

UNTIMELY PLAY: HISTORY, HABIT, GAMES

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ABSTRACT

Doug Stark: *Untimely Play: History, Habit, Games*
(Under the direction of Gregory Flaxman)

This dissertation argues that play has become a fundamental means of governing our lives under neoliberalism. Traditionally, play has been considered an activity separate from any practical purpose, but today, as education, labor, and daily conduct are increasingly gamified, play has purpose aplenty. What happened? In chapters that traverse colonial cricket, military training, workplace roleplay, and video gaming, *Untimely Play* retrieves neglected files from the archive of game history to tell a story that stretches back to the late nineteenth century. Before games infiltrated our classrooms, smartphones, and offices, and before the entertainment industry pioneered new ways to make leisure lucrative, play already did the work of social reproduction. Now, whether it be gamified apps that explicitly promise to change our habits, or interactive media that tacitly exercise our digital skills, games and other forms of play broker our adaptation to the social, technological, and affective conditions of late capitalism.

Adaptations are not neutral, but they are ambivalent. To critique and complicate the biopolitics of games, each chapter focuses on artists and critics whose literary, filmic, or digital works remediate and, thus, politicize play. After Friedrich Nietzsche, I consider these figures – including Trinidadian Marxist C. L. R. James, Jamaican philosopher Sylvia Wynter, German filmmaker Harun Farocki, American pianist David Sudnow, British cyberneticist Gregory Bateson, and Australian designer Bennett Foddy – to be radically “untimely” because, far from fashionable names in game studies, they offer fresh perspectives on the vexed relationship

between play and power today, especially as it pertains to racism, militarism, neoliberalism, and posthumanism. But beyond charting an alternate history of game research, this dissertation is called *Untimely Play* because it concerns peculiar play practices – from Sudnow, who transforms the Atari into a musical instrument, to Foddy, whose capricious video games train us in useless skills – that err from the prevailing habits of our time. Hence, while my primary thesis is that contemporary forms of play predominantly reproduce the neoliberal status quo, my secondary thesis is that play remains a means of introducing variation because, in play, we don't just learn from what is; we learn from what if.

For Gregg, who knew how to polish a turd.

ACKNOWLEDGEMENTS

Friendship, this relation without dependence, without episode, yet into which all of the simplicity of life enters, passes by the way of the recognition of the common strangeness that does not allow us to speak of our friends but only to speak to them, not to make of them a topic of conversations (or essays), but the movement of understanding in which, speaking to us, they reserve, even on the most familiar terms, an infinite distance, the fundamental separation on the basis of which what separates becomes relation.¹
Blanchot, *Friendship*, 1997.

My youth was dedicated to a dream: competing for England in the decathlon. At 9 am on Friday, July 10th, 2015, I was about to begin pole vaulting when I got the call. My wish would be fulfilled by the end of the month. Now, the British reserve an idiom for exceptional displays: that's all well and good, but can he do it on a cold, rainy night in Stoke? As an athlete, I could only do it on a cold, rainy night in Stoke. Fortunately for me, the competition was set to be in Hexham, three colder and rainier hours further north. Where others faltered, I set personal records. It was the performance of my sporting life, but it was also the beginning of the end of that life.

Next month, having traveled to Estonia, I could not do it on a hot, dry day in Rakvere. Sprinting down the back straight of the 400m, the final event of day one, my body was screaming at me to stop – no injury, only apathy; that's all I can remember. I started decelerating – a run, a jog, a walk, a standstill. As I exited the track, other athletes asked me whether I was okay, worried I'd hurt myself. I hadn't: no pain, just shame. Why did I do that? What was the

¹ Maurice Blanchot, *Friendship*, trans. Elizabeth Rottenberg (Stanford, CA: Stanford University Press, 1997), 291

point of coming out here just to... suck? There's only one thing worse than a bad time and that's no time. The decathlon was over. The season was over. But it took me another, hard, hard year to realize that, truly, my career was over. I didn't love it anymore. Sometimes the body "knows more than we do."²

If I hadn't been an athlete, I wouldn't have settled on the subjects that animate this dissertation: habit, adaptation, and, above all, a leisure activity dominating your life. My alma mater, Loughborough University, is known as a drinking college with a sporting problem, and I must thank those who encouraged my exerholism: my coaches Andy Day, James Copeland (yes, you were right, I should've done a Ph.D.), Alex "Dunning" Kruger, Grant Brown, and Zane Duquemin; and my training partners Spartak Ljsenko, Ricardo Twumasi, Alex Currie, Chloe Bradley, Rob Churchill, Kelly Bramhald, James Wright, Patrick Atkin, Raul Sosa San Frutos, Beth Crocker, Tom Rottier, Cameron Edgar, Victor Yu, and Link Larkin. "Philosophy is not always where it is usually foreseen," writes Michel Serres, who learned "more on the subject of the subject by playing ball than in Descartes' little room."³ Likewise, I learned more about play in the HiPAC than the book stack.

If I hadn't stopped being an athlete, I wouldn't have written this dissertation. Indeed, should we acknowledge the negative influences too? They are no less formative. Without the people and institutions that made elite sport unbearable, I might have pursued a career in coaching instead (a profession remarkably more precarious than higher education). Essential, however, were those Loughborough professors – Jennifer Cooke, Brian Jarvis, Paul Jenner,

² Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. D. A. Landes (New York: Routledge, 2012), 248.

³ Michel Serres, *The Parasite*, trans. Lawrence R. Schehr (Baltimore, MD: John Hopkins University Press, 1982), 227.

Oliver Tearle, and Nigel Wood – who held the academic door open despite my best efforts to close it: often training, seldom reading, and always eating. It was over an Imago chicken wrap that I first met Teresa O’Rourke, the Diane to my BoJack,⁴ and one of the most competitive people I know. (The main critique of your dissertation was that it had thirty-seven arguments, this one has thirty-six.) I don’t think it’s possible to shake Chiara Di Paolo, without whom this document would be misaligned. And then there’s Patrick New. I don’t know what’s scarier: the fact that I teach English, or you.

It’s a blessing to fall out of love with something before it ends. When I arrived at the University of North Carolina at Chapel Hill, in 2017, I wasn’t missing track & field, and I had a lot of energy – there’s something invigorating about not training for forty hours a week – but I didn’t know how to direct it. Enter Joyce Rudinsky, who told me to get in touch with Gregg Flaxman: the director of my energy and, ultimately, dissertation. Academics are typically good at academics, and I’m sure many of us have, at some point, prided ourselves on succeeding without trying. A hack for perfectionists: if, by dint of procrastination, over-commitment, or other self-sabotage, you never truly give your best effort, then your worth is never truly weighed! Gregg did the most important single thing anyone has done for my intellectual development. He called me out on my bullshit. People don’t care if you write something without caring, they only care about what you write. Besides, what do people know? We graduate students spend hundreds of hours tearing publications apart, and yet, publications are somehow the measure of our brilliance? Gregg taught me to take pride in the quality of my work for its own sake. But to do that, one needs standards, and I had none.

⁴ Doug Stark and Teresa O’Rourke, “The Lost Futures of BoJack and Diane,” *Post-45*, 2020, <https://post45.org/2020/11/the-lost-futures-of-bojack-and-diane/>.

You can't polish a turd, but I figured that miraculous things can happen under pressure. I spent the first few years of my Ph.D. burdening myself with as many groups, conferences, and courses as I could. My first game studies reading group was particularly formative. When you don't know anything different, the people around you set the standard. I am grateful that the exceptional intellects of David Rambo, Will Partin, and Nicole Berland seemed normal to me. There was no game program at UNC back then, and to meet people in the field, I attended a lot of conferences. Ironically, it was at an Octavia Butler event that I made my most important connection. Edmond Chang invited me to join the game stream at the Society for Literature, Science & the Arts (SLSA) in 2018, and that's been my main conference ever since.⁵ An earlier version of my fourth dissertation chapter received the Bruns Essay Prize in 2022 – a testament to how indebted my work is to the financial, organizational, and intellectual support SLSA has provided over the years, especially in the forms of Peter McDonald, Ashlee Bird, Alenda Chang, Katherine Buse, Sam Pizelo, Hannah Higgins, and Carol Colatrella. In addition to game studies, I had to outsource much of my media theory, too. Thank you, Duke professors, for allowing me to take a number of your courses (all very officially): Frederic Jameson, who taught me to be historical; Mark Hansen, who taught me to be exacting; and Luciana Parisi, who taught me to be exciting.

We moan a lot about our graduate stipends. Nevertheless, where I was coming from, the basic package UNC-Chapel Hill's English program provided was something unparalleled: more than three years of funding. I think I have Shayne Legassie, in particular, to thank for getting me in off the waitlist. I'm grateful for further financing from the Hobby (2022) and the Richardson

⁵ Edmond Y. Chang et al. "Playing at SLSA: A Game Studies Stream Retrospective." *Configurations*, vol. 31 no. 4, 2023: 351-365.

(2024) Departmental Fellowships, the Carolina Digital Dissertation Fellowship (2023), the Richard Brooke Scholarship (2023-4), the Collaborative Online International Learning Fellowship (2022), and my salary for working on the new Critical Game Studies Program in the Digital Literacy and Communications Lab (DLC) (2022-4). Serving alongside Courtney Rivard, Steven Gotzler, and David Hall in the DLC has informed this dissertation's arguments about the relationship between critique and play.

Grants from the Institute for the Arts and Humanities (IAH) have funded several of my collaborations with King's College London (KCL). From 2022 to 2023, the IAH supported a UNC-KCL media theory reading group that allowed me to workshop aspects of this project with, in particular, Erin Dickey, Max Tsarev, and Rhys Sparey. Other collaborations let me benefit from the thinking of Seb Franklin, Bernard Geoghegan, Gaspard Pelurson, Rob Gallagher, and Feng Zhu. If Ed Chang introduced me to the American game studies scene, then it has been Rob, the stylist, and Feng, the philosopher, who have kept me in touch with Europe. Once again, I have been lucky to have such unique scholars function as my standards. A fellowship in Duke's Games & Culture Lab (2019-20) provided another rare opportunity to be around rare people. Shai Ginsburg and Marshall Miller: thank you for permitting your game nights become talking about games nights.

But perhaps the most significant funding I received was for a week-long trip to Berlin in 2019. My committee members notwithstanding (and no offense, English faculty, I get it; it's not like books are media), I seldom experienced others being interested in my research during my time at UNC. Featuring idols and interlocutors like Andrea Capra, Hank Gerba, Nelly Pinkrah, Thomas Pringle, Shane Denson, Claus Pias, and Fred Turner, the Stanford-Leuphana Summer Academy didn't just provide a forum for the first iteration of this dissertation. It also provided

my first taste of what it was like to be around people who cared about my ideas – a boon that, fortunately, I didn’t have to declare on my 1040.

Despite these resources, I never could afford to have a car in North Carolina. I’ve been more reliant on the public transport system than most, and in the posthuman spirit of the dissertation, I could dedicate much of this acknowledgments section to the assemblages, infrastructures, and environments that enabled my work. Unfortunately, buses don’t read... but my NC friends do – and I have been no less reliant on them. Living with Kylan Rice showed me how to work, and playing with Emilio Taiveaho Peláez showed me how to live. Karah Mitchell⁶ taught me how to feel, and Krysten Voelkner, to find new zeal. Kelsey Brod ensured that my writing schedule wasn’t too flimsy, and Ana Hoppert, that there was still time for whimsy. William Morgan continues to energize me, and Blair Killian helped me see the end of this degree. Josy Raheem convinced me that intelligence does, indeed, exist, and without Stephanie Kinzinger, I’m not sure I’d have been able to persist. Stylistic excess for when I want to express... the inexpressible. For me, friends are those who return as we turn into someone else. Thank you for co-evolving.

Friends share common ground, but they don’t think the same. Distance, writes Maurice Blanchot, is fundamental to friendship: there must be difference, a gap between one another, or else there’s nothing to relate.⁷ Often, bridging this distance is the work of friendship, and being suspended in the air, offered a new perspective, its reward. What I like about dissertation committees is that they enforce this distance between you and people with whom you might otherwise be too close. Indeed, I might never have learned that, when given amorphous, flabby

⁶ Pronounced with a French inflection like Hyacinth Bucket.

⁷ Blanchot, *Friendship*, 291-2.

thoughts, Inga Pollmann has this incredible ability to render the fat, returning my ideas to me in leaner, better shape. The exercise of thought was what first drew me to Gabriel Trop, whose commitment to “open disciplinarity” – an indeterminate form of exercise that one cannot know the outcome of in advance – inspired many of my arguments here.⁸ And if you don’t believe that a training regimen can elicit surprising results, you’ve clearly never seen Rick Warner sink sixteen consecutive three-pointers. It’s not glamorous, but Rick has been my bureaucratic bastion throughout the Ph.D. The committee’s most avid exerciser, however, might be Patrick Jagoda, whose step count is so high that you’ll find his footprints all over this dissertation. I’m not sure I would’ve even bothered doing game research if people like him didn’t.

Particular circumstances inspired me to complete this project in the way I did – post-haste. My thanks go to those in the English Department at the University of Texas at Arlington who were willing to invest in my career by welcoming me as a colleague, especially Cedrick May, Penny Ingram, Erin Murrah-Mandril, Sarah A. Shelton, and Tim Morris. The deadline, despite its name, is thoroughly invigorating. I doubt I would’ve had the energy to speed through this dissertation without such an exciting opportunity awaiting me at the end.

Shortcuts did, nevertheless, need to be taken. I thank the editors and reviewers of the following publications for helping me refine ideas that, while I didn’t always intend to be part of this document, made their way into its pages. My arguments about neoliberalism and games build on Patrick Jagoda’s monograph, *Experimental Games* (2021), which William Morgan gave me the opportunity to review for *Qui Parle* in 2021.⁹ Chapter Two draws on material I first

⁸ Gabriel Trop, *Poetry as a Way of Life: Aesthetics and Askesis in the German Eighteenth Century* (Evanston, IL: Northwestern University Press, 2015), 28.

⁹ Doug Stark, “Better Problems: Neoliberalism, Strategic Achronicity, and the Experimental Games To-Be-Made.” *Qui Parle*, 30 (2) 2021: 399-419.

explored in an article for a 2021 *Eludamos* special issue on “The Philosophy of Computer Games,” edited by Jan-Hendrik Bakels and discussed with David Rambo.¹⁰ The middle of Chapter Three is an outgrowth of an essay for Simon Dor’s edited collection, *Depictions of Power*, that benefitted from conversations with Feng Zhu.¹¹ Chapter Five combines elements of a short piece in *Leonardo*, originally written for Iain D. Campbell and Natasha Lushetich’s 2023 special issue on “Indeterminacy After AI,”¹² and a 2021 article in the *Journal of Gaming and Virtual Worlds* for Melissa Kagen’s 2020 special issue on “Wandering Games.”¹³ Recycling this last article that I initially penned in my second year of graduate school (and very much meant to leave there) was ultimately a peculiar but generative experience because Shane Denson had since elaborated some of its implications in his book, *Post-Cinematic Bodies* (2023). Shane once told me, “If you have to write a book, write a book. But if you can, write a dissertation.” This is a dissertation.

They say it takes a village. While I consider many of the people I’ve mentioned to be part of my community, writing the dissertation was, to be frank, incredibly solipsistic. Perhaps it turned out okay because you can take Doug out of the village but you can’t take the village out of Doug. Under my parents’ thatched roof, I learned various lessons that helped me in my Ph.D. Many came from my father, David Stark, typically in the form of a parable about squirrels.

¹⁰ Doug Stark, “Training for the Military? Some Historical Considerations Towards a Media Philosophical Computer Game Philosophy,” *Eludamos*, 11 (1) 2021: 125–144.

¹¹ Doug Stark, “‘Instruction Manuals for Life:’ Operational Games, Risk, and Continual Training in Farocki’s *Leben BRD*,” in *Depictions of Power: Strategy and Management Games*, edited by Simon Dor, forthcoming.

¹² Doug Stark, “Exercises in Humility: Gregory Bateson on Contingency, Croquet, and Revising Habits of Thought Through Play,” *Leonardo*, 56 (1) 2023: 58–63.

¹³ Doug Stark, “Unsettling Embodied Literacy in *QWOP* the Walking Simulator,” *Journal of Gaming & Virtual Worlds*, 12 (1) 2020: 49–67.

(There's no need for you to read much further than this, Dad, so let me just give you the dissertation in a nutshell here.¹⁴) My mother, Wendy Stark, is more likely to read on. As she

¹⁴ Once upon a time, there was a squirrel – let's call him Dave – preparing his den for the winter. Dave was a rational bloke, so he'd started early and was already well on his way. But he worried about his friends. Squirrels need to collect lots of nuts throughout the year so that they have food to eat during the winter. Nut collecting, however, is hard work. In the past, many of the other squirrels grew bored of gathering, didn't acquire enough nuts, and, when the harsh weather arrived, starved.

So, Dave had an idea: what if we made nut collecting fun, like a game? Dave went back to his den and started drawing up a leader board. The idea was that the squirrels would put a few nuts into a pot to enter a competition. Then, each competitor squirrel would try to get hold of as many nuts as possible. Whoever accumulated the most nuts by the time winter began would be declared the winner and receive all the nuts in the pot.

Dave spread the word, and the nuts started trickling in. Within a few days, the game caught on like wildfire. As each competitor vied to best one another, the squirrel community soon became more productive than ever. Every squirrel had more than doubled their volume from last year, and the numbers kept climbing. Buzz grew around who might win, but the prize, in Dave's eyes, had already been won: they'd all survive the winter.

As the days grew darker, so did the obsession. The squirrels spent so much of their time gathering nuts that it became part of their routine, even their way of life. They enjoyed the uncertainty of competition, the thrill of accumulation, and the promise of victory – it kept them going. But at what cost? The initial purpose of the game – survival – was forgotten. All that remained was a habit they couldn't kick. And after a while, they exhausted their resources. There simply weren't any nuts left. Many turned to theft, others to intimidation, and some to the local pub – but the KPs only made them thirstier.

Fortunately, thought Dave, winter was coming fast. Soon, they'd all have to stop what they were doing and hole up in their dens. The problem with squirrels, however, is that they don't use calendars. Dave's vague stipulation of "winter" was open to interpretation, and no one wanted the game to end. After a concerted effort, he gave up trying to bring the competition to a close. He said "eeeepp" to his loved ones, hunkered down, and slept.

Months later, Dave was roused from his slumber by the sweet smell of spring. He stretched his furry, squirrel arms up above his head and let out a big squirrel yawn. What a good, long sleep (remarkably long, really, seeing as squirrels don't actually hibernate). Bleary-eyed, Dave started groping for the light when he grazed his paw on some barbed wire – a swift reminder of the waking world he'd left behind. Before going to sleep, he blocked himself in to protect his stash. As he started removing the barricade, the sun glared in and, blinded by the light, Dave stumbled outside. It took a few seconds for him to register the carnage.

The squirrels, it turned out, never ended up hibernating. While Dave's game was designed to help his friends get enough food to eat – to sate a need – it ultimately created a new need: to win. The issue with squirrel games is that they're like squirrel maps. They're part of the squirrel universe, but you mustn't mistake the squirrel map for the squirrel territory. That's how Dave nearly got eaten by a badger. So, when the squirrels started living their lives in accord with the rules of Dave's game, they no longer lived in accord with the rules of the squirrel world, rules that kept the squirrel body and the squirrel environment alive. They had adapted to a world that didn't exist, and the inertia of the habits they learned there led to the downfall of squirrel civilization. If only Dave's game had modelled a different world, one where squirrels had to learn to be better, instead of worse, than they are.

should: Mum is to blame for my affinity for words. Encouraging me to dictate stories to her, I became a writer before I could even write. But if you ask her about how I got into sport when I was little, she'll tell you that I didn't – and not just because I've never been little. As a child, I held a particular disdain for football. Any time Mum tried to get me to play, I'd sit on the ball and start talking instead. I hope you're ready for more of the same.

Nowadays, though, it's my fiancé Doreen who must suffer me talking the most – but we don't talk about my work that much, just everything. If it was Gregg who taught me to take pride in my work, then it was Doreen who taught me to take pride in the rest of my life. And seeing as I'm dedicating the rest of my life to Doreen, I think it's only fitting that I dedicate this dissertation to Gregg. Without him, I'd have quit in my first year.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS	xviii
INTRODUCTION: UNTIMELY PLAY	1
Argument: A Different Premise	1
Approach: Historicizing Play as a Cultural Technique	11
Genealogy: Play From Aesthetic Education to Adaptive Potentiation	22
Context: The Biopolitics of Play Under Neoliberalism	38
Chapter Summaries: Untimely Meditations on the Age of Gamification	47
CHAPTER 1: COLONIAL PLAY: WYNTER, JAMES, AND CRICKET	55
Introduction: Living by Games	55
Wynter and James: Towards a Social Genesis of Play’s Autonomy	62
The Cultural Function of Play: Display or Create?	71
Cricket: From Child’s Play to Life the Victorian Way	76
Black Skin, White Flannels: Cricket’s Overrepresentation of Man	83
Cosmoludics: A Strategic Achronicity	89
Conclusion: Fugitive Play	94
CHAPTER 2: MILITARY PLAY: PIAS, CROGAN, AND CONTINGENCY	101
Introduction: Training for the Military?	101
Claus Pias: A Little History of the Action Video Game	105
The Only Winning Move is Not to Play	115
Deleuze Contra Virilio	121
Conclusion: Recouping Video Game Training	129
Coda: Reframing Gaming	133
CHAPTER 3: PROTECTIVE PLAY: FAROCKI’S OPERATIONAL GAMES	138
Introduction: Projection/Protection	138
Harun Farocki: From Operational Images to Operational Games	143
How to Live in a Risk Society	147
<i>Leben BRD</i> : A “Continual Training” Montage	154

Aesthetic Exercise Machines	160
Conclusion: A Techno-Aesthetic Education	166
CHAPTER 4: OPTIMAL PLAY: SUDNOW’S VIDEO GAME PILGRIMAGE	170
Introduction: Gaming as Care for the Posthuman Self	170
David Sudnow: A Habitual Scholar	179
Fostering Grace: Gaming as a New Way of the Hand	185
Becoming Automatic: The Non-Linear Work of Play	192
Contextualizing the Microworld: “Lucratively Programed Care” for the Self?	201
Conclusion: Exercising Critical Complicity	211
CHAPTER 5: DISADAPTIVE PLAY: BATESON, FODDY, FUMBLECORE	218
Introduction: In Control	218
Gregory Bateson: The Play that Makes a Difference	226
Why So Simple? Playable Models, Correlation, and Walking Simulators	233
Going Out of Control: <i>QWOP</i> the Alien Walking Simulator	242
Conclusion: Disadaptive Play	249
Coda: Conquistadors of the Useless	253
BIBLIOGRAPHY	256

LIST OF ABBREVIATIONS

BB C. L. R. James, *Beyond a Boundary*

CGW Claus Pias, *Computer Game Worlds*

GM Patrick Crogan, *Gameplay Mode*

OF Félix Ravaisson, *Of Habit*

PM David Sudnow, *Pilgrim in the Microworld*

SEM Gregory Bateson, *Steps to an Ecology of Mind*

WH David Sudnow, *Ways of the Hand*

INTRODUCTION: UNTIMELY PLAY

Play... is the mother of every habit.¹⁵
Walter Benjamin, "Toys and Play," 1928

We are habits, nothing but habits.
Gilles Deleuze, *Empiricism and Subjectivity*, 1989¹⁶

New media live and die by the update.... To be is to be updated.... Habit + Crisis =
Update.... Habits are central to understanding neoliberalism.¹⁷
Wendy Chun, *Updating to Remain the Same*, 2016

The best we can do is to... implant... a new habit.... It is an attempt to give oneself... a
past in which one would like to originate in opposition to that in which one did originate.
Friedrich Nietzsche, *Untimely Meditations*, 1876¹⁸

Argument: A Different Premise

Games are everywhere. We find them in our offices, structuring roleplays, team-building activities, and inter-employee competitions. We find them in our classrooms, turning assignments into quests, percentages into points, and grades into levels. We find them on our smartphones, dangling badges, leaderboards, and other rewards to motivate productivity. And when we're not gamifying our labor, we're workifying our leisure. From hardcore *Helldivers* (2015) to weekend *Wordlers* (2021), millions of us sharpen our gaming skills every day. Some

¹⁵ Walter Benjamin, "Toys and Play," in *Selected Writings: Volume 2, 1927-1934*, edited by Michael W. Jennings, Howard Eiland, and Gary Smith, translated by Rodney Livingstone (Cambridge, MA: Harvard University Press, 1999): 117-121, 119.

¹⁶ Gilles Deleuze, *Empiricism and Subjectivity: An Essay on Hume's Theory of Human Nature*, translated by Constantin V. Boundas (New York: Columbia University Press, 1991), x.

¹⁷ Wendy Hui Kyong Chun, *Updating to Remain the Same: Habitual New Media* (Cambridge, MA: MIT Press, 2016), 2.

¹⁸ Friedrich Nietzsche, *Untimely Meditations*, edited by Daniel Breazeale, translated by R.J. Hollingdale (Cambridge: Cambridge University Press, 1997), 76.

even put them on display: streaming platforms, social media, and live tournaments have allowed electronic athletes to become sporting spectacles. Meanwhile, we watch all sorts of competitions on reality TV – be it drag or dating, topiary or baking – as well as movies and novels that adapt video game franchises, take place in virtual worlds, or gravitate around some contest. It’s no surprise, therefore, that games inflect our language, our sense of self, as we improve our inner game, level up our lives, and, more often than not, take the L. But perhaps this document is the surest symptom of the collapse of labor and leisure. There are few careers that so consummately marry the two than the academic who, when asked what they do for a living, answers: “I work on play.”

Neologisms abound to characterize this glut of games in the twenty-first century:

“playbor,” “ludification,” “ludic society,” “ludic century,” “ludic capitalism,” “gamespace,” “gameful world,” and, most recently, “the age of gamification.”¹⁹ Typically, scholars use the term “gamification” to describe a design technique: incorporating “game elements” into a traditionally “non-game” activity.²⁰ Hate chores? Turn them into a role-playing game (RPG).²¹ Struggle with

¹⁹Julian Kücklich, “Precarious Playbour: Modders and the Digital Games Industry,” *Fibreculture Journal*, no. 5 (2005); Joost Raessens, “Playful Identities, or the Ludification of Culture,” *Games and Culture* 1, no. 1 (2006): 52-57; Jaakko Stenros, Markus Montola, and Frans Mäyrä, “Pervasive Games in Ludic Society,” in *Extended Abstracts Publication of the Annual Symposium on Computer-Human Interaction in Play*, 2007, 30-33; McKenzie Wark, *Gamer Theory* (Cambridge, MA: Harvard University Press, 2007); Alexander R. Galloway, *The Interface Effect* (Cambridge: Polity Press, 2012); Eric Zimmerman, “Manifesto for a Ludic Century,” *Kotaku*, September 9, 2013; Steffen P. Walz and Sebastian Deterding, eds., *The Gameful World: Approaches, Issues, Applications* (Cambridge, MA: MIT Press, 2015); Jagoda, *Experimental Games*.

²⁰ Sebastian Deterding, Dan Dixon, Rilla Khaled, and Lennart Nacke, “From Game Design Elements to Gamefulness: Defining ‘Gamification,’” in *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments* (Tampere, Finland: ACM, 2011), 9-15.

²¹ *Habitica*. HabitRPG, Inc. <https://habitica.com>.

bedtime? Unlock Pokémon while you sleep.²² Can't run? Try being chased by zombies.²³ But we can understand these applications as part of a more pervasive, twenty-first-century “paradigm” whereby games have started to shape “social, political, economic, and aesthetic thought” in general.²⁴ Think of those other “ifications” or “izations” coined by social scientists, like McDonaldization, Disneyfication, and Americanization.²⁵ It's not simply a matter of quantity (there sure are a lot of games, huh); our gamified culture goes hand-in-hand with our neoliberal economy, which can, itself, “be said to adopt game form.”²⁶

But wait a minute, aren't games supposed to be separate from everyday life? Isn't play, by definition, a trivial, useless activity? What happened? The story goes like this: Once upon a time, play was an activity free from any practical purpose. We had to work, but we played for its own sake. Then something changed – capitalism, probably. The Industrial Age kept labor and leisure separate. As the means and relations of production transformed, so did work and play. They began to flirt, adopting one another's traits: Work mellowed out and became more flexible, creative – even fun; Play developed a sense of purpose, followed a structure, and started being more productive. Some say that neoliberalism chaperoned the courtship, officiated the wedding, and, ultimately, midwived the gamification of everything. Others go back further. Perhaps the

²² *Pokémon Sleep*. The Pokémon Company. <https://www.pokemonsleep.net>.

²³ *Zombies, Run! Six to Start*. <https://zombiesrungame.com>.

²⁴ Patrick Jagoda, *Experimental Games: Critique, Play, and Design in the Age of Gamification* (Chicago: University of Chicago Press, 2020), 35.

²⁵ Mathias Fuchs, “Predigital Precursors of Gamification,” in *Rethinking Gamification*, edited by Mathias Fuchs, Sonia Fizek, Paolo Ruffino, and Niklas Schrape (Lüneburg: Meson, 2014): 119-140.

²⁶ Jagoda, *Experimental Games*, 279.

corruption of play began with those stuffy Victorians... or is the Enlightenment to blame?

Different narratives nevertheless end the same: play just isn't what it used to be.

No wonder so many game scholars contend that we need to rethink our canonical definition of play. First published in 1938, Johan Huizinga's depiction of play as a "magic circle" that suspends reality shaped early approaches to immersive experiences, virtual worlds, and online communities.²⁷ Increasingly, however, the Dutch historian is more likely to function as a foil: He stands in for a romantic image of play that must be overturned. Often citing an instance of discrimination in or around games, critics prove that play doesn't suspend the social realities of racism and misogyny.²⁸ Give the finger to Johan Huizinga. Raise the bar over Roger Callois. Don't be in cahoots with Bernard Suits. Play is political, don't you know, these game studies luminaries were simply too old, white, and male to realize.

But where are these "magic circle jerks" today, people who truly believe that contextual factors simply evaporate whenever we play? Reflecting on his role in popularizing Huizinga's concept, game designer Eric Zimmerman contends that they don't exist.²⁹ The magic circle jerk may as well be a straw man, and Huizinga, a paper tiger. Understandably, a book written almost a century ago no longer captures our zeitgeist. And yet, monographs continue to begin by

²⁷ Tara Fickle, *The Race Card: From Gaming Technologies to Model Minorities* (New York: New York University Press, 2019), 113; Jaakko Stenros, "In Defence of a Magic Circle: The Social, Mental, and Cultural Boundaries of Play," *Transactions of Digital Games Research Association*, 1(2), 2014: 147-185.

²⁸ Mia Consalvo, "There Is No Magic Circle," *Games and Culture* 4, no. 4 (2009): 408-417; Shira Chess and Adrienne Shaw, "A Conspiracy of Fishes, Or, How We Learned to Stop Worrying About #GamerGate and Embrace Hegemonic Masculinity," *Journal of Broadcasting & Electronic Media* 59, no. 1 (2015): 208-220. Omari Akil, "Warning: Pokémon Go is a Death Sentence if You Are a Black Man," *Medium*, July 7, 2016; Fickle, *The Race Card*, 113-137; Aaron Trammell, *Repairing Play: A Black Phenomenology*, (Cambridge, MA: MIT Press, 2023).

²⁹ Eric Zimmerman, "Jerked around by the Magic Circle – Clearing the Air Ten Years Later," *Gamasutra*, February 7, 2012. Even Huizinga's commitment to this image of the magic circle is dubious at best. As Chapter One elaborates, the primary thesis in *Homo Ludens* is that play produces culture, an argument that complicates the notion that play is autonomous from reality. Johan Huizinga, *Homo Ludens: A Study of the Play-Element in Culture* (Boston: Beacon Press, 1980).

pointing at Huizinga, claiming that “our definition of play is broken.”³⁰ A story can only get so far from its point of departure. Why do we keep starting it in the same place?

This dissertation starts from the premise that we’ve been starting from the wrong premise. In 1997, widely renowned but strangely overlooked play scholar Brian Sutton-Smith published his magnum opus. Synthesizing decades of game and play research across the disciplines, *The Ambiguity of Play* identifies seven “rhetorics” that have defined different forms and functions for play throughout history: engaging fate, exercising power, and building community in more collectivist, ancient times; progressing civilization, indulging self-expression, and exploring the imagination in more individualist, modern times.³¹ Far from a superfluous activity with no bearing on reality, Sutton-Smith argues that the dominant understanding of play in the twentieth century was that it was integral to all kinds of development. School teachers, child psychologists, social scientists, and evolutionary biologists were united in their efforts to prove that play had a purpose: adaptation. Now, as games seem to be training and testing us everywhere we look, this developmental function is all the more apparent. In our age of gamification, it’s not just the notion that play suspends our lives that warrants critique; it’s the notion that play improves our lives.

Untimely Play makes four primary arguments: one diagnoses a contemporary problem, one advances an historical approach to the problem, and two complicate the overarching diagnosis to suggest ways out of the problem. The diagnosis: Although scholars have traditionally considered play to be separate from any practical purpose, I contend that games and

³⁰ Trammell, *Repairing Play*, 1.

³¹ Sutton-Smith’s periodization concerns prevalence, not existence. He emphasizes that the ancient rhetorics persist today. Brian Sutton-Smith, *The Ambiguity of Play* (Cambridge, MA: Harvard University Press, 1997).

other forms of play have become fundamental means of governing our lives under neoliberalism. Instead of figuring this as an entirely new phenomenon, however, I treat gamification as part of a longer history of adaptive play that stretches back to the late nineteenth century. By habituating certain skills, routines, and tastes, games have exercised a soft power over individual and collective life for some time. This biopolitics³² of play is conducive to – but not reducible to – the “voluntary servitude” of neoliberal governmentality.³³

Debates about the validity of Huizinga’s definition exemplify that play is too often characterized as a transhistorical category with a perennial set of qualities. My methodological contention is that treating play as a concept and a practice that changes in relation to its historical circumstances offers both a critical vantage on our age of gamification and a line of flight from it. Indeed, an effect of historicization is denaturalization: we discover why something came to be, how what we take for granted was created – that it could’ve been, and might still be, otherwise. And to examine the social developments, technological innovations, and regimes of power that have shaped what it means to play, I build on media scholars who have shifted their focus from objects like radio, TV, and video games to the so-called “cultural techniques” [*Kulturtechniken*] that precede and exceed them, like listening, watching, and playing. This “media anthropological

³² For an overview of biopolitics as a method for studying digital games, see Michał Kłosiński, "Mapping Game Biopolitics," *Games and Culture* 0, no. 0 (2024), <https://doi.org/10.1177/15554120241233808>.

³³ Natasha Lushetich, "On Ludic Servitude," in *The Double Binds of Neoliberalism: Theory and Culture After 1968*, ed. Guillaume Collett, Krista Bonello, and Iain MacKenzie (Lanham: Rowman & Littlefield, 2022), 103–121.

turn”³⁴ from objects to practices in media studies can, I believe, complement the “playful turn” from games to play in game studies.³⁵

Histories of the present have a terminus that can dictate what matters, who counts, and, ultimately, which lessons we learn from the past.³⁶ Research is often praised for its “timeliness,” for being fashionable, for appealing to what we already care about. We know what we like, and we like what we know. But this leaves little room for surprise. German philosopher and philologist Friedrich Nietzsche maintained that historical work should go against the grain, that the ideal meditation on the past is “untimely – that is to say, acting counter to our time and thereby acting on our time and, let us hope, for the benefit of a time to come.”³⁷ *Untimely Play* foregrounds figures who, largely overlooked by game scholarship, offer a fresh perspective on the vexed relationship between play and power today. Hence, I intend my use of the term “untimely,” to be, like Nietzsche’s, somewhat ironic, for “nothing is more needed... – and thus

³⁴ Erhard Schüttpelz, “The Media-Anthropological Turn of Cultural Techniques,” *Theory, Culture & Society* 30, no. 6 (2013): 20-29.

³⁵ Braxton Soderman and Justin Keever, “The Playful Turn and Critical Play,” *G|A|M|E: The Italian Journal of Game Studies* 10 (2023), <https://www.gamejournal.it/i10-02-soderman-keever/>.

³⁶ See Siegfried Zielinski’s “variantology” of media, which is positioned against anti-humanist genealogies that – despite their attempts to overturn traditional, anthropocentric historical narration by focusing on, say, discourses (e.g. Michel Foucault) or media systems (e.g. Friedrich Kittler) – still tend to gloss over the complexities of the past to chart a smooth journey to the present. For Zielinski,

Instead of looking for obligatory trends, master media, or imperative vanishing points, one should be able to discover individual variations. Possibly, one will discover fractures or turning points in historical master plans that provide useful ideas for navigating the labyrinth of what is currently firmly established. In the longer term, the body of individual anarchaeological studies should form a *variantology* of the media.

Likewise, this dissertation seeks to unearth a “variantology” of play. Siegfried Zielinski, *Deep Time of the Media: Toward an Archaeology of Hearing and Seeing by Technical Means*, Translated by Gloria Custance (Boston, MA: MIT Press, 2006), 10.

³⁷ Nietzsche, *Untimely Meditations*, 60.

nothing is more ‘timely’ – than precisely the kind of ‘untimeliness’ represented by” the authors under scrutiny here.³⁸

The first complication: Drawing on the likes of Trinidadian Marxist C. L. R. James, Jamaican philosopher Sylvia Wynter, German filmmaker Harun Farocki, American pianist David Sudnow, and Australian game designer Bennet Foddy, I argue that it is precisely because games and other forms of play are so central to social reproduction that artists and critics have found them to be fruitful means of exposing the logics that animate culture more generally. In chapters that move from colonial cricket to video gaming, and from piano improvisation to management training, *Untimely Play* focuses on literary, cinematic, and digital works that remediate play, situating it in a particular configuration of power. Attending to this messy, social “history of play” in context – instead of simply the pre-packaged, commercial “history of the game” in isolation³⁹ – allows us to account for the contingencies, complexities, and aberrances that the people have introduced into hegemonic, normative ways to play.⁴⁰ If untimeliness entails being out-of-kilter with the prevailing trends of one’s time, then *Untimely Play* concerns figures who not only appear untimely to us now but were, to some extent, untimely in their own time too. By unsettling the habitual notion that games are just games, artists and critics have consistently demonstrated that play is politics by other means.

³⁸ Daniel Breazeal, “Note on the Text,” in Friedrich Nietzsche, *Untimely Meditations*, (Cambridge, UK: Cambridge University Press, 1997): xlv-xlvii, xlv.

³⁹ Stephanie Boluk and Patrick LeMieux, *Metagaming: Playing, Competing, Spectating, Cheating, Trading, Making, and Breaking Videogames* (Minneapolis, MN: University of Minnesota Press, 2017), 17.

⁴⁰ Janine Fron, Tracy Fullerton, Jacquelyn Ford Morie, and Celia Pearce, “The Hegemony of Play,” in *Situated Play, Proceedings of the Digital Games Research Association Conference*, ed. Baba Akira (Tokyo: DiGRA, 2007), 309–318.

Given my attempt to construct an alternate, untimely archive of game scholarship, it will come as no surprise that this dissertation doesn't always invoke the usual suspects – game researchers I am nonetheless indebted to. While it was once necessary to establish the importance of “studying games for their own sake,”⁴¹ we are, thanks to our forebearers, now free to explore how games can serve other ends. The legitimacy of game research has, perhaps ironically, allowed a number of so-called second-generation game scholars to challenge what it means to do game research, especially by hybridizing with other contemporary areas of study. Likewise, *Untimely Play* asks both what other fields can do for game studies and what studying games can do for other fields (particularly film studies, media studies, literary studies, play studies, cultural studies, and black studies). But in envisioning a different future for game studies, we need not leave the past behind. “The best we can do,” writes Nietzsche,

is to implant in ourselves a new habit, a new instinct, a second nature, so that our first nature withers away. It is an attempt to give oneself, as it were a posteriori, a past in which one would like to originate in opposition to that in which one did originate.⁴²

It helps to look to the past because, more often than not, the coordinates for the journey we think we must chart on our own are already there, nestled in the archive.

Nietzsche's notion of giving oneself a different past in order to counterpose the present sets-up my second complication: Play, I contend, can offer us an alternate past too, a fictional one that, when out of step with our own time, when untimely in the face of neoliberalism, can originate new experiences, new habits, new ways of being in the world. The power play has to inform the future is most apparent when we pretend to do a highly practical activity. From

⁴¹ Jesper Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds* (Cambridge, MA: MIT Press, 2005), 9.

⁴² Nietzsche, *Untimely Meditations*, 76.

running a wargame to practicing a pitch, we play out plenty of scenarios before doing them for real. These simulations allow us to refine our behavior in preparation for an actual circumstance and, as such, can be considered part and parcel of the late capitalist imperative to optimize all spheres of life. And yet, we are being too hasty when we render all forms of preparation neoliberalism incarnate. That even the most rational forms of conduct start with an element of fiction, as play, suggests that we might fabulate different premises, different training simulations, different ways of playing out and, ultimately, realizing the future.

Play embodies “the powers of the false,” which, for Nietzsche, are twofold.⁴³ On the one hand, falsity portends the end of the world as we know it: a descent into empty truths, willful deceit, and nihilism. On the other hand, falsification is the very power of creation, the power to invent the world anew, the power to make something that didn’t exist exist. In play studies, Nietzsche is known as one of the few philosophers who indulged the Dionysian, disruptive force of play, over its Apollonian propensity to organize.⁴⁴ But the author of *Beyond Good and Evil* (1886) had no truck with such binaries – reason and myth, fact and fiction, order and chaos, fantasy and reality – that are, truly, false alternatives. When we play, we stay a line between these poles, and when we learn from this experience, letting it shape the rest of our lives, we don’t just learn from what is; we learn from “what if.” Beyond critiquing our age of gamification, *Untimely Play* grapples with the extent to which the fabulation of play can still be said to introduce difference.

⁴³ Gregory Flaxman, *Gilles Deleuze and the Fabulation of Philosophy* (Minneapolis, MN: University of Minnesota Press, 2012), xiii.

⁴⁴ Mihai I. Spariosu, *Dionysus Reborn: Play and the Aesthetic Dimension in Modern Philosophical and Scientific Discourse* (Ithaca, NY: Cornell University Press, 1989).

Approach: Historicizing Play as a Cultural Technique

When it comes to the definition of play, the only consensus is that there isn't one. From Immanuel Kant's aesthetic theory to the wiggle room of a door handle, and from children's make-believe to grinding on *World of Warcraft* (2004), play characterizes a seemingly irreconcilable range of activities, interactions, styles of conduct, dispositions, experiences, and contexts⁴⁵ – it may even, as the door handle suggests, be “in things.”⁴⁶ Although game and play scholars bemoan the slipperiness of their object, this is hardly a unique problem. Comparable to the media in the middle of media studies, or the life at the heart of biology, play is only one of many undefined, discipline-defining concepts that have a lot of play.

Our belief in our uniqueness does, however, seem to have authorized a unique willingness to foreground the “ambiguity of play,”⁴⁷ making its unlawfulness a law. Philosopher Mihai Spariosu calls it “amphibolous,” meaning play pulls in two directions at once, lacking clarity.⁴⁸ Anthropologist Victor Turner describes play as “liminal” or “liminoid,” a threshold between reality and fantasy.⁴⁹ Cyberneticist Gregory Bateson sees play as a paradox⁵⁰ – both what it is and what it isn't: the playful bite is both a bite and not a bite. When not pondering

⁴⁵ Thomas Henricks argues that these are the six ways we predominantly study play in the social sciences. Thomas S. Henricks, *Play and the Human Condition* (Urbana: University of Illinois Press, 2015).

⁴⁶ Ian Bogost, *Play Anything: The Pleasure of Limits, the Uses of Boredom, and the Secret of Games* (New York: Basic Books, 2016), 47.

⁴⁷ Sutton-Smith, *The Ambiguity of Play*, 1-2.

⁴⁸ Spariosu, *Dionysus Reborn*, 2.

⁴⁹ Victor Turner, *The Ritual Process: Structure and Anti-Structure* (Chicago: Aldine Publishing, 1969).

⁵⁰ Gregory Bateson, “The Message ‘This is Play’,” in *Group Processes: Transactions of the Second Conference*, ed. Bertram Schaffner (New York: Josiah Macy, Jr. Foundation, 1956), 145-242.

whether “*scholars should declare a moratorium on defining play*,”⁵¹ dramatist Richard Schechner adds that while the playful bite is not a bite, it is also not not a bite: “nip” is the positive sum of two negatives.⁵² In his later work, Bateson suggests that this nip is best conceived of as a channel communication in constitutive tension with the “first-order” bite, a “second-order” thematization that animals without the capacity for symbolic manipulation are largely unable to perform.⁵³ Indeed, what Terry Marks-Tarlow terms the “recursivity” of play not only concerns its repetitive quality but also its tendency to reflect back on itself, transforming its own meaning.⁵⁴ This metacommunication, argues Kenneth Burke, is a nascent form of language⁵⁵ – a necessary phase, biologists have since explored, in the evolution of our “symbolic species.”⁵⁶ The future of play only bears further ambiguities. For if play is often what isn’t, then as what is evolves, so does play.

Given this enthusiasm on the part of scholars from various disciplines to indulge the indeterminacy of play as a concept and a practice, it’s remarkable that contemporary game research is so committed to harping on the insufficiency of certain definitions like Huizinga’s.

⁵¹ Richard Schechner, *The Future of Ritual: Writings on Culture and Performance* (London: Routledge, 1993).

⁵² Richard Schechner, “Playing,” *Play and Culture* 1(1): 3-27.

⁵³ Henceforth, “SEM” will convey the following citation: Gregory Bateson, *Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology* (San Francisco, CA: Chandler, 1972), 177-193.

⁵⁴ Terry Marks-Tarlow, “The Play of Psychotherapy,” *American Journal of Play* 2, no. 3 (2010): 269-284.

⁵⁵ Animals who do not have a way of saying “no” convey the sentiment by means of an affirmative action that, while resembling that action, is clearly not the same thing as what it represents. Burke calls this the “dramatistic negative,” and suggests that, before words, the negative could only be communicated through a stylized positive. Kenneth Burke, *Language as Symbolic Action: Essays on Life, Literature, and Method* (Berkeley: University of California Press, 1966), 423.

⁵⁶ Karl Groos provides one of the earliest versions of this thesis. *The Play of Animals* (New York: D. Appleton and Company, 1898); Timothy Deacon, *The Symbolic Species: The Co-Evolution of Language and the Brain* (New York: W.W. Norton & Company, 1997).

Perhaps it has something to do with how the field came into being. Towards the turn of the millennium, the rise of video games, among other factors, encouraged researchers to establish conferences, publication venues, and, ultimately, an academic discourse dedicated to games – the virtual space odyssey starting circa 2001.⁵⁷ Up until this point, writes Jesper Juul, academics had “mostly been concerned with using games for studying other matters”: economic game theory, Claude Shannon’s computer chess, Ludwig Wittgenstein’s language games, and so on. Game studies, in contrast, was to research games “for their own sake.”⁵⁸ Apparently eager to demonstrate the importance of studying games for their own sake, many considered the field’s first task to be delineating its object in contrast to other media like literature, film, and TV. “Begin like this: If photographs are images, and films are moving images, *then video games are actions.*”⁵⁹ As such, researchers couldn’t just apply old theories of passive media; video games demanded a new science. The narratology versus ludology myth exemplifies the extent to which this premise entailed a distancing from other fields.⁶⁰ Whereas approaches attentive to rules, mechanics, and interactivity gained traction, those derived from film, literary, and theater studies received disdain for the “violence” they did to games.⁶¹ This approach is often called

⁵⁷Espen Aarseth, "Computer Game Studies, Year One," *Game Studies* 1, no. 1 (2001); Espen Aarseth, "Two Decades of Game Studies," *Game Studies* 21, no. 1 (2021).

⁵⁸ Juul, *Half-Real*, 9.

⁵⁹ Alexander Galloway, *Gaming: Essays on Algorithmic Culture* (Minneapolis: U. Minnesota Press, 2006), 2.

⁶⁰ Gonzalo Frasca, "The Debate that Never Happened," in *Level Up: Digital Games Research Conference Proceedings* (Utrecht: University of Utrecht, 2003), 56-69.

⁶¹ Markku Eskelinen, "The Gaming Situation," *Game Studies* 1:1 (2001): <http://www.gamestudies.org/0101/eskelinen/>.

“formalism,”⁶² but, if you’re not a game scholar, it might appear more akin to Northrop Frye’s anatomy of criticism: an attempt to define what game studies (or “ludology”) uniquely does.⁶³

Over the field’s first decade, the focus shifted from game form to game context, with researchers paying particular attention to the players, bodies, technologies, and economies that shape gameplay – what’s known as “game studies’ material turn.”⁶⁴ And while issues of race, gender, sexuality, and other identity categories have concerned game research since its inception,⁶⁵ the 2014 harassment campaign known as #GamerGate galvanized further attention to the politics of representation.⁶⁶ Much of this work has sought to critique the straight, white, male orientation of gamer culture and, moreover, to think beyond the largely European canon of game

⁶² To understand the peculiar way game studies uses the term “formalism,” see Alex Mitchell and Jasper Van Vught, *Videogame Formalism: On form, Aesthetic Experience and Methodology* (Amsterdam University Press, 2023).

⁶³ Stuart Moulthrop, “Being the Asterisk: Noah Wardrip-Fruin and the Future of Game Studies,” *Electronic Book Review*, Nov. 1, 2020.

⁶⁴ Thomas Apperley and Darshana Jayemanne, “Game Studies’ Material Turn,” *Westminster Papers in Communication and Culture* 9, no. 1 (2012): 5-25.

⁶⁵ For an early example, see Helen W. Kennedy, “Lara Croft: Feminist Icon or Cyberbimbo? On the Limits of Textual Analysis,” *Game Studies* 2, no. 2 (2002).

⁶⁶ For an overview, see Adrienne Shaw, “Are We There Yet?: The Politics and Practice of Intersectional Game Studies,” *The Velvet Light Trap* 81 (2018): 76-80. Examples include Aubrey Anable, *Playing with Feelings: Video Games and Affect* (Minneapolis: University of Minnesota Press, 2018); Anna Anthropy, *Rise of the Videogame Zinesters: How Freaks, Normals, Amateurs, Artists, Dreamers, Drop-outs, Queers, Housewives, and People Like You Are Taking Back an Art Form* (New York: Seven Stories Press, 2012); Shira Chess, *Ready Player Two: Women Gamers and Designed Identity* (Minneapolis: University of Minnesota Press, 2017); Megan Condis, “Playing the Game of Literature: Ready Player One, the Ludic Novel, and the Geeky ‘Canon’ of White Masculinity,” *Journal of Modern Literature* 39, no. 2 (2016): 1-19; Kishonna L. Gray, *Intersectional Tech: Black Users in Digital Gaming* (Baton Rouge: LSU Press, 2020); Carly A. Kocurek, *Coin-Operated Americans: Rebooting Boyhood at the Video Game Arcade* (Minneapolis: University of Minnesota Press, 2015); Jennifer Malkowski and Treanda M. Russworm, eds., *Gaming Representation: Race, Gender, and Sexuality in Video Games* (Bloomington: Indiana University Press, 2017); Adrienne L. Massanari, “#Gamergate and The Fappening: How Reddit’s Algorithm, Governance, and Culture Support Toxic Technocultures,” *New Media & Society* 19, no. 3 (2017): 329-346; Souvik Mukherjee, “Playing Subaltern: Video Games and Postcolonialism,” *Games and Culture* 11, no. 5 (2016): 504-520; Soraya Murray, *On Video Games: The Visual Politics of Race, Gender, and Space* (New York: I.B. Tauris, 2017); Christopher B. Patterson, *Open World Empire: Race, Erotics, and the Global Rise of Video Games* (New York: New York University Press, 2020); Bo Ruberg and Adrienne Shaw, eds., *Queer Game Studies* (Minneapolis: University of Minnesota Press, 2017).

scholarship. Now, researchers increasingly adopt posthumanist frameworks to think play beyond the human too.⁶⁷ Indeed, twenty years after “game studies year one,” we’re more likely to encounter a game researcher grumbling about their field’s arrested development than its colonization by more established disciplines. No sitcom, recent publications depict the field’s formation as a balkanization that not only precluded fruitful intellectual exchange but also ostracized those – mostly women – who didn’t toe the line.⁶⁸ Moreover, articles like “Against Game Studies,” “The Pyrrhic Victory of Game Studies,” and “The Future of Media Studies Is Game Studies” suggest a burgeoning desire to overturn this foundational insularity in favor of a more thoroughgoing interdisciplinarity.⁶⁹ It stands to reason, then, that game researchers are now suspicious of early approaches that strived to define our objects so definitively, for these definitions, by extension, appear to define a field. In seeking to move beyond this tendency, we might learn from those who thought more expansively about what play can be.

To riff on the philosopher of science Paul Feyerabend, play is, too often, conceived “*sub specie aeternitatis*,” scholars comparing definitions “without regard to their history and without

⁶⁷ For a range of approaches that speak to posthumanism, see Alenda Y. Chang, *Playing Nature: Ecology in Video Games* (Minneapolis: University of Minnesota Press, 2019); Aleena Chia and Paolo Ruffino, “Politicizing Agency in Digital Play After Humanism,” *Convergence* 28, no. 3 (2022): 392–407; Sonia Fizek, *Playing at a Distance: Borderlands of Video Game Aesthetic* (Cambridge, MA: MIT Press, 2022); Justyna Janik, “Intra-Acting Bio-Object: A Posthuman Approach to the Player-Game Relation,” *Journal of Gaming and Virtual Worlds* 13, no. 2 (2021): 165–180; Brendan Keogh, *A Play of Bodies: How We Perceive Videogames* (Cambridge, MA: MIT Press, 2018); Braxton Soderman, *Against Flow: Video Games and the Flowing Subject* (Cambridge, MA: MIT Press, 2021); Julian Togelius, *Playing Smart: On Games, Intelligence, and Artificial Intelligence* (Cambridge, MA: MIT Press, 2019); Tom Tyler, *Game: Animals, Video Games, and Humanity* (Minneapolis: University of Minnesota Press, 2022); Poppy Wilde, *Posthuman Gaming: Avatars, Gamers, and Entangled Subjectivities* (London, UK: Routledge, 2023).

⁶⁸ Amanda Phillips, Negg(at)ing the Game Studies Subject: An Affective History of the Field,” *Feminist Media Histories*, 6:1 (2020): 12–36.

⁶⁹ Alex Gekker, “Against Game Studies,” *Media and Communication*, 9:1 (2021): 73–83; Sebastian Deterding, “The Pyrrhic Victory of Game Studies: Assessing the Past, Present, and Future of Interdisciplinary Game Research,” *Games and Culture* 21, no. 2 (2021); Shira Chess and Mia Consalvo, “The Future of Media Studies Is Game Studies,” *Critical Studies in Media Communication*, 39:3 (2022): 159–64.

considering that they might belong to different historical strata.”⁷⁰ David Golumbia, for example, argues that video games – our most popular play form – are “games without play” because the activities and pleasures of titles like *World of Warcraft* are more akin to those of work. Far from providing open-ended experiences of freedom, they indulge our lust for power.⁷¹ Hence, the greatest mistake game scholars made was assuming that video games were games in the first place. While contrasting video games with older forms of play instructively highlights the differences between the present and the past, I wager that idealizing one kind of play in order to disqualify another as “not play” causes more problems than it resolves.

Conversely, Sutton-Smith’s *The Ambiguity of Play* demonstrates what it might look like to historicize play, each of his seven rhetorics issuing from a particular, discursive formation. His analysis reveals some of the ideological implications of our play definitions, exemplifying the power history has to furnish a critical perspective. Spariosu’s *Dionysus Reborn* (1989) operates on similar premises. Drawing on Wittgenstein, Spariosu proposes that the various meanings of play have, at best, a “family resemblance,” with only overlapping similarities and no one feature common to all. Avoiding offering “yet another” universal definition of play, he suggests that these “language games” that determine play as such are always bound up with an historically situated form of life.⁷² According to Wittgenstein, every human exists within a given “form of life” – embodying a “habitus,” as Pierre Bourdieu puts it – that gives meaning to linguistic and cultural practices.⁷³

⁷⁰ Paul Feyerabend, *Against Method* (London: Verso, 1993), 106.

⁷¹ David Golumbia, “Games without Play,” *New Literary History* 40, no. 1 (2009): 179-204.

⁷² Spariosu, *Dionysus Reborn*, xi.

⁷³ For Wittgenstein, this observation leads to the conclusion that any attempt to qualify these forms of life philosophically is doomed to failure because it would require a language not likewise grounded in a particular form of life, hence speaking in terms of language games and family resemblances. Ludwig Wittgenstein, *Philosophical*

If we can understand Michel Foucault's work as Wittgenstein + power,⁷⁴ and Friedrich Kittler's oeuvre as Foucault + technology,⁷⁵ then we start to get a sense of how one might study contemporary forms of play as products of our sociotechnical situation instead of behaviors that are, categorically, not play. A student of Kittler's, Claus Pias, offered one of the earliest materialist correctives to this idealist bent in play theory.⁷⁶ His *Computer Game Worlds* (2002/2017), originally a Germanophone dissertation completed in 2000, before "computer game studies, year one," charts the late nineteenth and early twentieth century epistemological and technological developments required for the video game to come into existence. Pias suggests that if the eighteenth and early nineteenth centuries ordained an open form of play that cohered with the liberal, romantic worldview of its time, then the video game exemplifies a form of play

Investigations, 4th ed., trans. G. E. M. Anscombe, P. M. S. Hacker, and Joachim Schulte (Oxford: Blackwell, 2009), 15.

⁷⁴ Peter Sloterdijk writes

If Wittgenstein was an occult and involuntary Nietzschean, Michel Foucault emerged from the outset as his manifest and voluntary counterpart. Nonetheless, one can say that Foucault started from where Wittgenstein left off: showing that entire branches of science or epistemic disciplines are nothing other than complexly structured language games, also known as discourses or discursive practices. Just as Wittgenstein had broken with the cognitivist prejudice in language theory to show how much speaking is an act rather than knowledge, Foucault broke with the epistemist prejudice in the theory of science in order to explain how much the disciplines he examined are performative systems rather than 'reflections' of reality.... One could therefore describe Foucault's work as it developed between the late 1950s and the mid-1970s as a Wittgensteinianism intensified via Heidegger.

Peter Sloterdijk, *You Must Change Your Life: On Anthropotechnics*, trans. Wieland Hoban (Cambridge: Polity Press, 2013), 148.

⁷⁵ Kittler is to Foucault what Marx is to Hegel: he "pulled discourse analysis off its textual and discursive head and set it on its media-technological feet." Geoffrey Winthrop-Young, "Introduction," in Friedrich Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford, CA: Stanford University Press, 1999), xi-xxxviii, xxii. As Alberto Romele argues, we might also understand Kittler as a kind of cyborg Bourdieu, the Frenchman having paid only scant attention to the role of technical media in determining our habitus. *Digital Habitus: A Critique of the Imaginaries of Artificial Intelligence* (London, UK: Routledge, 2023).

⁷⁶ In critiquing humanist conceptions of play, Pias arguably extends Kittler's anti-humanist project of ousting the spirit of the humanities into the realm of play studies. Henceforth, "CGW" will convey the following citation: Claus Pias, *Computer Game Worlds*, Trans. Valentine A. Pakis (Berlin, Germany: Diaphanes, 2017).

proper to neoliberalism, one that, on the contrary, largely reinforces the powers that be in the guise of freedom.⁷⁷

Computer Game Worlds also provided one of the earliest (and perhaps most faithful to Deleuze and Guattari) conceptualizations of the video game as an assemblage.⁷⁸ For Pias, relationships of “recurrence and communication” hold together the heterogeneous elements that comprise video gaming: player, body, console, screen, disc, and so on (*CGW* 12). Assemblages are defined by what they do, and different kinds of video game assemblage are defined by the different, historically grounded functions they perform by organizing these elements in a particular fashion. Action video games like *Pong* (1972), for example, developed out of ergonomics, cybernetics, and other military-industrial sciences that pioneered real-time, graphical interaction. The *Pong* assemblage is defined by its “time-critical” operation, which places particular demands on the user: focused attention, fast-twitch reflexes, and nimble fingers (*CGW* 10-11). For Pias, gaming is a machine compatibility test that humans pass when they learn

⁷⁷ Sebastian Moring and Olli Leino, “Beyond Games as Political Education: Neoliberalism in the Contemporary Computer Game Form,” *Journal of Gaming & Virtual Worlds* 8, no. 2 (June 2016): 145-161.

⁷⁸ Thousands of publications mobilize “assemblage,” and yet, authors seldom provide a robust justification for doing so. The concept has all but achieved the status of what Gustave Flaubert called a “received idea,” one so well understood that it requires no elaboration. Game research is no exception. It seems that almost any collection of objects encompassing more than a player and a game counts as an assemblage. This broad application of the concept can be traced back to T. L. Taylor’s influential article, “The Assemblage of Play,” which, in 2009, offered a corrective to earlier game studies “frameworks that divide the gaming moment into structure (or narrative) and player.” Instead of treating a game as a “boxed product,” Taylor argues that we should understand it as a “lived object” by examining the “range of actors (system, technologies, player, body, community, company, legal structures, etc.), concepts, practices, and relations that make up the play moment.” Why this assortment qualifies as “The Assemblage of Play” and not, say, “The Context of Play,” is unclear. Roughly based on Bruno Latour, Taylor admits that she was “very loosely using the term.” This is not a problem in itself; the article stands on its own merits. But as the concept gains more and more traction in game studies, it behooves us to question what it means when we call something an “assemblage.” T. L. Taylor, “The Assemblage of Play,” *Games and Culture* 4 (4), 2009: 331–339, 336, 332, 336.

to “embody a particular kind of communication between devices.” The punishment for failure?
“Symbolic death.”⁷⁹

In Anglophone game research, assemblage thinking is often associated with posthumanism because it allows scholars to move beyond the game (structure, object) and player (agency, subject) model to distribute whatever play is across a range of human and non-human actors. But given Pias’s Germanophone context, it’d be more apt to treat his approach in accord with “cultural techniques” [*Kulturtechniken*], which, etymologically rooted in late nineteenth-century agricultural engineering, has come to describe a range of anthropotechnical operations that constitute culture. “Within the US,” explains Bernhard Siegert,

the notion of the ‘posthuman’ emerged from a framework defined by the blurring of the boundaries between man and machine. However, while US postcybernetic media studies are tied to thinking about bodies and organisms, German media theory is linked to a shift in the history of meaning arising from a revolt against the hermeneutical tradition of textual interpretation and the sociological tradition of communication.... The guiding question for German media theory, therefore, was not How did we become posthuman? but How was the human always already historically mixed with the non-human?⁸⁰

Humans do not exist independently of “cultural techniques of hominzation” like building settlements, inscribing surfaces, manipulating symbols, and, as I argue in Chapter One, playing games. Time does not exist without cultural techniques of temporalization like sundials, calendars, and clocks. And space does not exist without cultural techniques of spatialization like mapping, gridding, and marking territory.⁸¹ In Heideggerian parlance, “the study of cultural techniques provides a kind of flanking manoeuvre by relating the thinking of Sein (Being) to the

⁷⁹ Claus Pias, “The Game Player’s Duty: The User as an Assemblage of the Ports” in Erkki Huhtamo and Jussi Parikka, eds. *Media Archaeology: Approaches, Applications and Implications* (Minneapolis MN: University of Minnesota Press, 2011): 164-183, 173.

⁸⁰ Bernhard Siegert, “Cultural Techniques: Or the End of the Intellectual Postwar Era in German Media Theory,” *Theory, Culture & Society* 30, no. 6 (2013): 48-65, 53.

⁸¹ Bernhard Siegert, “The Map is the Territory,” *Radical Philosophy* 5 (2011): 13-16.

processing and operating of bits and pieces of Seiendes (beings).”⁸² Consider the division of nature and culture, two major concepts. Anterior to this split are the technical operations that instantiate them, such as the walls that shore up the boundaries of civilization, and the doors that let one cross the threshold.⁸³ Nevertheless, the cultural technique is softer than the hard technical base in Kittler’s assessment of those media that determine our situation. To paraphrase Cornelia Vismann, cultural techniques, like assemblage thinking, speaks in terms of neither technical determinism nor the sovereignty of the subject but in a kind of “middle voice” English (and German) struggles to replicate.⁸⁴

In the context of media studies, cultural techniques are often associated with the “media-anthropological turn” towards media practices.⁸⁵ In a now canonical passage, historian Thomas Macho explains that

Cultural techniques – such as writing, reading, painting, counting, making music – are always older than the concepts that are generated from them. People wrote long before they conceptualized writing or alphabets; millennia passed before pictures and statues gave rise to the concept of the image; and until today, people sing or make music without knowing anything about tones or musical notation systems. Counting, too, is older than the notion of numbers. To be sure, most cultures counted or performed certain mathematical operations; but they did not necessarily derive from this a concept of number.⁸⁶

⁸² Geoffrey Winthrop-Young, "Cultural Techniques: Preliminary Remarks," *Theory, Culture & Society* 30, no. 6 (2013): 3-19, 10.

⁸³ Bernhard Siegert, "Doors: On the Materiality of the Symbolic," *Grey Room* 42: 6–23.

⁸⁴ Cornelia Vismann, "Cultural Techniques and Sovereignty," *Theory, Culture & Society* 30, no. 6 (2013): 83-93.

⁸⁵ Schüttpelz, "The Media-Anthropological Turn."

⁸⁶ Thomas Macho, "Zeit und Zahl. Kalender- und Zeitrechnung als Kulturtechniken," in Krämer S and Bredekamp H (eds) *Bild – Schrift – Zahl*. München: Wilhelm Fink, 179–192, 179. See also Thomas Macho, "Second-Order Animals: Cultural Techniques of Identity and Identification," *Theory, Culture & Society* 30, no. 6 (2013): 30-47. Macho contends that cultural techniques, by definition, have a second-order, symbolic dimension. While cultural techniques researchers are more than willing to consider the non-human operations that produce the human as such, this criterion seems to substantiate the notion that cultural techniques are “cultural,” that is, somewhat the preserve of humans. However, as the example of the nip and the bite suggests, play is a second-order operation that non-

If media scholars often focus on media objects – film, radio, and video games – then the cultural techniques approach focuses on the practices that precede, attend, and endure them: watching, listening, and playing. Thus, the emphasis of a history of cultural techniques is not on technical objects like the video game alone, but on the history of play,⁸⁷ which cannot be separated from its social and technological conditions. And although this framework often takes a view from above, treating cultural techniques, predominantly, as part of the machinations of hegemony, there's no reason why they, culturally contingent, can't be treated pluralistically.⁸⁸ Furthermore, as Siegert argues, "by assuming the position of the third, an interface between the real and the symbolic," cultural techniques can be a deterritorializing force, complicating the divisions they usually uphold. With its history of Dionysian and Apollonian tendencies, straddling the line between fantasy and reality, I consider play to be an ambivalent cultural technique par excellence – one that, at times, ends up producing the reality it's supposedly apart from.⁸⁹

Untimely Play argues that play, as a concept and a practice, is best approached as an historical category that changes over time, not an immutable idea with a singular definition. As I see it, many of the problems we have when it comes to talking about play stem from presentist

human animals can perform. For more on the relationship between animals and cultural techniques, see Sebastian Vehlken, *Zootechnologies: A Media History of Swarm Research* (Amsterdam: Amsterdam University Press, 2019).

⁸⁷ Boluk and LeMieux, *Metagaming*, 17.

⁸⁸ Bernard Dionysus Geoghegan, "After Kittler: On the Cultural Techniques of Recent German Media Theory," *Theory, Culture & Society* 30, no. 6 (2013): 66-82, 76.

⁸⁹ Texts that have explicitly theorized play or games as cultural techniques include Roger Moseley, *Keys to Play: Music as a Ludic Medium from Apollo to Nintendo* (Oakland: University of California Press, 2016); Stefan Werning "Analytical Game Design: Game-Making as a Cultural Technique in a Gamified Society," in Glas, R., S. Lammes, M. de Lange, J. Raessens, and I. de Vries, eds. *The Playful Citizen: Civic Engagement in a Mediatized Culture* (Amsterdam: Amsterdam University Press, 2019): 56-72; Timothy Barker, "Cultural Techniques of Play: A Media Philosophical Approach to the Study of Time, History, and Memory in Games," *Configurations*, 27(1), 2019: 87-110; Fabian Lorenz Winter, "Levels and Loot: Archives in Video Games," *Journal of Aesthetics & Culture* 14 (1), 2022; Timothy Barker, "Unplayable Games: Time and Digital Culture," *Kunsttexte*, (2) 2023.

assumptions about the uniqueness of our situation on the one hand and a peculiar piety toward outmoded definitions on the other. If we start with Huizinga, then today's convergence of work and play – and perhaps even the notion that play is a conduit for power – seems anomalous. It's understandable, therefore, that scholars have penned pages on the colonization, corruption, or loss of play because, clearly, play isn't what it used to be. But play hasn't always been what it used to be. In the long *durée* of humanity, Huizinga's account of the idealized, free form of play is the exception, not the rule.⁹⁰ The "magic circle" is a relic of industrial capitalism, one of the few periods in history when the division between labor and leisure was so clear-cut.⁹¹ As games and other forms of play become more and more purposeful, and the ends they're supposed to serve are increasingly determined in advance, at stake is not play as such but our room for play – our potential.

Genealogy: Play From Aesthetic Education to Adaptive Potentiation

How did play, once considered useless, become so thoroughly useful? How, in other words, did we get from surplus play to adaptive play? Although the notion that play is integral to all kinds of development didn't come to the fore until the twentieth century, a brief excursion into what came before reveals that even ostensibly purposeless theories still granted play something of a purpose: to experience difference.

Play has been understood as autonomous from practical reality throughout history⁹² but its status as an expression of freedom becomes clear in the modern philosophy of aesthetics. At

⁹⁰ We may even go so far as to say that, in the context of the twentieth century, Huizinga's purposeless play is the radical, not conservative, notion because it runs counter to the prevailing scientific wisdom that play does something important.

⁹¹ Jacques Ehrmann, "Homo Ludens Revisited," *Yale French Studies*, no. 41 (1968): 31-57.

⁹² Mary Midgley, "The Game Game," *Philosophy* 46, no. 178 (1971): 231-253.

the core of Immanuel Kant's aesthetic theory in *The Critique of Judgement* (1790) is the "free play" of the faculties.⁹³ The faculties include sensibility, which generates sensory representations on the basis of present external stimuli; understanding, which spontaneously generates conceptual representations; and imagination, which mediates the two and provides sensible representations of objects that are not currently present to us. Under normal circumstances, sensory representations are delivered to the understanding, and the understanding tries to match this data with a set of existing empirical concepts. At the aquarium, I gaze into the murky corner of a tank, glimpsing some movement. It's a long, tube-shaped creature intermittently popping its head out of the coral. On the basis of this sensory data, my understanding concludes that that's a moray.

The aesthetic encounter suspends this process of correlating experience with a preestablished set of concepts. Instead, the imagination organizes the sensory experience by itself, albeit in a way that's easily comprehensible to the understanding. Consider a time you have contemplated an artwork that didn't immediately make sense to you. Sure, you could match it with some concepts – Picasso, pop art, nineteenth century, Dutch – but there's something to this painting that these markers don't quite capture. After further attention, the artwork starts to mean something, it starts to make sense, and it even starts to make you think differently about its subject. Instead of recognition – that's a moray – this is reflection: the free play of the faculties can revise what we thought we knew, prompting us to think anew. This is one reason why aesthetic judgment is considered autonomous – it can elude the strictures of our preestablished conceptual schema. At the same time, it reassures us of our lawfulness because we effectively

⁹³ Immanuel Kant, *Critique of Judgment*, trans. Werner S. Pluhar (Indianapolis: Hackett Publishing Company, 1987), 62.

generate our own rules. Hence, Kant considered aesthetic judgement to be the sensuous confirmation of our innate capacity to be moral creatures. The free play of the faculties affirms the human's ability to self-regulate without the imposition of duty, to be good while still being free.

Aesthetic autonomy didn't emerge autonomously. Although Kant's *Critique of Judgement* is rightly read as a work of philosophy that transcends its circumstances, aesthetic autonomy can be understood as a response to an historical problem.⁹⁴ Towards the turn of the century, it became increasingly apparent that modernity was corroding what were once fundamental human values. The Industrial Revolution and colonial expansion intensified the ills of capitalist society, leading many to feel alienated from their labor and from one another. There was a rising sense that unbridled self-interest was atrophying the human ability to treat others with compassion. And yet, one couldn't just act differently. So ingrained were social conventions that individuals couldn't even trust themselves to make a change: the inertia of habit would inevitably reproduce the same system. It's all people knew. To make a change, we have to know something different; we have to undergo self-transformation; we have to become the right kind of person. Only then can we envision and enact a different world. But where can one find this training ground for the future, one that flouts the usual rigors to learn something new?

Friedrich Schiller's 1794 *Letters on the Aesthetic Education of Man*⁹⁵ argues that art is our training ground for the new society. Aesthetics already approximated this function in Kant. The spontaneous self-regulation of the imagination is not subordinate to the understanding's

⁹⁴ Grant H. Kester, *The Sovereign Self: Aesthetic Autonomy from the Enlightenment to the Avant-Garde* (Durham, NC: Duke University Press, 2023).

⁹⁵ Friedrich Schiller, *On the Aesthetic Education of Man*, trans. Elizabeth M. Wilkinson and L. A. Willoughby (Oxford: Clarendon Press, 1967).

conceptual schema, and this quasi-autonomy allows it to foster insights that are non-reducible to what we already know. Inspired by Kant, Schiller proposes that art possesses the unique capacity to repair the damaged human personality because it allows us to experience what we cannot under capitalist solipsism: the reconciliation of self and other.

For Schiller, humans have two primary drives: the sense drive, which stems from our physical, sensuous existence; and the form drive, which is our rational nature. These two drives are in constant competition. If the sense drive overcomes the form drive, it reduces us to matter, to our existence in time. I must simply endure whatever changes the world throws at me. I'm standing outside. It starts raining. I'm getting wet. The form drive is how I endure as an individual in the face of my changing world, it's how I have an identity. This unchanging nature is, counterintuitively, where my agency to change my situation comes from. I am dry. I start getting wet. I prefer to be dry. I open my umbrella. I stay dry. We might think that this superiority of the form drive is ideal, but without the perfection of the sense drive, we cannot be open to new experiences. Ideally, we combine the two, and that's the role of the third drive, the play drive.

Akin to Kant's free play of the faculties, the play drive balances the sense drive's constant becoming and change with the form drive's enduring being and identity. In play, I am simultaneously passive, exercising my sense drive by receiving the world, and active, exercising my form drive by reflecting on my experience. In 2012, Hannes Koch and Florian Ortkrass staged an art installation called *Rain Room*, which, by dint of motion sensors, allowed visitors to walk through a downpour without getting wet. Suspending the threat of wet, *Rain Room* exposed me to an experience I wouldn't otherwise enjoy and, ultimately, fostered a new appreciation for the sound, shape, and texture of rain. At the same time, I reflected on my experience, wondering why I had to hide from the rain to feel closer to it. This play of sense and form, feeling and

reasoning, passivity and activity is the harmony of self and other. And because this state mobilizes much of what makes us who we are as humans, Schiller writes that “man only plays when he is in the fullest sense of the word a human being, and he is only fully a human being when he plays.”⁹⁶

Art offers a solution to the problem of moral torpor because it provides an aesthetic experience of reconciliation that, in theory, prefigures a social experience of reconciliation. Our ingrained habits prevent us from acting differently on the basis of will alone, so we need the eponymous “aesthetic education” to prepare a different form of conduct for the future. In his history of aesthetic autonomy, Grant Kester argues that Schiller effectively set tone for the subsequent two-and-a-half centuries of artistic politics. The basic idea is that the aesthetic experience

lays the groundwork for our eventual participation in actual forms of political transformation. Due to the proscription against any direct attempt to bring about political change, this experience must, by necessity, unfold entirely within the consciousness of the individual viewer or reader via regression to a presocial state where the true self is located. A process of aesthetically driven self-reflection is the point of origin for all subsequent forms of political insight.⁹⁷

Although Schiller is not talking about play in exactly the same sense as Huizinga, who covers a more diverse range of high and low cultural forms, we can see clear parallels between Schiller’s account of aesthetic autonomy and Huizinga’s notion of the magic circle – a point I will return to shortly.⁹⁸ Contrary to the widespread belief that aesthetics and politics are counterposed, the suspension of reality is the prelude to changing reality. For this to work, art has to be conceived

⁹⁶ Schiller, *On the Aesthetic Education of Man*, 107.

⁹⁷ Kester, *The Sovereign Self*, 37.

⁹⁸ Mihaly Csikszentmihalyi’s highly influential theory of flow also resembles Schiller’s model. We experience flow (play) when one’s innate skill (form) is in harmony with external challenge (sense). *Flow: The Psychology of Optimal Experience* (New York: Harper & Row, 1990).

of as quasi-autonomous from the rest of life, or else it will simply reproduce the world it's supposed to help us overcome. Far from inconsequential, therefore, experiences of art cultivate, even transform, us in enduring ways. An aesthetic education promises social transformation because it prepares us to live in a world that doesn't exist yet – a world we might consider untimely.

Despite verging on a theory of play as adaptation, Schiller is remembered as a forebearer of the “surplus energy theory” of play.⁹⁹ Scientists had a hard time figuring out why animals would expend energy doing something so useless, and the logical explanation seemed to be that organisms play when they've run out of useful things to do. In other words, the evolutionary role of play is to expend energy that we don't need, and Schiller exemplifies this standpoint in his reflection on non-human play:

When the lion is not tormented by hunger, and when no wild beast challenges him to fight, his unemployed energy creates an object for himself; full of ardour, he fills the re-echoing desert with his terrible roars, and his exuberant force rejoices in itself, showing itself without an object.... The animal works, when a privation is the motor of its activity, and it plays when the plenitude of force is this motor, when an exuberant life is excited to action.¹⁰⁰

In essence, this is the classic division of work and play: we are compelled to work by external demand and to play by our internal abundance. By couching this division in terms of need rather than remuneration, though, Schiller arguably disentangles play from the capitalist division of labor and leisure, rendering it a more fundamental organic phenomenon. The extent to which he was projecting his social circumstance onto the animal kingdom is up for debate.¹⁰¹

⁹⁹ Groos, *The Play of Animals*, 1-22.

¹⁰⁰ Schiller, *On the Aesthetic Education of Man*, 80-81

¹⁰¹ Claus Pias, "Falsches Spiel. Die Grenzen eines Ressentiments," *Maske und Kothurn: Internationale Beiträge zur Theater-, Film- und Medienwissenschaft* 54, no. 4 (2008): 35-47.

Now, one might think that the musings of an eighteenth-century poet would have little traction within the scientific community, but almost a century later, Herbert Spencer echoed Schiller in explaining his theory of evolution. Citing a German author whose name he can't remember, the Englishman argued that aesthetic sentiment has its origin in the play impulse and, moreover, that the impulse to play stems from superfluous energy.¹⁰² Whereas Schiller was ultimately interested in the social good art could do, Spencer was more invested in drawing definitive conclusions about the way the world works. In his hands, play transformed from something that can happen when an animal has excess energy into something caused by an excess of energy.

At the end of the nineteenth century, another German, Karl Groos, took issue with this “surplus energy theory” of play. His 1896 *The Play of Animals* (1898) comprises numerous examples of its namesake, several of which challenge Spencer's thesis. If animals only play because of surplus energy, then why do young, emaciated polar bears bother their starving mother with their playfulness? Food deprivation means that they can't possibly be in possession of an abundance of energy. And yet, the cubs still tussle with one another. If not blowing off steam, what is the evolutionary point of play? After extended observation, it's clear that the polar bears picked up certain gestures and movements from these play sessions, ones that they repeated later in life. Instead of expending energy, Groos contends that the evolutionary function of play is preparation. The cause of play, therefore, is not an abundance of energy, but instinct.

¹⁰² I am drawing on Karl Groos's narrative here. While his points still stand, the great irony of this somewhat snarky reference to Spencer forgetting where he got his idea from may well be that Groos has mistaken his fundamentals for his principles. It seems the passage he quotes is actually from page 627 in Walter Bowers Pillsbury, *The Fundamentals of Psychology* (New York: Macmillan, 1888), not Herbert Spencer, *The Principles of Psychology* (London: Longman, Brown, Green, and Longmans, 1855).

A second intervention follows. At the time, Groos was responding to theories of evolution that relied on positing a number of natural instincts: To account for all the activities animals perform in their lifetime, you can say that these are fixed patterns of behavior given at birth. This certainly seems to be the case with animals that emerge almost fully formed. Deer, for example, are instinctively mobile as soon as they exit the womb. The same does not hold true for other animals, however, especially humans. Groos's notion that play is preparatory doubles as a critique of evolutionary theories that chalk too much up to nature, not nurture. Play, he argues, is a primary instinct that allows animals to learn other behaviors. It is by means of play that young animals acquire the skills, routines, and capacities – the habits – of their species. Likewise a counterpoint to instinctual theories of animal behavior, habit gained renewed epistemological traction in the nineteenth century. Understood not as dull, mechanical repetition, but as a synthesis of experiences into anticipations – as reproductions of past responses to environmental stimuli – habit helped explain learned behaviors.¹⁰³

We've got it the wrong way around. It's not that young animals have their needs taken care of by their parents and are, therefore, free to express their excess energy. Animals don't play because they're young; they're young so that they can play. Groos suggests that sufficient playtime is the reason why different species have different lengths of childhood. In theory, humans are children for longer than deer are fawns because they have so much more to learn. Nevertheless, this isn't simply a theory of imitation. The “‘experimenting’ of little children and young animals, movement, hunting, and fighting games, which are the most important elementary forms of play, are not imitative repetitions, but rather preparatory efforts.”¹⁰⁴ Against

¹⁰³. Tony Bennett, “Habit: Time, Freedom, Governance.” *Body & Society*, 19(2-3), 2013: 107-135.

¹⁰⁴ Groos *The Play of Animals*, 7.

the notion that we play for its own sake, Groos concludes that “youth probably exists for the sake of play.”¹⁰⁵

From this perspective, the boundary between work and play looks flimsy. Whereas the surplus energy theory neatly aligns with the social division of labor and leisure – play being that thing we do when we don’t have to work to meet a need – Groos proposes that play, itself, meets a need, albeit in an indeterminate fashion. My contention is that this model of play is a more appropriate starting point for dealing with our “age of gamification”, where play clearly performs a number of functions. The debate over whether or not we should call contemporary forms of play “play” on account of their proximity to work rests on outmoded abstractions. Before we coined “playbor” to characterize a new chimera, play already did the work of physiological and psychological development.

In his 1920 *Beyond the Pleasure Principle*, Sigmund Freud provides one of the most famous accounts of the role of play in psychic development: the game of Fort/Da.¹⁰⁶ Freud observed that his 18-month-old grandson would repeatedly throw a cotton reel out of his cot. Each time he threw it, he exclaimed “Oo,” and the sound prompted the mother to fetch it. On the cotton reel’s return, his grandson would emit a thankful “Ah.” For Freud, these noises approximated “Fort” (gone) and “Da” (there), and the repeated act had a twofold significance. First of all, the child effectively comes to terms with the unpleasant experience of his mother leaving him. Typically, the child has no control over this; he is passive. But in play, he becomes the master of the situation, dictating the mother’s comings and goings. This doubles as the

¹⁰⁵ Groos, *The Play of Animals*, 75.

¹⁰⁶ Sigmund Freud, *Beyond the Pleasure Principle*, trans. and ed. James Strachey (New York: W.W. Norton & Company, 1961), 13-17.

release of pent-up aggression. The child experiences some resentment at having been left, and play provides a space to sublimate the desire for revenge without the consequences of another form of expression.

In Freud, we can see the influence of both Groos's adaptive theory of play and the surplus energy theory of play. On the one hand, Fort/Da allows the child to come to terms with an otherwise troubling experience and, moreover, adapt to the inconvenience of other people: a fundamental dimension of individual development. Indeed, many early forms of movement play allow the child to process the trauma of reality, especially the loss of immediate satisfaction in the womb and, soon after, the disappearance of what is typically their first physical object: the mother. Fiddling with "transitional objects" like dolls or blankets provides comforting, external contact in the carer's absence until the child can form comforting, internal representations.¹⁰⁷ On the other hand, insofar as Fort/Da is a form of inconsequential revenge, play still expresses an excess, but instead of being an energetic excess determined by biology, it's a libidinal excess determined by society. In Freud, the surplus energy theory of play transforms into a surplus libido theory of play whereby desires that can't find expression elsewhere are sublimated. The same principle applies to adults, although their play is fundamentally regressive. Freud depicts the suppression of wordplay as a healthy step in psychic development and, by extension, "joke-work" in adulthood amounts to a return of the repressed pleasure of nonsense. Play, here, is decidedly normative. When it's not helping us assimilate troubling experiences to become functional members of society, it's allowing us to express desires that would otherwise trouble

¹⁰⁷ D.W. Winnicott, *Playing and Reality* (London: Tavistock Publications, 1971), 1-25.

that society. Meanwhile, the association with childhood disciplines any radical ramifications of adult play.¹⁰⁸

The regressive associations of adult play underscore the widespread belief that play only fostered growth until one grew up and out of it. While Groos certainly had his own fairly linear model, he nonetheless maintained that play had important functions in adulthood. Moreover, whereas psychoanalysis was primarily concerned with the role of play in the development of the individual psyche, Groos extended his insights to culture. In *The Play of Man* (1899/1901), he argues that the same “inborn impulse” that inspires animal play mediates the transition from childhood to adulthood.¹⁰⁹ Beyond physiological and psychological development, Groos explains that play participates in the development of society writ large. “Physical heredity” cannot account for tradition; the “store of culture must be acquired by each individual anew.”¹¹⁰ Forms of play, especially “dramatic imitation play,” allow the child to acquire the habits of the social group just as the play of animals allows them to acquire the habits of the species.¹¹¹ Marcel Mauss’s writings on “Techniques of the Body” (1934), a progenitor of the discourse on cultural techniques, insinuates that, beyond dramatic imitation play, other forms of recreation are fundamental to acculturation.¹¹² Thus, play is primarily a means of reproducing the culture

¹⁰⁸ The infantilization of adult play in early psychoanalysis exemplifies what Sutton-Smith’s seventh rhetoric of frivolity, which makes minor forms of play appear trivial. *The Ambiguity of Play*, 201-213

¹⁰⁹ Karl Groos, *The Play of Man*, trans. Elizabeth L. Baldwin (New York: Appleton, 1901).

¹¹⁰ *Ibid*, 398.

¹¹¹ *Ibid*, 313-5.

¹¹² Marcel Mauss, “Techniques of the Body,” *Economy and Society* 2 (1): 70–88. The basic idea is that body techniques we consider universally human, such as walking, running, swimming, and eating, are not only learned but also socially conditioned and, therefore, culturally specific. By extension, various factors shape body techniques, including gender. See Iris Marion Young, “Throwing Like a Girl: A Phenomenology of Feminine Body Comportment Motility and Spatiality,” 3 (2), 1980: 137–156.

already in place, and while he certainly complicates this paradigm at points, Groos's depiction of the process is largely teleological.¹¹³ The notion that play inevitably helps us go from lower to higher complexity, childhood to adulthood, internal psyche to external society, is a defining feature of the modern "rhetoric of play as progress."¹¹⁴

As historians have shown, Groos's Darwin inspired theory of play as preparation defined the twentieth century.¹¹⁵ Play recurred as a crucial means of self-development, especially in psychoanalysis, biology, and child pedagogy. This doesn't mean that the aesthetic dimension was forgotten. On the contrary, Groos located an inchoate artistry in animal experimentation and, perhaps, the evolutionary origin of human art. Along these lines, we might disinter Schiller from the surplus energy theory of play. He does, after all, portray aesthetic education as preparation too, albeit for a different world. Indeed, together, Schiller and Groos stage one of our fundamental concerns: When play becomes functional, can it still go beyond mimesis to introduce difference? In the twentieth-century discourse on play, the predominant answer was no. Even when not directly imitative, modern play cleaves to the Apollonian, not the Dionysian, to social order, not radical chaos.¹¹⁶

So keen were scholars to prove that play was part and parcel of progress that, Sutton-Smith argues, research into adaptive play often supplemented its findings with a little ideology. The literature on child development, for example, sought to show that

increases in the complexity of play skill... lead to increases in some parallel kind of human growth or adaptation. This subordination of intrinsic play functions to other

¹¹³ Groos was not the progenitor of the linear progression of play, which can be traced back to Jean Paul. Michael Powers, "The Smallest Remainder: Benjamin and Freud on Play," *MLN* 133, no. 3 (2018): 720-742.

¹¹⁴ Sutton-Smith, *The Ambiguity of Play*, 9.

¹¹⁵ Henricks, *Play and the Human Condition*.

¹¹⁶ Spariosu, *Dionysus Reborn*.

extrinsic developmental functions occurs apparently because the theorists are primarily concerned with child socialization and maturity, and children's civilized progress in general. As a result, their broader sentiments about child development carry over into their attitudes toward play, which then become as much determined by the rhetoric of progress as by any empirical data about the causal value of play itself.¹¹⁷

When your academic career hinges on demonstrating that play does something, it's easy to mistake correlation for causation. Beliefs about the inevitability of human progress led scientists to establish a fairly direct, linear, and causal relationship between play and development. This research formed the basis of the “play ethos,” “a strong and unqualified assertion of the functional importance of play, namely that it is essential to adequate (human) development.”¹¹⁸

Sutton-Smith contends that it'd be more scientifically accurate to, instead of causation, understand play as an “exercise in adaptive potentiation” that proceeds in an indirect, non-linear manner – much like the brain, which proliferates neuronal pathways that, despite not having specific functions, prepare us to adapt to future circumstances.¹¹⁹ Indeed, play doesn't necessarily adapt us to what it resembles – playing doctor as a child, for instance, did not prepare me to sit the MCAT – but it can expand our horizons. Sutton-Smith proposes that play sustains “the variability of the human condition” at a number of scales:¹²⁰ Movement play attunes our proprioception, enabling us to mobilize in ways we don't, but could; mental play creates connections that we can only imagine, but can, indeed, imagine; and forms of cultural play – singing, dancing, gaming – present realities that don't exist, but do. Play operates in the subjunctive mood, and unlike other “as ifs,” it's an “enacted subjunctive:” We act out the

¹¹⁷ Sutton-Smith, *The Ambiguity of Play* 18-19.

¹¹⁸ Peter K. Smith, *Understanding Children's Worlds: Children and Play* (Chichester, UK: John Wiley & Sons, 2010), 28.

¹¹⁹ Sutton-Smith, *The Ambiguity of Play*, 231.

¹²⁰ Ibid, 230.

possible.¹²¹ If the wiggle on a door handle is often referred to as its “play,” its room for movement, then we might say that play nourishes our play – our potential.

Sutton-Smith’s interpretation of play bears a remarkable resemblance to that of another German philosopher who, inspired by Groos,¹²² suggests a way of translating the Kiwi’s largely scientific theory into a more thoroughly cultural one. During his winter sojourn in Moscow from December 1926 to January 1927, Walter Benjamin spent much of his time toy shopping.¹²³ Intrigued by the popularity of old toys among adults, he surmised that the Freudian explanation was insufficient.

When the urge to play overcomes an adult, this is not simply a regression to childhood. To be sure, play is always liberating. Surrounded by a world of giants, children use play to create a world appropriate to their size. But the adult, who finds himself threatened by the real world and can find no escape, removes its sting by playing with its image in reduced form. The desire to make light of an unbearable life has been a major factor in the growing interest in children's games and children's books since the end of the war.¹²⁴

Not just for children coming to terms with their new world, play helps adults deal with the new, alienating world of industrial society. Akin to Sutton-Smith, Benjamin contends that we have misinterpreted the role of play in adulthood because we have been too eager to understand play from the point of view of adulthood, which, like so much presentist historiography, assumes itself to be the inevitable conclusion of what comes before it. Marshaling all play activities into a progression towards that end, this perspective is unable to see that some forms of play confound social reproduction.

¹²¹ Ibid, 29.

¹²² Benjamin, “Toys and Play,” 119.

¹²³ Pfeifer, Annie, “A Collector in a Collectivist State: Walter Benjamin’s Russian Toy Collection.” *New German Critique*, vol. 45, no. 1 (133), 2018, 49–78.

¹²⁴ Walter Benjamin, “Old Toys,” in *Selected Writings*, vol. 2: 1927–1930, ed. Michael W. Jennings, Howard Eiland, and Gary Smith (Cambridge, MA: Harvard University Press, 1999), 98–102, 100.

Certainly, the traditions, gender norms, and modes of conduct baked into toys allow them to function as means of cultural inheritance, but this “the assumption that the imaginative content of a child's toys is what determines his playing” neglects the “true face of the child at play:” “A child wants to pull something, and so he becomes a horse; he wants to play with sand, and so he turns into a baker; he wants to hide, and so he turns into a robber or a policeman.”¹²⁵ In other words, we neglect the agency of the child’s imagination, which is capable of introducing variation. Nevertheless, whereas Sutton-Smith locates a margin of autonomy in play’s subjunctive mood, its non-coincidence with reality, Benjamin argues that the more fundamental law of play is repetition:

Not a ‘doing as if’ but a ‘doing the same thing over and over again,’ the transformation of a shattering experience into habit – that is the essence of play. For play and nothing else is the mother of every habit. Eating, sleeping, getting dressed, washing have to be instilled into the struggling little brat in a playful way, following the rhythm of nursery rhymes. Habit enters life as a game, and in habit, even in its most sclerotic forms, an element of play survives to the end. Habits are the forms of our first happiness and our first horror that have congealed and become deformed to the point of being unrecognizable ¹²⁶

The debt to Freud is apparent in this notion of transforming a shattering experience, a trauma, into habit. But for Benjamin, the Janus-face of inheriting a legacy, of copying a model, of joining a tradition by means of its repetition, is the errant repetition, one that proceeds without a model, into the unknown. The child, despite having already learned the lesson, demands: Do it again. Unlike Freud’s somewhat pessimistic interpretation, for Benjamin, nascent in the compulsion to

¹²⁵ Walter Benjamin, “The Cultural History of Toys,” in *Selected Writings, vol. 2: 1927–1930*, ed. Michael W. Jennings, Howard Eiland, and Gary Smith (Cambridge, MA: Harvard University Press, 1999), 113–116, 115. For examples of radical child’s play, see Mary Flanagan, *Critical Play: Radical Game Design* (Cambridge, MA: MIT Press, 2009), 17–62.

¹²⁶ Benjamin, “Toys and Play,” 120.

repeat is the possibility that this time, maybe, things might be different. Such is the gamble of play.

When it comes to play, however, Benjamin is perhaps best known for his notion of *Spielraum* – quite literally, the room for play. His famous “The Work of Art in the Age of its Technological Reproducibility” (1935) argues that transformations in the mode of production had precipitated a break from tradition.¹²⁷ No longer did the work of art bear its aura, its uniqueness, but whereas others primarily bemoaned this development, Benjamin had a more ambivalent take, one that suggests the “decay” of traditional art consumption opened onto more democratic forms of culture that allowed the masses to adapt to their accelerating world. Scholars often theorize media devices as extensions of our perceptual capacities, as if, perhaps, our ability to properly use technologies is given. On the contrary, for Benjamin, there’s often a gap, an asynchrony of personal power and historical place, whereby the pace of technological development outstrips the human’s capacity to keep up.¹²⁸ In this scenario,

The most important social function of film is to establish equilibrium between human beings and the apparatus. Film achieves this goal not only in terms of man’s presentation of himself to the camera but also in terms of his representation of his environment by means of this apparatus. On the one hand, film furthers insight into the necessities governing our lives by its use of close-ups, by its accentuation of hidden details in familiar objects, and by its exploration of commonplace milieux through the ingenious guidance of the camera; on the other hand, it manages to assure us of a vast and unsuspected field of action [*Spielraum*].¹²⁹

¹²⁷ I am referring to the second version because, as Miriam Hansen explains, it has more play. Walter Benjamin, “The Work of Art in the Age of Its Technological Reproducibility: Second Version,” in *Selected Writings, Volume 3: 1935–1938*, ed. Howard Eiland and Michael W. Jennings (Cambridge, MA: Harvard University Press, 2002), 101–133; Miriam Bratu Hansen, “Room-for-Play: Benjamin’s Gamble with Cinema,” *October*, 109, 2004: 3–45.

¹²⁸ Inga Pollmann, “Invisible Worlds, Visible: Uexküll’s Umwelt, Film, and Film Theory,” *Critical Inquiry* 39, no. 4 (2013): 777–816, 805.

¹²⁹ Benjamin, “The Work of Art,” 117.

Cinema invites us into a playground of experience that not only helps us make sense of our world – representing it to us in such a way as to aid comprehension – but also alters our capacity to perceive, preparing us to inhabit a world that, while ostensibly ours, doesn’t always feel like it is. No Luddite, Benjamin may well have extended this interpretation to digital media, combining his appreciation of the toy with his appreciation of the moving image to grapple with the most popular play form today: the video game.¹³⁰

My contention is that play is a fundamental means by which we shape the future because it allows us to inhabit – and even adapt to – worlds that aren’t our own... yet: untimely worlds. Whether or not the inertia of habits acquired in play ends up actualizing those powers of the false to make something fictional a reality is a recurrent theme of this dissertation. Studying episodes in the history of games when play has been particularly purposeful, it becomes clear that various regimes of power in different historical contexts have effectively mobilized the potential of play to realize an unjust world – especially our late capitalist one. Indeed, games and other forms of play have always lent themselves to the exercise of soft power that suffuses contemporary society whereby the guise of self-direction obfuscates subjugation. Now it seems that they may as well be neoliberalism incarnate.

Context: The Biopolitics of Play Under Neoliberalism

Our age of gamification is intertwined with neoliberalism, which scholars consider to be both an approach to economic policy and a prevailing ideology. Associated with 1980s political leaders like Margaret Thatcher, Ronald Reagan, and Augusto Pinochet, neoliberal policy is characterized by market-oriented reforms: eliminating price controls, deregulating markets, encouraging privatization, taking austerity measures, and, altogether, reducing state influence.

¹³⁰ Hansen, “Room-for-Play,” 42-5.

The basic idea is that heavy-handed governing impedes the economic competition that drives growth. If statecraft is an art, then neoliberalism is, in theory, minimalist.¹³¹ But instead of asking whether existing policies “spark joy” before throwing them out, you ask whether they spark innovation. In practice, this meant getting rid of a lot of public services. Thatcher, Reagan, and Pinochet had to dismantle their respective welfare states to pave the way for economic freedom, leading many to decry neoliberalism as a form of market fundamentalism that puts money ahead of people. Although critics debate whether or not “neoliberalism” continues to represent the current state of political economy at a global scale,¹³² it remains an accurate term for the slew of policies introduced in the late twentieth and early twenty-first centuries that transformed society.

According to Thatcher, “economics [were merely] the method; the object [was] to change the heart and soul.”¹³³ Critics concur that neoliberal policy comes with an ideology to boot,¹³⁴ one that reconfigures life in financial terms: the market inflects our common sense of worth, a cost-benefit analysis directs all our endeavors, and self-entrepreneurship becomes our modus operandi.¹³⁵ Whereas the subjects of old supposedly had to be disciplined by the schools, factories, and barracks, the neoliberal “achievement subject” is hardly subjected at all or, more accurately, subjects herself to a program of self-improvement.¹³⁶ Consider the vernacular

¹³¹ Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France, 1978-79* (New York, NY: Palgrave Macmillan, 2008).

¹³² William Davies and Nicholas Gane, "Post-Neoliberalism? An Introduction," *Theory, Culture & Society* 38, no. 6 (2021): 3-28,

¹³³ Margaret Thatcher, “Mrs Thatcher: The First Two Years,” interview by Douglas Keay, *Woman's Own*, October 31, 1987.

¹³⁴ Stuart Hall, *The Hard Road to Renewal: Thatcherism and the Crisis of the Left* (London: Verso, 1988).

¹³⁵ Wendy Brown, *Undoing the Demos: Neoliberalism's Stealth Revolution* (Cambridge, MA: MIT Press, 2015), 17.

¹³⁶ Byung-Chul Han, *Psychopolitics: Neoliberalism and New Technologies of Power*, trans. Erik Butler (London: Verso, 2017).

meaning of “neoliberal:” an aspersion cast at workaholics. While not incorrect, this pejorative makes it seem as though the enlightened can simply distance themselves from neoliberal false consciousness. Sure, successful podcaster and human trafficker Andrew Tate’s desire to take the red pill, escape the 9 to 5 “matrix,” and pursue a perpetual “grindset” constitutes a remarkably pure embodiment of Thatcherism for a British man who hates women. But the difficulty of combatting ideology is that it manifests unconsciously, habitually, and even affectively.¹³⁷ If you’ve ever felt your anxiety climb when you haven’t “done enough” today, your heart sink when you look at someone else’s CV, or your dopamine rush when that paycheck hits, then you’ve felt some of the ways neoliberalism encourages us to feel: the compulsion to work, the urge to compete, the yearn to earn.

If neoliberalism is starting to sound a lot like a game, then that’s no coincidence. In the early twentieth century, John von Neumann and Oskar Morgenstern drew on game models to create a definition of rational action – the maximization of utility – that became the “blueprint for the neoliberal world order.”¹³⁸ Then, mid-century political theorists like Friedrich Hayek and Milton Friedman employed game metaphors to depict the market as a fair, rule-bound, free play of competing interests – as long as there’s no overbearing gamemaster (government).¹³⁹ And increasingly, games don’t just help us theorize rational behavior; they help us practice rational behavior. The principles of applied games designed to “nudge” us to make better, more rational

¹³⁷ Lauren Berlant, *Cruel Optimism* (Durham, NC: Duke University Press, 2011).

¹³⁸ S. M. Amadae, *Prisoners of Reason: Game Theory and Neoliberal Political Economy* (Cambridge: Cambridge University Press, 2016), 146; Oskar Morgenstern and John von Neumann, *Theory of Games and Economic Behavior* (Princeton, NJ: Princeton U. Press, 2006).

¹³⁹ Friedrich A. Hayek, *The Road to Serfdom* (Chicago: University of Chicago Press, 1944); Milton Friedman, *Capitalism and Freedom* (Chicago: University of Chicago Press, 1962); Jagoda, *Experimental Games*, 41-72.

decisions are indistinguishable from the “choice architectures” of behavioral economics.¹⁴⁰

Simultaneously, games weave the values of neoliberalism into the fabric of everyday life. Critics have long figured sport as the embodiment of capitalism (truly, there are few more fitting pastimes for the capitalist than competing),¹⁴¹ but it’s currently the video game that most clearly makes control, mastery, “competition, repetition, and quantified objectives” unavoidable, regardless of whether we’re at labor or at leisure.¹⁴²

This should come as no surprise, seeing as the history of the video game and the history of late capitalism are practically identical.¹⁴³ When wartime shortages had been made up, the 1950s incubated various new technologies and commodities, many of which took their cues from military innovations.¹⁴⁴ In particular, the 1960s and 70s witnessed the computer’s evolution from a martial monolith into a personal product, and during this period, games shaped research and reception.¹⁴⁵ *Spacewar!* (1962), one of the first video games, served as both a diagnostic tool for hardware and a vanguard for the computer’s countercultural cache.¹⁴⁶ The rise of the arcade and

¹⁴⁰ Richard H. Thaler and Cass R. Sustein, *Nudge: Improving Decisions about Health, Wealth, and Happiness* (New Haven, CT: Yale University Press, 2008).

¹⁴¹ Theodor W. Adorno, "On the Fetish Character in Music and the Regression of Listening," in *The Essential Frankfurt School Reader*, edited by Andrew Arato and Eike Gebhardt (New York: Continuum, 1982), 270-299, 296.

¹⁴² Jagoda, *Experimental Games*, 12.

¹⁴³ In using “late capitalism,” I am following Ernest Mandel and Frederic Jameson. Ernest Mandel, *Late Capitalism* (London: Verso, 1975); Frederic Jameson, *Postmodernism, or, The Cultural Logic of Late Capitalism* (Durham, NC: Duke University Press, 1991).

¹⁴⁴ Jameson, *Postmodernism*, xix-xx.

¹⁴⁵ Laine Nooney, *The Apple II Age: How the Computer Became Personal* (Chicago: University of Chicago Press, 2023).

¹⁴⁶ Stuart Brand and Annie Leibovitz’s coverage of *Spacewar!* featured alongside articles on Carlos Santana and the *Brotherhood of Eternal Love* in the December 1972 edition of *Rolling Stone*. See Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (Chicago, IL: University of Chicago Press, 2006)

console industry during the 1970s and 80s meant that informatic leisure could accompany informatic labor on a larger scale, a coincidence of digital skills that led early video game theorist, Ronald Reagan, to claim that gaming was training the workforce of the future.¹⁴⁷ Despite the US “video game crash” in 1983, post-industrial production speed and global distribution spread allowed the industry to recover and, ultimately, video games superseded film and television to become the mass media of the twenty-first century.¹⁴⁸

Throughout its history, the video game has pioneered new methods of value extraction. The pay-to-keep-playing model that drove arcade profits was an early attention economy;¹⁴⁹ virtual currencies, like *Second Life*’s (2003) Linden Dollar, anticipated crypto; modding practices, where players create video game content for fun and for free, were some of the first examples of “playbor,” a hybrid form of labor and leisure that now underpins the creator economy;¹⁵⁰ and gold farming – which often entails Chinese workers earning video game currency in a computer sweatshop – allowed users in the global north to outsource play to the global south.¹⁵¹ The video game industry continues to be the canary in the coal mine for broader economic developments: surveilling players, accruing data, training AI, and, increasingly, selling

¹⁴⁷ Ronald Reagan, “Remarks During a Visit to Walt Disney World's EPCOT Center Near Orlando, Florida,” Reagan Library, August 8, 1983, <https://www.reaganlibrary.gov/archives/speech/remarks-during-visit-walt-disney-worlds-epcot-center-near-orlando-florida>.

¹⁴⁸ Eric Zimmerman, “Manifesto for a Ludic Century,” *The Journal of the Future of Education* 1, no. 1 (2013): 1-7; Nick Dyer-Witheford and Greig de Peuter, *Games of Empire: Global Capitalism and Video Games* (Minneapolis: University of Minnesota Press, 2009).

¹⁴⁹ John Fiske and Jon Watts, “Video Games: Inverted Pleasures,” *Australian Journal of Cultural Studies*, vol. 3, no. 1 (1985), <https://www.mcc.murdoch.edu.au/ReadingRoom/serial/AJCS/3.1/Fiske.html>.

¹⁵⁰ Kücklich, “Precarious Playbour.”

¹⁵¹ Tara Fickle, “Made in China,” *ROMchip: A Journal of Game Histories* 1, no. 1 (2019), <https://romchip.org/index.php/romchip-journal/article/view/111>; Ge Jin, *Gold Farmers*. YouTube, 2006. <https://www.youtube.com/watch?v=ho5Yxe6UVv4>

games not as products you own, but as services you subscribe to.¹⁵² This “battle pass capitalism,” exemplified by games such as *Fortnite* (2017), prioritizes retention and, as such, feeds into the swell of companies that, despite not being traditional “lifestyle brands,” nonetheless strive to make their products part of the consumer’s way of life, even identity (think “*Disney adult*”).¹⁵³ And thanks to those apps on our phones, when we get bored of playing, we can always pass the time working on ourselves.

Our moment is replete with what Michel Foucault calls “technologies of the self” that individuals intentionally adopt to transform their “bodies, souls, thoughts, conduct, and way of being.”¹⁵⁴ Of course, betterment is hardly a novel aspiration. Western thought has been concerned with what it means to live the “good life” since its beginning. More than styles of metaphysical musing, the Ancient Greek schools – stoics, cynics, epicureans, and so on – taught styles of living: a regimen of physical and mental practices that allowed philosophers to achieve certain virtues, like self-control. The stoic might end her day with a meditation on her social interactions, noting when she let their emotions get the better of her, striving to do better next time.¹⁵⁵ Likewise, devotional literature isn’t simply read; it’s supposed to facilitate personal and spiritual growth – to provide a model for conduct. The secular self-help section of Barnes & Noble harbors various texts purporting to perform the same function – we’re just more likely to pick up a businessman’s hagiography. Under late capitalism, self-transformation has

¹⁵² Daniel Joseph, “Battle Pass Capitalism,” *Journal of Consumer Culture* 21, no. 1 (2021): 68-83.

¹⁵³ Adam Arvidsson, *Brands: Meaning and Value in Media Culture* (London: Routledge, 2006).

¹⁵⁴ Michel Foucault, “Technologies of the Self,” in Luther H. Martin, Huck Gutman, and Patrick H. Hutton (eds.) *Technologies of the Self* (Amherst, MA: University of Massachusetts Press, 1988), 17-18.

¹⁵⁵ Pierre Hadot, *Philosophy as a Way of Life: Spiritual Exercises from Socrates to Foucault*, edited with an introduction by Arnold I. Davidson, translated by Michael Chase (Oxford: Blackwell, 1995).

transmogrified into self-entrepreneurship, the moral imperatives of old into the financialized interests of the present.¹⁵⁶

Close by, you'll find popular press titles like *Atomic Habits* (2018), *The Power of Habit* (2012), and *7 Habits of Highly Successful People* (1989), and through our personal devices, we can bring up YouTube tutorials, training diaries, and other "How To" videos that walk us through the steps to reach any number of goals, from muscles to mindfulness.¹⁵⁷ The most widely touted habituation techniques, however, are digital. Fitbits, Apple Watches, and Nike+ FuelBands: all employ data-tracking software to monitor, record, and compare our performances. Gamified apps are part and parcel of this "quantified self" movement, the pleasures of "data fetishism" being practically synonymous with those of scoring points.¹⁵⁸ And while they can certainly improve our health, today's technologies of the self nonetheless receive a healthy skepticism. Wendy Chun argues that the project of changing our habits has lost its radical potential. If it once entailed cultivating moral or religious virtues, now self-habitation simply responds to a core commandment of neoliberalism: optimize thy life. Even when habit change isn't self-entrepreneurship, it's survival. The constant slew of social crises, new media devices, and technological upgrades demand that we must constantly adapt. Habit change has become habitual: we update to remain the same.¹⁵⁹

¹⁵⁶ Sloterdijk, *You Must Change Your Life*, 389.

¹⁵⁷ Salomé Aguilera Skvirsky, *The Process Genre: Cinema and the Aesthetic of Labor* (Durham, NC: Duke University Press, 2020).

¹⁵⁸ Sharon & Zandbergen, T. & D. (2016). "From Data Fetishism to Quantifying Selves: Self-tracking Practices and the Other Values of Data". *New Media & Society*. 19 (11): 1695–1709.

¹⁵⁹ Chun, *Updating to Remain the Same*, 1-3.

But do we have to throw out the habitual baby with the neoliberal bathwater? *Untimely Play* follows scholars who have treated the resurgence of an ambivalent, rather than negative,¹⁶⁰ notion of habit in public discourse as an opportunity to reprise philosophies of old.¹⁶¹ In particular, after critiques of anthropocentrism, habit has become a means of rethinking some of the binaries that stratify Western thought: free will and determinism, individual and collective, ideal and material, nature and culture, life and artifice.¹⁶² Habit provides a middle term, and is particularly instructive when it comes to the feedback loop between human conduct and technological convention. We can, for example, understand artificial intelligence as a habit machine.¹⁶³ Every time you type something into a search engine, the recommendation algorithm tells you that the best link to follow is the one users who came before you made a habit of clicking on. Likewise, game scholars have increasingly employed theories of habit to address questions of embodiment, repetition, and reflexivity, especially in the context of competitive

¹⁶⁰ Veli-Matti Karhulahti argues that we should not conflate video game addiction with video game passion. As Chapter Four explores, corporations still benefit from our attachment to their games regardless of whether it's a debilitating addiction or not. Especially in the age of games as a service, where retention rather than sale is paramount, we might speak of passion by design instead of addiction by design. *Esport Play: Anticipation, Attachment, and Addiction in Psycholudic Development* (New York: Bloomsbury Academic, 2020).

¹⁶¹ The introduction to a 2013 special issue on habit for journal *Body & Society* emphasizes that self-help culture wherein "changing habits" is a central injunction furnishes another favorable condition for habit's scholarly return. See Tony Bennett, Francis Dodsworth, Greg Noble, Mary Poovey, and Megan Watkins "Habit and Habituation: Governance and the Social," *Body & Society* vol. 12, no. 2-3 (2013): 3-29. More recently, the UK government's pandemic era recourse to the "choice architectures" of behavioral economics popularized by Richard H. Thaler and Cass R. Sustein's *Nudge* renews the exigency of thinking habit and governance together. See Tony Bennett, Ben Dibley, Gay Hawkins and Greg Noble, "Disassembling and Reassembling Habits: COVID-19" in *Assembling and Governing Habits*, edited by Tony Bennett, Ben Dibley, Gay Hawkins, Greg Noble (Oxford, UK: Routledge, 2021).

¹⁶² Carolyn Pedwell, *Revolutionary Routines: The Habits of Social Transformation* (Montreal: McGill-Queen's University Press, 2023).

¹⁶³ Romelle, *Digital Habitus*; Massimo Airoldi, *Machine Habitus: Toward a Sociology of Algorithms* (Cambridge: Polity Press, 2022).

esports.¹⁶⁴ As the previous section showed, bringing habit and play together is hardly a recent academic innovation. Their conceptual history is intertwined, both showing up in the late nineteenth and early twentieth centuries in attempts to grapple with the human or animal capacity to change.

Indeed, for nineteenth-century French philosopher Félix Ravaisson, habit is our power to change – the means by which organisms consolidate experience into a future form of conduct.¹⁶⁵ Responses to stimuli, over time, pass from consciousness to unconsciousness, intention to inclination, but do not imply a dull, mechanistic repetition we must overcome. Rather, habit is a “second nature” that lies somewhere on the continuum of will and nature, voluntary and instinctive movement (*OF* 65-6). The gradual transformation of conscious intention into embodied inclination frustrates conventional demarcations of activity and passivity, highlighting that agency is hardly the preserve mental activity (*OF* 57). Ultimately, habit demonstrates a double movement. On the one hand, it can deaden the senses, allowing certain activities to recede from our awareness, to feel easy. I no longer have to think intently about driving stick in a car, shifting gears is automatic – even when it isn’t. On the other hand, habit can heighten the senses. The sommelier, for example, is more attuned to aromatic differences thanks to repeated smell tests.

My contention is that games and other forms of play have become primary means of governing our lives in the twenty-first century, and they do so by adapting us to new technologies, cultural values, and, ultimately, regimes of governance. Sometimes, the adaptation

¹⁶⁴ For an overview, see Feng Zhu, “The Intelligence of Player Habits and Reflexivity in Magic: The Gathering Arena Limited Draft,” *Angelaki* 28, no. 3 (2023): 38–55.

¹⁶⁵ Henceforth, “*OF*” will convey the following citation: Félix Ravaisson, *Of Habit*, translated and edited by Clare Carlisle and Mark Sinclair (London, UK: Continuum, [1838] 2008): 22-77.

is explicit, as with those gamified apps that promise to change our habits, and other times, it's tacit: even when played “for fun,” video games still attune our sensorimotor systems to digital rhythms. Adaptations, I argue, are seldom neutral: Games and other forms of play exercise power over life by habituating skills, routines, and tastes that bring individuals and collectives into accord with the status quo. To be clear, however, I am not claiming that this is a unique property of contemporary play. Our age of gamification only places in relief what has been the case for some time. Before games infiltrated our classrooms, smartphones, and offices, turning labor into “playbor,” and before the entertainment industry pioneered new ways to make leisure lucrative, play already did the work of social reproduction.

Chapter Summaries: Untimely Meditations on the Age of Gamification

Let's recap: *Untimely Play* makes four interconnected arguments. The first is diagnostic: Under neoliberalism, play has become a fundamental means of controlling our lives. The second is methodological: Instead of a concept or practice with a singular definition, play is best conceived of as an historical category that changes over time. This approach leads to two further arguments that complicate the first: Third, precisely because play is intertwined with its cultural, technological, and affective conditions, it offers artists and scholars a means of thinking critically about society in general; Fourth, play's propensity to fabricate the future is not reducible to the neoliberal imperative to control the future. Under certain circumstances, it maintains the power to entertain alternate worlds, to introduce variation, and to expand our potential. Therefore, I am using “untimely play” in two senses: to characterize the overlooked or unfashionable archive of figures I draw upon to rethink play today and to characterize forms of play that, untimely in their own time, foster habits aberrant to the status quo.

Chapter One, “Colonial Play: Wynter, James, and Cricket,” answers calls to decolonize play theory by asking: What if, instead of canonical works by the likes of Johan Huizinga, game studies treated C. L. R. James’s *Beyond a Boundary* (1963) as its starting point?¹⁶⁶ Whereas the classics pay little attention to material conditions, James’s cricket memoir shows that the history of games cannot be told in isolation from the history of capitalism. No orthodox Marxist, James’s experience as a colonial subject leads him to reckon with what history, economics, and politics didn’t account for, but a “glance at the world” revealed: “When the common people were not at work, one thing they wanted was organized sports and games” (*BB* 152). On this basis, I contend that James enables an historical materialist account of the “magic circle” – of play’s autonomy – that understands playing games to be a cultural technique that channels popular desire into particular ways of living. In James’s native Trinidad, the British Empire attempted to manage life through cricket: playing and spectating supposedly promoted Victorian values, habits, and identifications that remade subalterns in the European image of what Sylvia Wynter terms “Man.” Far from only recently *being* colonized by neoliberalism, therefore, games have long *been means* of colonization. Nevertheless, the shared habits of cricket also founded a diasporic unity James saw as a significant factor in the case for Trinidad’s independence. Building on Wynter and Yuk Hui’s work on cosmology, I argue that cricket was an ambivalent form of play that synchronically supported both an imperialist and black radical worldview. Cricket, James suggests, allowed Caribbeans to play a new culture into existence, an untimely culture that, in the wake of the middle passage, had to invent its own past.

¹⁶⁶ Henceforth, “*BB*” will convey the following citation: C. L. R. James, *Beyond a Boundary* (Durham, Duke University Press, 2013).

If the question that animates *Beyond a Boundary* is “what do they know of cricket that only cricket know” (*BB* 233), then Chapter Two, “Military Play: Pias, Crogan, and Contingency,” asks: What do they know of the video game that only video games know? Histories of the medium unanimously note its debt to the military-industrial complex, and there has been no shortage of arguments concluding that gamers may as well be training for the military. Drawing primarily on Claus Pias’s underappreciated *Computer Game Worlds* (2002/2017), I chart a genealogy of the action video game from late nineteenth-century experiments in reaction time to one of the first arcade games, *Pong* (1972). This history is one of the coevolution of humans and technology: Players and machines alike undergo gradual optimization. Whereas Pias speculates little on the continued implications of this past for the present state of play, Patrick Crogan contends that the video game continues to reproduce the Cold War mentality it emerged from.¹⁶⁷ Paul Virilio once made a similar assessment of cinema and, building on Gillies Deleuze’s attempt to move past Virilio’s critique, I propose that video game training is better understood as an extension of the neoliberal control society’s war on contingency than a means of militarization. Turning to Mark Hansen’s work on embodiment and technology, the chapter concludes by trying to redeem the video game’s propensity to train its users. Just as cinema helped Benjamin’s contemporaries adapt to their accelerating world, it is by virtue of video games cybernetically working on us that we synchronize with the rhythms of digital culture.

Chapter Three, “Protective Play: Farocki’s Operational Games,” addresses the vantage German filmmaker Harun Farocki provides on neoliberalism. Scholars have long considered

¹⁶⁷ Henceforth, “*GM*” will convey the following citation: Patrick Crogan, *Gameplay Mode: War, Simulation, and Technoculture* (Minneapolis: University of Minnesota Press, 2011).

media technologies to be extensions of man that expand our capacity to perceive. In his recent monograph, *Screening Fears* (2023),¹⁶⁸ Francesco Casetti offers a counter-argument: modern media do not so much expose us to as shelter us from the world. Likewise, from the imaginary worlds of child's play to the virtual worlds of video games, play has historically been conceived of as a means of expanding our horizons. But today, as education, labor, and daily life are increasingly "gamified," it's clear that play performs another function – protection. Military wargames, mock job interviews, and CPR training sessions are all forms of roleplay that allow us to acquire skills fit to, but without the risk of, the real deal. They are a twofold form of what I call *protective play*: on the one hand, playing at a scenario instead of doing it for real protects the player from that activity's usual implications; on the other, it allows the player to acquire habits that, in theory, will protect them from real threats.

By way of Farocki's *Serious Games* installation (2009-10),¹⁶⁹ I first examine how video game *Virtual Iraq II* (2007) prepares soldiers for battle by refining perceptual, reactive, and communicative habits. While *Serious Games* underscores the disciplinary power of games that marshal human capacity to benefit the US military, I argue that Farocki's *Leben BRD (How to Live in the FRG)* (1990)¹⁷⁰ captures the soft power games exercise in our control society. Comprising thirty-two games, tests, and therapies simulating scenarios from childbirth to policing, this film about life under neoliberalism foregrounds a factor in the current ubiquity of games – their ability to structure forms of protective play that meet the demands and assuage the anxieties induced by late capitalism. Whereas commentators portray the film as a condemnation

¹⁶⁸ Francesco Casetti, *Screening Fears: On Protective Media* (Princeton, NJ: Princeton University Press, 2023).

¹⁶⁹ Harun Farocki, *Serious Games*, 2009-2010.

¹⁷⁰ Harun Farocki, *How to Live in the FRG*, 1990.

of preparation tout court, I interpret it as a Brechtian “training montage” that re-habituates the viewer over the iteration of its images. This filmic counter-training suggests that the social issue is not preparation itself but the kind of future our practices are currently preparing us to live. By extension, employing the “as if” mode of play to impart certain habits is neither innately martial nor neoliberalism incarnate; playing out scenarios in advance is a fundamental means by which we shape the future. I conclude with the final work Farocki finished in his lifetime, *Parallel I-IV* (2014),¹⁷¹ an untimely series about timely video games. Whereas Chapter Two argues that video games can help us come to terms with computational media in embodied ways, this chapter contends that video games can also precipitate more critical, reflective relationships with digital media, especially when reframed by a camera.

Chapter Four turns from state biopolitics to the corporate management of life in an analysis of David Sudnow’s 1983 autoethnography, *Pilgrim in the Microworld*.¹⁷² I situate his account of the expert gamer’s regimen in a nascent attention economy to argue that the video game industry invests in its own future not only by training players in the skills required to consume its products but also by sublimating the desire to elevate one’s life into a life-time of leveling-up. Significantly, Sudnow’s background as a pianist and ethnomethodologist led him to expand the implications of his training beyond optimizing in-game performance. By reimagining the video game as a new medium for art and, moreover, a means of examining the habits that organize our digital lives, Sudnow discharges the pejorative associations of training. Read

¹⁷¹ Harun Farocki, *Parallel* (I-IV), 2012-2014.

¹⁷² Henceforth, “PM” will convey the following citation: David Sudnow, *Pilgrim in the Microworld: Eye, Mind and the Essence of Video Skill* (New York NY: Warner Books, 1983).

alongside Sudnow's piano monograph, *Ways of the Hand* (1978),¹⁷³ *Pilgrim* encourages us to understand mundane practice, self-reflection, and embodied automation to be fundamental for both creativity and critique. Ultimately, Sudnow prompts a response to Pierre Bourdieu's criticism that ethnomethodology is an apolitical, solipsistic framework that recapitulates the transcendental subject of phenomenology.¹⁷⁴ I draw on French philosopher Félix Ravaisson's ontological theory of habit echoed by the likes of Gilles Deleuze, Brian Massumi, and Elizabeth Grosz to revise Sudnow's premises. If "we are habits" shaped by contemporary sociotechnical circumstances, then reflecting on habit can extend beyond the self to encompass the environment that conditions self-formation. Following recent work on habit assemblages, I contend that *Pilgrim* models a form of reflexivity that takes responsibility for the distributed nature of digital existence.

These two chapters concern the practices people conduct in relation to video games, locating a margin of aberrance in the way we play. Conversely, Chapter Five, "Disadaptive Play: Bateson, Foddy, Fumblecore," focuses on peculiar video games that, by virtue of their design, unsettle the "machinic habits" of computational media.¹⁷⁵ Although game scholars consider games to be fundamentally indeterminate, common sense dictates that game-based contingency is paradigmatically delimited – possible moves and outcomes preset and immutable (think faces of a die). Drawing on Gregory Bateson's reading of the croquet match in *Alice's Adventures in Wonderland*, the chapter begins by articulating a second paradigm for game-based contingency

¹⁷³ Henceforth, "*WH*" will convey the following citation: David Sudnow, *Ways of the Hand: A Rewritten Account* (Cambridge, MA: MIT Press, 2001).

¹⁷⁴ Pierre Bourdieu, "Social Space and Symbolic Power," *Sociological Theory* 7, no. 1 (Spring 1989): 14-25, 15.

¹⁷⁵ Brian Massumi, *Parables for the Virtual: Movement, Affect, Sensation* (Durham, NC: Duke University Press, 2002), 137.

wherein the game neither determines possibilities beforehand nor excludes aberrance but integrates contingency by recursively modifying its structure. Instead of providing an experience of mastery that restricts the future, the croquet match stages an exercise in humility, exposing Alice to novelty. I then examine two niche video game genres that diverge from more mainstream games to promote open-ended play: “walking simulators” and “fumblecore” games. Despite the former’s reputation for eschewing violence, competition, and other video game norms in favor of wandering around virtual worlds, it nonetheless perpetuates a highly normative model for walking simulation. Fumblecore games, on the contrary, are designed to break with conventional controls, making interface use the primary challenge. I interpret Bennett Foddy’s 2008 browser game, *QWOP*, as an alien walking simulator that disrupts the dominant habits of computational media. Indeed, if contemporary forms of play predominantly adapt us to digital culture, then fumblecore games present a means of what Gilbert Simondon calls “disadaptation,” which leads to the indeterminate search for a new structure. Disadaptation is, however, only a phase on the path to a new adaptation. Many humans and machines have become quite skilled at *QWOP*. The chapter concludes with a brief reflection on the nature of the habits required to play such unconventional, untimely games, habits that, since play became useful, suggests a resurgence of the useless.

Foddy’s game exemplifies the synthesis of artistic practice and critical inquiry that concerns much of this dissertation. Starting with James’s “autosociographical” writing on sport, *Untimely Play* vitiates against the notion that theory is antithetical to practice by demonstrating that game criticism not only responds to social circumstance but also is, itself, a practice. To paraphrase Deleuze, when power becomes biopower, resistance becomes the art of life. Each chapter engages a critical perspective that issues from a form of life in tension with a prevailing

regime of power. Whereas others have historically opposed cultivation and critique,¹⁷⁶ my contention is that the two are mutually dependent. Just as the machinations of contemporary power demand granular, micropolitical analysis, I argue that slow, mundane, sometimes complicit, and often invisible efforts to revise habits, reassemble technologies, and renew sociality are humble struggles appropriate to an era in which traditional strategies of resistance always appear to be coopted in advance. To combine the epigraphs, if play can be said to be the “mother of... habit,” and “we are,” indeed, nothing but “habits,” then perhaps it is by giving ourselves a different past, by “originating” new habits in play, that we can break the cycle of “updating to remain the same.” Ultimately, *Untimely Play* both charts a history of and contributes to the “critical culture” that has emerged around play during the twentieth and twenty-first centuries.¹⁷⁷

¹⁷⁶ Alberto Toscano, “Cultures of Abstraction,” *Theory, Culture & Society* 25, no. 4 (2008): 57-75.

¹⁷⁷ Bernard Stiegler and Jacques Derrida, *Echographies of Television: Filmed Interviews*, trans. Jennifer Bajorek (Cambridge: Polity Press, 2002), 4.

CHAPTER 1: COLONIAL PLAY: WYNTER, JAMES, AND CRICKET

Man only plays when in the full meaning of the word he is a man, and he is only
completely a man when he plays.¹⁷⁸

Friedrich Schiller, *Letters Upon the Aesthetic Education of Man*, 1794

The figure of Man – in Wynter’s formulations – is the measuring stick through which all
other forms of being are measured.¹⁷⁹

Katherine McKittrick, “Yours in the Intellectual Struggle,” 2015

What do they know of cricket who only cricket know? To answer involves ideas as well as
facts.... If the ideas originated in the West Indies it was only... in English life and history
that I was able to track them down and test them. To establish his own identity, Caliban,
after three centuries, must himself pioneer into regions Caesar never knew.

C. L. R. James, “Preface” in *Beyond a Boundary*, 1963

Introduction: Living by Games

The title of a recent special issue encapsulates the widespread belief that we are currently
witnessing “The Colonization of Play by Neoliberal Capital.”¹⁸⁰ This statement hinges on
conceptualizing play as a free, intrinsically motivated activity that takes work as its constitutive
contrast – an activity not done for its own sake but for the sake of something outside itself.
Indeed, many play definitions rely on distinguishing between activities whose value, meaning,
and purpose are extrinsic (work) and activities apparently *free from* external determination that
are, thus, *free to* indulge values, meanings, and purposes inherent to that activity (play). Claims

¹⁷⁸ Schiller, *On the Aesthetic Education of Man*, 107.

¹⁷⁹ Katherine McKittrick, “Yours in the Intellectual Struggle,” in *Sylvia Wynter: On Being Human as Praxis*, ed. Katherine McKittrick (Durham, NC: Duke University Press, 2015), 1-8, 3.

¹⁸⁰ Thiago Falcão and Kishonna Gray, “Editorial: A Colonização do Jogo pelo Capitalismo Neoliberal,” *Contracampo* 40, no. 2 (2021): 1-3.

as to play's "colonization," conceived as the "appropriation" of "playful and creative dynamics" by post-industrial "production and accumulation,"¹⁸¹ mark an attempt to make sense of an apparently novel problem – that contemporary play forms confound this dichotomy. The coinage of "playbor" is a case and point.

And yet, the conflation of abstract categories of activity seems an inadequate ground to warrant the pejorative connotations of "colonization." To understand this ethical condemnation, one must recognize that the call for papers draws upon a longstanding investment unique to the study of games and play. In addition to the critique of post-industrial power endemic to media and cultural studies more generally, at stake is the corruption of an activity that, anterior to "neoliberal capital's" perversion of it, performed a positive social function. In this context, play's benefit boils down to its autonomy; because the good play does derives from furnishing an activity ruled by values apart from those that condition practical reality, it follows that any apparent encroachment by capitalist axioms connotes a social ill. From this, one can infer that the assertion of play's colonization rests upon a twofold presupposition: 1) that play was once (and perhaps still is) separable from socio-economic determination; 2) that play, in its unadulterated state, is an inherently valuable activity for humans to perform.

While this chapter does not dispute the importance of attending to the uniquely post-industrial social formations, technologies, and governmental strategies that condition contemporary play, it takes issue with both the ostensive novelty of play's corruption and the vague veneration of its benefits. Karl Marx's analysis of his industrial society demonstrates that the determination of play by capital is hardly new and that, on the contrary, play has long served

¹⁸¹ Thiago Falcão, "The Gambification of Children's Toys: Play, Consumption and Media Practices in Brazil," *Medium*, July 6, 2021. <https://medium.com/@thiagofalcao/the-gambification-of-childrens-toys-123456789>.

to perpetuate alienation, not absolve it. While he makes the same distinction between work and play as above – the former extrinsically determined, the latter autotelic – he does so with the caveat that play’s unalienated status is typically an illusion. Often manifesting as leisure under capitalism, play merely proffers another vista of alienated activity when, among other eventualities, it: 1) serves only as respite, taking increased productivity as its justification; 2) becomes an economic activity oriented around the consumption or possession of goods or services; 3) reinforces capitalist values such as competition, efficiency, and fetishism; 4) furnishes a flight from quotidian reality, set aside in such a way as to trivialize its significance. This last circumstance simultaneously insulates work¹⁸² – “[b]y viewing leisure as the primary sphere of freedom, one undermines the strength of demands that work be transformed into a freer and more creative activity.”¹⁸³ Thus, Marx emphasizes that the widespread sense of play as free not only belies its extrinsic determination but also, akin to the “ideology of the aesthetic,”¹⁸⁴ prevents it from having any radical social import by banishing it to a distinct realm.

In this light, theories that define play by its autonomy may not be the best starting point for critiquing, say, the commercial video game. The presentism of the colonization claim exemplifies that weighing contemporary play forms against an a priori conception of play as free can trammel analysis into identifying the corruption of an ideal category at the expense of unpacking play’s historically situated constitution. More forcefully, Marx suggests that the

¹⁸² I have synthesized some conditions of alienation here that Laurence M. Hinman differentiates into a total of seven. "Marx's Theory of Play, Leisure and Unalienated Praxis," *Philosophy & Social Criticism* 5, no. 2 (1978): 192-228, 195.

¹⁸³ Ibid, 200

¹⁸⁴ For Terry Eagleton, this ideology produces an aesthetic realm that affords a sense of reconciliation and harmony but is really occluded from effecting material change in the socio-economic order. Terry Eagleton, "The Ideology of the Aesthetic," in Paul Hermadi (ed.), *The Rhetoric of Interpretation and the Interpretation of Rhetoric* (Durham, NC, Duke University Press, 1989): 75-86.

uncritical faith in the benefits of play risks recapitulating abstractions instantiated by the capitalist mode of production, naturalizing them discursively (e.g. labor vs. leisure). Regarding both the critique and affirmation of play, therefore, it behooves the game scholar to begin not by positing play's separation from reality but by accounting for the historical circumstance that sanctions its quasi-autonomy and, thus, enables its specific import as a concept and a practice. By historicizing play in this way, one treats its apparent autonomy neither uncritically as a given or dismissively as an illusion, but as a problem for analysis.

To that end, this chapter takes inspiration from Cameron Kunzelman and Michael Lutz who, in their podcast that surveys game studies literature, pose the question: What if, instead of the canonical *Homo Ludens* (1938) and *Man, Play and Games* (1958)¹⁸⁵ the field treated *Beyond a Boundary* (1963) as its Ur-text?¹⁸⁶ Whereas Johan Huizinga and Roger Caillois focus on play to develop “social theories in disguise” largely devoid of attention to material conditions (*CGW* 11), for C. L. R. James, “we cannot narrate the history of [games] in isolation from the history of

¹⁸⁵ Roger Caillois, *Man, Play, and Games* (Chicago, IL: University of Illinois Press, [1958] 2001).

¹⁸⁶ Cameron Kunzelman and Michael Lutz, “14 – James – Beyond A Boundary,” *Game Studies Study Buddies*, July 2019, <http://rangedtouch.com/2019/07/30/14-james-beyond-a-boundary/>. Their forthcoming chapter “Re-Historicizing Game Studies with C. L. R. James” in *Game Studies Historiographies* (TBD) plays out this thought experiment, arguing that

James models a theorization of games and play that, when considered alongside roughly contemporary texts that have been fully incorporated into the game studies canon, underscores the chauvinistic assumptions built into midcentury game and play scholarship while also highlighting a path toward an alternate history of game studies, a game studies where careful and critical attention to issues of class, race, and identity are not new developments in a recently diversifying field, but the latent potential of an already diverse field that has been limited by a narrow apprehension of its own history and scholarly mandate.

I concur with this assessment and hope this dissertation further demonstrates that reevaluating the history of game research can do much for its present. Scholars have, however, spilled plenty of ink dunking on Huizinga and Caillois for their “chauvinistic assumptions,” so I will not dedicate much space to that angle here. Besides, while we are right to critique *Homo Ludens* for its Eurocentrism, among other things, the following owes much to Huizinga, who was, after all, a Dutch anti-fascist who sadly died before seeing the end of Nazi occupation. Moreover, I think it's difficult to comprehend the full extent of *Beyond a Boundary*'s contribution without speaking of Marx, to whom James was responding, or Cedric Robinson, who figured James as the black radical par excellence – both of whom were likely beyond the parameters of Kunzelman and Lutz's short, introductory essay designed for a game studies audience.

capitalism itself.”¹⁸⁷ Typically, following Marx in this manner leads to antipodal conclusions regarding play that roughly align with the trajectories delineated thus far: 1) despite the above critique, play is an inherently valuable activity because of its autonomy and, thus, struggle should carve out further playtime by, for example, protesting to reduce the work day;¹⁸⁸ 2) continuing the above critique, play is a mere extension of alienated labor that fosters, at best, the illusion of freedom – only revolutionary praxis can change social relations.¹⁸⁹ Theodor Adorno suggests a third route in his defense of art’s autonomy whereby “art becomes social by its opposition to society, and it occupies this position only as autonomous art...it criticizes society by merely existing” in dialectical tension with that which produced it.¹⁹⁰ However, Adorno pointedly throws sport under the bus; the capitalist values immanent to games render them fundamentally servile.¹⁹¹

Amid these tendencies, James’s uniqueness¹⁹² lies in reckoning what his studies in “history, economics, politics” did not account for but a “glance at the world” revealed: “when the

¹⁸⁷ Kenneth Surin, “CLR James’ Materialist Aesthetic of Cricket,” in *Liberation Cricket: West Indies Cricket Culture*, ed. Hilary Beckles and Brian Stoddart (Manchester: Manchester University Press, 1995), 313-341, 333.

¹⁸⁸ Although positioned as a refutation of Hinman’s (arguably pessimistic) interpretation of Marx’s theory of play, namely, that play cannot be praxis without changing society first, Michael J. Roberts’s “The Politics of Playtime,” in my opinion, doesn’t actually write about play at all. In his pivotal example of play as praxis – late nineteenth-century labor movements, when workers struggled in the “pursuit of more time for play” – it was the lure of play that motivated a struggle we can call praxis, but it’s inaccurate to state that the activity of play itself “changed the world.” Michael J. Roberts, “The Politics of Playtime: Reading Marx Through Huizinga on the Desire to Escape Ordinary Life,” *American Journal of Play*, 11:1, 2018: 46-64.

¹⁸⁹ Hinman speculates that play could become praxis but only when revolution has already changed the world in such a way as to obviate the division between work and play in first place.

¹⁹⁰ Theodor W. Adorno, *Aesthetic Theory*, eds. Gretel Adorno and Rolf Tiedemann, trans. Robert Hullot-Kentor (Minneapolis: U Minnesota P, 1997) 225-26.

¹⁹¹ Adorno, “On the Fetish Character of Music.”

¹⁹² “Trotsky had said that the workers were deflected from politics by sports. With my past I simply could not accept that” (BB 153).

common people were not at work, one thing they wanted was organized sports and games. They wanted them greedily, passionately” (BB 152). James deploys Tolstoy’s question – *What do men live by?* – to reframe the problem of play’s social function, rendering it coextensive with what has become a central concern of British cultural studies,¹⁹³ namely, the politics of popular desire. In Trinidad, men clearly live by cricket. But “what do they know of cricket that only cricket know” (BB 223)? James must answer this question at the fraught nexus of the British Empire and Caribbean subalternity. On the one hand, the civilizing intentions behind the imperial propagation of cricket prove that play is not only now *being* colonized. Rather, games have long served as means *of* colonization – living by cricket is living by the values of the colonists. On the other, James demonstrates that, beyond merely symbolic catharsis or defiance devoid of social reality,¹⁹⁴ cricket gives expression to values in opposition to power. Thus, popular games advance the ongoing project of liberation for the same reason they augur colonial hegemony – their propensity to *culture*. Over iteration and duration, game playing and spectatorship inculcate a set of symbolic proficiencies, embodied skills, and aesthetic sensibilities that manifest as real changes in subject imaginaries, capacities, and predilections. This chapter relates these individual transformations to what Franz Fanon conceptualizes as “sociogeny” – social development. In keeping with the dissertation’s overall concern, it engages *Beyond a Boundary*, elaborating its

¹⁹³ Stuart Hall acknowledges that *Beyond a Boundary* anticipates this concern of British cultural studies, Hazel Carby considers it “one of the most outstanding works of cultural studies ever produced,” and Neil Lazarus concurs that “James reveals himself to be one of the most truly decisive Marxist cultural theorists of our century.” Stuart Hall, “CLR James: A Portrait,” in *C.L.R. James: His Intellectual Legacies*, ed. Selwyn R. Cudjoe and William E. Cain (Amherst, MA: University of Massachusetts Press, 1995), 1-14; Hazel V. Carby, “Proletarian or Revolutionary Literature: C. L. R. James and the Politics of the Trinidadian Renaissance,” *South Atlantic Quarterly* 87, no. 1 (1988): 51; Neil Lazarus, “Cricket and National Culture in the Writings of CLR James,” in *Liberation Cricket: West Indies Cricket Culture*, ed. Hilary Beckles and Brian Stoddart (Manchester: Manchester University Press, 1995), 342-355, 342.

¹⁹⁴ Orlando Patterson, “The Ritual of Cricket,” in *Liberation Cricket: West Indies Cricket Culture*, ed. Hilary Beckles and Brian Stoddart (Manchester: Manchester University Press, 1995), 141-147.

methodological commitments, to argue that cricket exemplifies a biopolitics of play whereby game-based practices organize the social by promoting individual and collective ways of living.

This argument advances by way of six sections. Focusing on the childhood experiences James recounts, sections one and two introduce Fanon's sociogenesis to set up the two-fold problem of play's sociality: 1) the social production of play's sanctity and 2) the extent to which play can be said to change social relations. Both sections place James in conversation with Huizinga to clarify the former's materialist approach to games and culture in light of the latter's thesis that play creates culture. Whereas Huizinga reviles nineteenth-century sport, interpreting it as the decline of play, section three traces a brief history of cricket from its rural origins to its Victorian prominence to support James's claim that cricket's popularization amplifies its social significance. Attention to the role of sport in promoting the ideals of the Victorian middle class leads to section four's discussion of the colonial intention to "civilize" the Caribbean by means of the mores immanent to cricket. Drawing on Wynter's reading of James, I situate the game within what she conceptualizes as the autopoietic institution of Man: the theoretical and practical universalization of the European subject. Importantly, James's colonial education demonstrates that the effectiveness of cricket's tacit disciplinary function derives from faith in the game's status as a voluntary activity separate from the exigencies of everyday life. Section five turns to the revolutionary potential James accords cricket as the expression of popular desire. That what was meant to maintain colonial domination – training in the master's tools and values – fosters collectivity beyond the boundary of the master's game suggests the importance of attending to how games can, despite fraught design and implementation, nonetheless take on a reparative function. Finally, I respond to recent calls to decolonize play by concluding that James allows us to re-originate the concept outside of its largely European theorization.

Wynter and James: Towards a Social Genesis of Play's Autonomy

In *Black Skin, White Masks* (1967), Franz Fanon recounts a scene of subjection eventuated by his transition from Martinique to the Parisian metropole. Being hailed by whites on the train – “Look, a Negro!” – revealed that

not only must the black man be black; he must be black in relation to the white man.... From one day to the next, the Blacks have had to deal with two systems of reference. Their metaphysics, or less pretentiously their customs and the agencies to which they refer, were abolished because they were in contradiction with a new civilization that imposed its own.¹⁹⁵

Here, Fanon's dual existence echoes what W.E.B. Du Bois conceptualizes as the double consciousness whereby black Americans must conduct themselves in accord with both their own perspective and the perspective of whites.¹⁹⁶ Beyond conveying what it's “like” to be black, this experience of identity fragmentation has psychological and metaphysical implications; it casts doubt on both the assumed unity of the subject and the universality typically accorded the category “human.” Indeed, Fanon goes on to argue that the model of the human – what he terms “Man” – that grounds ontology and epistemology is really a “normalcy”¹⁹⁷ derived from and iterated in reference to white Europeans. That this norm informs but does not account for Fanon's double status reveals that prevailing conceptions of subjectivity and being must be critiqued or, at least, supplemented by, an account of the social organization – especially the

¹⁹⁵ Frantz Fanon, *Black Skin, White Masks*, trans. Richard Philcox (New York: Grove Press, 2008).

¹⁹⁶ Dickson D. Bruce, “W.E.B. Du Bois and the Idea of Double Consciousness,” *American Literature* 64, no. 2 (1992): 299-309.

¹⁹⁷ Sylvia Wynter, “The Ceremony Found: Towards the Autopoietic Turn/Overtake, Its Autonomy of Human Agency and Extraterritoriality of (Self-)Cognition,” in *Black Knowledges/Black Struggles: Essays in Critical Epistemology*, ed. Jason R. Ambrose and Sabine Broeck (Liverpool: Liverpool University Press, 2015), 185-252, 197.

“black/white complex” about which there is nothing natural ¹⁹⁸ – that conditions them. Building on Sigmund Freud’s use of “phylogeny” (the species’ development) and “ontogeny” (the organism’s development) to describe the genesis of neuroses, Fanon coins “sociogeny” to understand this neglected social dimension of illness and, moreover, to understand black pathologies as an effect of colonization. Two conclusions follow: 1) race is not biologically innate but socially instantiated and renewed; 2) the human is also an historically situated social construction, one inherently racialized within the colonial episteme.

Fanon’s analysis proves influential not only for theorizing the social production of race and the human but also for mobilizing black experience as a support for theory. His double consciousness places the social nature of blackness in relief, a fact that eludes both the colonizer, who benefits from arbitrary superiority, and, often, the colonized, who internalizes enforced inferiority. Sylvia Wynter speculates that these two tendencies came into productive contradiction within Fanon because of his bourgeois education that bid to make him in the image of “Man” he’d never be granted the full privileges of¹⁹⁹ – there are only white masks for black skin. For Wynter, Fanon’s experience of always seeing oneself simultaneously in the first person (the subjective experience of consciousness) and the third person (the socially structured point of view he must co-ordinate himself in relation to) suggests an “objective phenomenology”²⁰⁰ whereby one’s neurochemically informed psychic state – specifically the negative affects promulgated by the denigration of blackness – implies the social organization that instantiates

¹⁹⁸ Sylvia Wynter, "Towards the Sociogenic Principle: Fanon, Identity, the Puzzle of Conscious Experience, and What It Is Like to Be 'Black'," in *National Identities and Socio-Political Changes in Latin America*, ed. Mercedes F. Durán-Cogan and Antonio Gómez-Moriana (New York: Routledge, 2001), 30-66, 57.

¹⁹⁹ Wynter, “Towards the Sociogenic Principle,” 34-5.

²⁰⁰ Ibid, 54- 60

and reproduces it. In this way, the analysis of experience eludes solipsism and takes on critical veracity insofar as it understands that experience as harboring an indexical relation with the circumstance that precipitates it. From this perspective, what it's "like" to be black furnishes insight into the socially constituted "fact" of blackness.

Not incidentally, fragmentations of identity incurred by colonial education recur in prominent cultural theorists who foreground the reciprocity of "a life" and "ideas."²⁰¹ Regaling his own Caribbean youth, Stuart Hall emphasizes that his status as a "familiar stranger" in two disparate social climates – intimate with Jamaica and the United Kingdom but belonging wholly to neither – lent itself to the critique of both. As "an element of the group... whose membership... involves both being outside it and confronting it," the stranger can look awry at that which is taken for granted.²⁰² C. L. R. James similarly maintains an instructive perspective "from the margins"²⁰³ throughout his oeuvre. Undoubtedly peripheral to the white English and American society he frequented from 1932, born in Trinidad in 1901, he also felt himself to be "an alien in [his] own environment among [his] own people, even [his] own family" (*BB* 50) because, in part, of becoming "a British intellectual before [he] was ten" (*BB* 28). This blend of classical education and life in a royal colony meant that he was "specially prepared to write"²⁰⁴ his 1938 text on the Haitian revolution – *The Black Jacobins* – that marries post-colonialism with traditional Marxism to work against the orthodoxy that subordinates race to class struggle.

²⁰¹ Stuart Hall, *Familiar Stranger: A Life Between Two Islands*, with Bill Schwarz (Durham, NC: Duke University Press, 2017), 10.

²⁰² Georg Simmel, "The Stranger," in *Georg Simmel: On Individuality and Social Forms: Selected Writings*, ed. Donald N. Levine (Chicago: University of Chicago Press, 1971 [1908]), 143-149, 144.

²⁰³ Hall, *Familiar Stranger*, 10.

²⁰⁴ C. L. R. James, *The Black Jacobins: Toussaint L'Ouverture and the San Domingo Revolution*, 2nd ed. (New York: Vintage Books, 1963), xvi.

James was specially prepared to write an unorthodox account of games too. Growing-up in the small town of Tunapuna literally furnished him a view from the periphery of cricket: “Our house was superbly situated, exactly behind the wicket.... By standing on a chair a small boy of six could watch practice every afternoon and matches on Saturdays” (*BB* 3). More significant was the domestic circumstance that informed what he made of what he saw. That “the cares of a wife and family on a small income cut short” his father’s cricketing career encouraged young James to relate what takes place within the boundary of play in light of that which is typically demarcated as beyond the boundary, namely, socio-economic factors (*BB* 10). Thus, just as Fanon’s experiences suggested that race has a social dimension, James’s established the exigency of understanding play’s social genesis. For treating the subjective as indicative of social organization in this way, Wynter suggests the style of *Beyond a Boundary* be understood not as autobiographical but “autosociographical.”²⁰⁵ In the history of black radicalism, life writing is far from averse to theory.²⁰⁶

It’s easy to take the message encapsulated by the book’s title as an injunction to reduce cricket to playing out the socio-economic factors that condition it. While this would once have entailed a meaningful departure from the common-sense sanctity of sport and, indeed, the prevailing formalism of early game research, to render James’s intervention in this manner would be reductive – no different to Marx’s articulation of play’s inevitable alienation under conditions of alienated labor. Another formative relationship led James to consider the apparent autonomy

²⁰⁵ Sylvia Wynter, “In Quest of Matthew Bondsman: Some Cultural Notes on the Jamesian Journey,” *Urgent Tasks* no. 12 (Summer 1981): 31-45, 31.

²⁰⁶ Anna Kornbluh critiques the recent rise of life writing, especially forms of autotheory, for their naïve faith in the veracity of experience, a tendency she attributes to “too late capitalism,” whose style is “immediacy.” *Immediacy, or The Style of Too Late Capitalism* (New York, NY: Verso, 2024). Chapter four, which focuses on David Sudnow’s autoethnographic *Pilgrim in the Microworld*, likewise argues that experience can be grist for the theoretical mill because the self is always an expression of its historical context.

of sporting performance from social stratification. James's then neighbor, Matthew Bondman, was, simultaneously, a dark-skinned, lower-class Trinidadian and an excellent cricketer. By virtue of his family's disdain for Bondman, James learned that, while socially reviled, Bondman was nonetheless venerated on the field. "How could an ability to play cricket atone in any sense for Matthew's abominable way of life?" (BB 5).

Here, James identifies what has become known as the "magic circle" of play. Derived from Johan Huizinga's scant use, Katie Salen and Eric Zimmerman's foundational game design text, *Rules of Play* (2004), popularized the term, defining it as "the boundary of the game space" within which "the rules of the game play out and have authority" – an authority that invests "the actions of player... creating new and complex meanings that are only possible in the space of play."²⁰⁷ Thus, the magic circle exemplifies the common play definition criterion – separation from practical reality – that Huizinga's theory epitomizes. In *Homo Ludens* (1938), the Dutch historian summarizes the formal characteristics of play, stating that "we might call it a free activity standing quite consciously outside 'ordinary' life.... It is an activity connected with no material interest, and no profit can be gained by it."²⁰⁸ Hence, "play is a voluntary activity... executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself."²⁰⁹ Notably, "magic circle" does not feature in these pivotal excerpts, but Salen and Zimmerman's development²¹⁰ of it remains instructive insofar as

²⁰⁷ Katie Salen and Eric Zimmerman, *Rules of Play: Game Design Fundamentals* (Cambridge, MA: MIT Press, 2004), 4-7.

²⁰⁸ Huizinga, *Homo Ludens*, 13.

²⁰⁹ *Ibid*, 28.

²¹⁰ Zimmerman's self-deprecating admission that he and Salen are "to blame" for the magic circle concept belies that we should, perhaps, credit them, not Huizinga, for its invention:

it foregrounds the centrality of boundedness to Huizinga's play theory and, furthermore, a way of answering James's question. It was because distinct means of valuation pertained within the boundary that Bondman, otherwise "so crude and vulgar in every aspect of his life," "was all grace and style" with a bat in hand (*BB* 4).

But James is not just concerned with delineating the unique status of cricket in contrast to everyday conduct; he's also committed to elaborating the social relations that grant it this status and, in turn, the impact games have on "real" life – a topic Huizinga supposedly has little to say about. Game researchers tend to charge Huizinga's play definition with the fallacy of "misplaced concreteness"²¹¹ because the assertion of play's sanctity seems to neglect the contextual factors that, from empirical observation, obviously impinge upon it.²¹² That hunger pangs detrimentally

[G]ame designer Frank Lantz and I started using the term in our game design classes years before work on *Rules of Play* began. In 1999, we co-authored an article for *Merge Magazine* called "Rules, Play, Culture: Checkmate" that referred to the magic circle as "the artificial context of a game... the shared space of play created by its rules." However, the term only reached full fruition in *Rules of Play*. It's certainly true that in the nearly 10 years since the book was published, the idea of the magic circle is easily the most popular concept to come out of it. So in many ways I do feel responsible for the magic circle shenanigans that have followed the book's publication. [...] *To be perfectly honest, Katie and I more or less invented the concept*, inheriting its use from my work with Frank, cobbling together ideas from Huizinga and Caillois, clarifying key elements that were important for our book [...] in order to come to a new synthesis. (emphasis own)

Zimmerman, "Jerked Around," 2012, emphasis own)

²¹¹ Alfred North Whitehead, *Science and the Modern World* (New York, NY: Macmillan, [1925] 1948).

²¹² E.g. Consalvo, "There is No Magic Circle." As Tara Fickle suggests, these critiques of Huizinga double as critiques of early approaches to immersive "second worlds." *The Race Card*, 113. Instead of a conflict, however, Zimmerman contends in "Jerked Around" that we have a confusion of disciplinary knowledges – the magic circle a useful term for game designers wanting to engineer games that "create a special set of meanings for the players," not a heuristic for the sociological or cultural study of games. "Jerked Around." Nevertheless, various scholars have attempted to maintain the gist of the magic circle – as the production of a unique space-time organized by rules distinct to those of daily life – describing this effect of play in psychological, sociological, cultural, or semiotic terms. As Jaakko Stenros summarizes in "In Defense of the Magic Circle," there are three ways in which the magic circle – as the production of a boundary or closure – continues to be operative in game studies discourse: a kind of personal, psychological bubble or play frame experienced phenomenologically; a social contract upholding actions as "play;" and the spatial or temporal cultural site where play is expected to happen like an arena. We might add, a fourth: James Ash's post-phenomenological concept of the "interface envelope" that describes an ecology of non-human agents working with the player to produce an effectively closed space of play akin to the magic circle. James Ash, *The Interface Envelope: Gaming, Technology, Power* (London: Bloomsbury, 2015).

impact one's cricket performance, for example, demonstrates the impossibility of play truly keeping practical necessities at bay.²¹³ Nevertheless, Huizinga's elaboration of the conditions for play's autonomy evidences a more nuanced account of play's relation to the "ordinary world:"

All play moves and has its being within a play-ground marked off beforehand either materially or ideally, deliberately or as a matter of course.... The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc, are all in form and function play-grounds, i.e. forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart.²¹⁴

Here, play's autonomy does not emerge *sui generis* but results from a process of demarcation material (e.g., the cricket field's physical perimeter) and ideal (e.g., the rules one accepts upon entering the field). Regarding hunger, it'd be a small leap to include the oft-neglected, typically women's, labor of supplying cricket tea – the traditional halftime meal – as a non-game dimension to the sport that nonetheless enables a period of play free from the extrinsic determination of sandwich appetite. Moreover, that this space-time is "within the ordinary world" yet simultaneously dedicated to "an act apart" suggests more of an invagination of play within ordinary life than it does a separating cut. Indeed, Huizinga's explanation implies compatibility with what remains somewhat of a game studies polemic – even game worlds participate in the real world.²¹⁵

The nature of this participation is of greater concern to James than Huizinga. After all, whereas Huizinga's aim is to furnish a general account of "the play element in culture," James's

²¹³ Huizinga explicitly acknowledges this eventuality: "At any moment 'ordinary life' may reassert its rights either by an impact from without, which interrupts the game, or by an offence against the rules, or else from within, by a collapse of the play spirit, a sobering, a disenchantment." *Homo Ludens*, 21

²¹⁴ Interestingly, magic circle is here only a subset of demarcated zones. *Ibid*, 10.

²¹⁵ Jagoda, *Experimental Games*, xi.

experiences engender a commitment to understanding cricket's implications in context.

Regarding Bondman, James's analysis constantly shuttles between the magic circle and its beyond to not only establish the contrast between his in-game status and ordinary life but also a relation between play and socio-economic conditions. On the surface, Bondman's ability to perform and, thus, be venerated is contingent on the team helping him pay club dues and buy cricket gear. Inversely, this financing was contingent on his performance; the team only persevered with support because of his talent. But Bondman bears a further significance within the Jamesian system. In the past, Bondman's social position in Trinidad would have placed him "amongst the skilled slave specialists who had actually run the plantation" and, therefore, in the possession of a productive capacity valuable to colonial accumulation.²¹⁶ However, the machines of industrialization and, later, the cybernetic revolution displaced the Bondmans of the world.

Now, Wynter elaborates, he

would have to come to terms with the fact that he had become "*refuse*" (the term given to the slave too old and worn-out to contribute labor). He could hustle a day's work here and there, sweep a yard or two, live from hand to mouth. Jump Jim Crow. Or he could drop out. Matthew dropped out. His "abominable life" was the end result of a historical process which had built a world that had no place in it where Bondsman could realize his powers. Establish his identity. Enact his radical historicity. [sic]²¹⁷

Rendered abject by the prevailing, capitalist heuristic, one of the few vistas for self-expression left available to Bondman was cricket. Its "popular aesthetic code" furnishes an alternate means of valuation²¹⁸ – a point I return to in conclusion.

²¹⁶ Wynter, "In Quest of," np.

²¹⁷ Ibid.

²¹⁸ Sylvia Wynter, "Beyond the Categories of the Master Conception: The Counterdoctrine of the Jamesian Poiesis," in *C. L. R. James's Caribbean*, ed. Paget Henry and Paul Buhle (Durham, NC: Duke University Press, 1992), 63-91.

Needless to say, Bondman's career "did not last long" but James's exposure to it established the exigency of attending to the ways in which the magic circle of play is neither entirely apart from nor entirely determined by anterior social relations. Hence, as Neil Lazarus puts it, "the indispensability, for James, of a *sociopoetics* of cricket" – what I am conceptualizing, after Fanon, as sociogenesis – "an approach to the game that will make neither the mistake of supposing it to be less than a form of art, nor the mistake of supposing it, as a form of art, to be autonomous."²¹⁹ Certainly, *Beyond a Boundary* should be understood in contrast to those accounts that "suppose" art or play's autonomy – the "magic" of magic circle denoting an apparent but inexplicable sanctity.

That said, it's too quick to claim there's no space for autonomy in James. The discussion of Bondman demonstrates not a dismissal of autonomy so much as a different understanding of it. Just as Fanon's delineation of race as a social construct denaturalizes but doesn't deny the extent to which race really organizes life, James's boundary acquires reality and significance by virtue of the concrete practices, historically situated imaginaries, and social relations that sanction it. James encourages us to understand the boundary of play in constitutive tension with its beyond as quasi-autonomous. In this light, it'd be erroneous to merely dispel the magic circle as an obtuse academic abstraction; it's a problem for analysis. One must specify the way in which a game achieves its autonomy in or across given contexts and, in turn, grapple with the real consequences the social construction of play as a special category of activity has. To clarify James's approach to these consequences, Huizinga warrants further consideration. There's a difference between treating a fiction as reality and acknowledging the reality a fiction takes on.

²¹⁹ Lazarus, "Cricket and National Culture," 347

The Cultural Function of Play: Display or Create?

The extent to which play can be said to transform society pertains to Huizinga's central thesis in *Homo Ludens*, namely, play produces culture. Insofar as culture "presupposes human society," animal play serves as Huizinga's first testament to play's anteriority:²²⁰ "Woodcocks perform dances, crows hold flying matches, bower-birds and others decorate their nests, song-birds chant their melodies. Thus competitions and exhibitions as amusements do not proceed from culture, they rather precede it."²²¹ Nevertheless, Huizinga is less concerned with "the natural impulses and habits conditioning play in general" than he is with the part play plays in social life²²² By means of chapters on play's presence in law, war, poetry, myth, knowledge, art, and philosophy, Huizinga advances a seemingly paradoxical contention – these cultural forms "arise[] in the form of play." How can play, set apart from the order of everyday life, simultaneously have a "culture function" that "creates order, *is* order"?²²³

To understand the stakes of this question, recourse to Clifford Geertz's "display" theory of games is instructive. The anthropologist's "Deep Play: Notes on the Balinese Cockfight" is best known for its eponymous concept, derived from Jeremy Bentham: play with stakes so high that it is irrational from a utilitarian standpoint.²²⁴ But the essay also centers on the game in order to advance a theory of art – "art forms generate and regenerate the very subjectivity they pretend

²²⁰ Huizinga, *Homo Ludens*, 1.

²²¹ Ibid, 47

²²² Ibid, 4.

²²³ Ibid, 9, 10

²²⁴ Clifford Geertz, "Deep Play: Notes on the Balinese Cockfight," *Daedalus* 134, no. 4 (Fall 2005): 56-86, 71.

only to display.”²²⁵ By stating that the game displays, Geertz means that the “cockfight is ‘really real’ only to the cocks – it does not kill anyone, castrate anyone, reduce anyone to animal status, alter the hierarchical relations among people, nor refashion the hierarchy; it does not even redistribute income in any significant way.”²²⁶ Hence, the Balinese cockfight “is – or more exactly, deliberately is made to be – a simulation of the social matrix”²²⁷ that “renders ordinary, everyday experience comprehensible.”²²⁸ Redolent of art as mimesis – Plato’s notion that art imitates nature – the game furnishes a representation of social relations that enables their interpretation.²²⁹

Whereas an orthodox Platonic reading tends towards the conclusion that art, therefore, is impoverished reality, Geertz comes to a distinct thesis: because “Quartets, still lifes, and cockfights” render legible what otherwise wouldn’t be – for the Balinese, the implicit social hierarchy – these cultural forms are not “merely reflections of a preexisting sensibility analogically represented; they are positive agents in the creation and maintenance of such a sensibility.”²³⁰ Put differently, despite being representations of an existent reality, it is by engaging a cultural form – be it looking at a painting in a gallery or participating in a bird battle

²²⁵ Ibid, 85.

²²⁶ Ibid 79.

²²⁷ Ibid, 74.

²²⁸ Ibid, 79.

²²⁹ “Its function, if you want to call it that, is interpretive: it is a Balinese reading of Balinese experience; a story they tell themselves about themselves.” Ibid, 82.

²³⁰ Ibid, 85.

royale²³¹ – that the participants’ sensibility, if not their social position, changes.²³² Importantly, the cockfight, by virtue of its status as game, places in relief two qualities of cultural forms in general: 1) games, repeated time and time again, foreground that culture contributes to subject formation over iteration – one’s “read[ing] and reread[ing]” gradually inculcates a consciousness of the social matrix they display; 2) the supposed unreality of games proves metonymical for the autonomy of culture from social relations and material conditions – symbolizing its hierarchy but offering no means of intervention.

Distinct to this claim that play displays, Huizinga argues that play creates. As evidence, Huizinga refers to manifestations of agon in ancient Greek life – from the chariot races to the theatrical conflict of protagonist and antagonist, and from Olympic religious festivals to philosophical debates. In each case, spacetime is given over to contest governed by rules distinct to those that order everyday life and, importantly, do not serve to merely represent something already in the world.²³³ Here lies the generative cultural function Huizinga attributes to play. These contests do not merely recapitulate form, they create it as the unfolding clash of rivals achieves “rhythm, harmony, change, alternation, contrast and climax.”²³⁴ The emergence of melody from a succession of musical tones best exemplifies this “essential” quality of play whereby the “repetition and alternation” of sequences of activity – “refrain” – engenders an observable pattern.²³⁵ It is in this sense that what, historically, we identify as crystalized

²³¹ Indeed, the now popular video game genre had its origin in cockfighting.

²³² “*But no one’s status really changes. You cannot ascend the status ladder by winning cockfights; you cannot, as an individual, really ascend it at all.*” Ibid, 78.

²³³ Active participation renders them “methetic rather than mimetic.” Huizinga, *Homo Ludens*, 15.

²³⁴ Ibid, 75.

²³⁵ Ibid, 10

instances of “folklore, poetry, philosophy, or... various forms of judicial and social life” have their origin in the dynamism of play.²³⁶

Although Huizinga instructively casts play not as display but creation, the question as to play’s sociogenetic function remains: do the cultural forms play precipitates influence the social relations Geertz claims cultural forms can at best reflect? Though this is not Huizinga’s primary concern, he suggests as much:

A play-community generally tends to become permanent even after the game is over. Of course, not every game of marbles or every bridge-party leads to the founding of a club. But the feeling of being ‘apart together’ in an exceptional situation, of sharing something important, of mutually withdrawing from the rest of the world and rejecting the usual norms, retains its magic beyond the duration of the individual game.²³⁷

Regarding cricket, Huizinga’s observation amounts to the following: beyond the boundary of the game’s spacetime that flattens social differences in the service of competition – the level playing field – relationships endure on account of shared investments and a common *savoir-faire*. However, because class and race simply do not feature prominently in Huizinga’s analysis, it’s difficult to relate play’s propensity to found community to existing social stratifications.

James, in contrast, confronts this issue directly. He recounts attempts, years after his formal education concluded, to reconnect with a white former teammate who shared “the old school-tie” – a pun enfolding the vestment and the bond. The sheer awkwardness of these meetings made it clear to James that the common established by cricketing together is ultimately superfluous to “the link between family and friends, between members of the class or caste” (*BB*

²³⁶ Ibid, 46. We may also interpret the development of cricket, covered in the following section, as an historical account of this phenomenon whereby the relatively free, even Dionysian, chaos of child’s play gradually coagulates into the rule-bound, Apollonian form of sport.

²³⁷ Even “the spoil-sports in their turn make a new community with rules of its own. The outlaw, the revolutionary, the cabbalist or member of a secret society, indeed heretics of all kinds are of a highly associative if not sociable disposition, and a certain element of play is prominent in all their doings.” Huizinga, *Homo Ludens*, 12

32). Thus, he anticipates what Lisa Nakamura identifies as the racialized subject's fraught commitment to game-based meritocracy. Drawing on Lauren Berlant, Nakamura contends that faith in a game's ability to level the social playing field otherwise striated by race amounts to a form of "cruel optimism" – an attachment to an ideal that actually perpetuates the conditions one wishes to escape by virtue of it.²³⁸ In this instance, James depicts the old school-tie fostered by cricketing as one such cruel attachment. Play community not only doesn't necessarily entail a strong social relation, it can obfuscate the real social relations one seeks to transform by granting the semblance of unity.²³⁹ Nevertheless, just because a game does not have a progressive social import doesn't mean it lacks social import. Here, play's sociogenic function is to reproduce; cricket's misdirection actively renews the social stratifications that subtend empire by precluding radical change.

As the ensuing sections elaborate, this recognition of the constitutive role games play in maintaining imperial hegemony is the crux of both James's critique and affirmation of cricket. If Geertz depicts games as exemplary cultural forms because they symbolize social relations and Huizinga casts play as a means of generating cultural forms that organize social activity, then James's intervention is to approach games in light of a particular conception of what culture is – an historically situated way of life.²⁴⁰ Indeed, against bourgeois theory that casts sport as "mere entertainment" – play "recuperation" from the real work of labor – James takes cricket seriously

²³⁸ Nakamura, Lisa, "Afterword: Racism, Sexism, and Gaming's Cruel Optimism." In *Gaming Representation Race, Gender, and Sexuality in Video Games*, edited by Malkowski, J., & Russworm, T. M. Indiana University Press 2017: 245-250.

²³⁹ The parallels, and perhaps even synonyms, between aesthetic experience and play experience should be apparent by now. After Eagleton, we might think of this cruel optimism of the play community as coextensive with the "ideology of the aesthetic," which can itself be said to galvanize interpersonal connections that hinge on the relatively weak links of taste. Eagleton, "Ideology of the Aesthetic."

²⁴⁰ Raymond Williams, *Keywords: A Vocabulary of Culture and Society* (New York: Oxford University Press), 90.

as inspiring “*alternative life-activit[ies] in [their] own right.*”²⁴¹ In other words, the stakes of studying games derive from their propensity to give expression to and, therefore, organize life itself. Additionally, whereas Geertz explicitly and Huizinga implicitly privilege the symbolic, by understanding games as constitutive of a way of life – of a culture – James renders games pertinent to symbolic and material production. Thus, uncovering the political ends cricket serves must consider the concomitant social situation, a task James undertakes in elaborating the sport’s historical development.

Cricket: From Child’s Play to Life the Victorian Way

James begins his history of cricket with the Ancient Greeks, inviting clarificatory comparisons with Huizinga. As delineated above, the Dutch historian isolates instances of Greek agonism to support his argument for the generative import of play. In doing so, Huizinga deals with the fact that the Greeks did not recognize the centrality of play to their culture as play by claiming that the pervasiveness of contest meant it couldn’t be distinguished from the “ordinary.”²⁴² Of course, James is less interested in advancing a transhistorical concept than he is in drawing a history of his present state of play in Trinidad. Ancient Greece compels him precisely because of this conflation of games and the ordinary – the Olympiad was clearly not “only a game;” it had ramifications beyond its bounds. The athlete represented his community and, in victory, conferred great honor on it. In turn, he would exist at public expense for the rest of his life, often given a job managing the city gymnasium which, James is keen to emphasize, was not merely a site for “callisthenic[s] and drill[s];” it hosted “physical and intellectual

²⁴¹ Wynter, “In Quest of.”

²⁴² Huizinga, *Homol Ludens*, 28

recreation” (*BB* 156). In attending to the activities that coalesce around sport, James, unlike Huizinga, stakes play’s culture function not on autonomy but entanglement.

He extends this contextual appreciation of play to geopolitics. As the Greek games were not merely an element in but the preserve of Greek societies, they came to support a Greek “consciousness of themselves as” Greek and, moreover, as “separate from the barbarians who surrounded them” (*BB* 157). The barbarians may well have had their own play forms but, from the Greek perspective, these did not signal civilization – only inclusion in their inter-city competition did. Therefore, the boundedness of play shored up another boundary: between the civilized and the uncivilized. Playing games contributed to an operational chain of cultural techniques that not only thematized Greek culture in its performance,²⁴³ but also, in

²⁴³ Theoretical disputes over what cultural techniques are boil down to cooking. For Thomas Macho, the second-order, reflexive operation that allows an activity to be about itself is constitutive of what makes a cultural technique a cultural technique.

From their very beginnings, speaking can be spoken about and communication can be communicated. We can produce paintings that depict paintings or painters; films often feature other films. One can only calculate and measure with reference to calculation and measurement. And one can of course write about writing, sing about singing, and read about reading. On the other hand, it is impossible to thematize fire while making a fire, just as it is impossible to thematize field tilling while tilling a field, cooking while cooking, and hunting while hunting.... [T]o do so we need to avail ourselves of the techniques of symbolic work, which is to say, we are not making a fire, hunting, cooking, or building at that very moment.

Siebert, conversely, believes that this paradigm is somewhat reductive.

Granted, you cannot thematize the making of fire while making fire, but this certainly does not apply to cooking.... Cooking, a differentiated set of activities linked to food preparation, is both a technical procedure that brings about a transformation of the real and a symbolic act distinct from other possible acts. For instance, as part of the culinary triangle underlying the symbolic order of food preparation, the act of boiling something means to neither roast nor smoke it. Hence every instance of boiling, roasting, or smoking is always already an act of communication, because it communicates to both the inside and the outside that within a certain culture certain animals are boiled, roasted, and/or smoked – like (or unlike) in other cultures, be they near or far. Because it is constituted by structural differences, cooking does indeed thematize cooking in the act of cooking.

Play can certainly be about play, it may even, after Bateson’s infamous message “this is play,” be necessarily about itself, insofar as it must convey what it is not, and therefore what it is. And even in the more explicit criterion of self-referentiality Macho gives – a painting about a painting – we can think of any time we’ve ever mimicked someone else’s bit, somewhat ironically, in order to mock it. But for our purposes, Siebert’s qualification is important too. From his perspective, a form of play that reflects its culture and, thus, differentiates that form of play from the play forms of other cultures, is already doing this self-thematization. Not incidentally James’s veneration of

contemporary parlance, helped define what it meant to be human, for participation in the games effectively adjudicated one's participation in culture, and one's exclusion entailed a relegation to nature.²⁴⁴ Thus, James historicizes the civilizing function Huizinga accords play, demonstrating that to claim play *is* a civilizing force is to preclude reckoning with the power disparities that ordain civilization as such; the way of life games participate in (re)producing cannot be thought apart from its constitutive exclusions. By equating the playing with the civilized, the Greek games set a precedent pertinent to the forthcoming analysis of cricket's colonial operation – subtly overrepresenting the dominant identity and its values.

So, where did cricket come from? Likely derived from Anglo-Saxon child's play, cricket's first written record dates 1597.²⁴⁵ But the sport's essentials developed between 1780 and 1840, during the industrial revolution. Far from the bourgeois associations it has today, James emphasizes that cricket's progenitors were “men of hand and eye”: “the yeoman farmer, the gamekeeper, the potter, the tinker, the Nottingham coal-miner, the Yorkshire factory hand” (*BB* 160). That playing, spectating, and participating in other cricket-centered activities came, in many instances, to organize the rural way of life supports one of James's central claims – this sport is “as much part of history as books written are part of the history.”²⁴⁶ Cricket was initially a “national art form” proper to villages not just because it encapsulated something of that culture,

Greek society issued from his belief that it was a direct democracy, one in which “Every Cook Can Govern” – perhaps because governance requires self-reflection, and, clearly, every cook is capable of reflexivity. Macho, “Second-Order Animals,” 31; Bernhard Siegert, *Cultural Techniques: Grids, Filters, Doors, and Other Articulations of the Real*, trans. Geoffrey Winthrop-Young (New York: Fordham University Press, 2015), 12; C. L. R. James, “Every Cook Can Govern: A Study of Democracy in Ancient Greece, Its Meaning for Today,” *Correspondence* 2, no. 12 (June 1956). Transcribed by David Harvie, 2003.

²⁴⁴ Siegert, *Cultural Techniques*, 9.

²⁴⁵ Peter Wynne-Thomas, *From the Weald to the World* (London: Stationery Office Books, 1997); H. S. Altham, *A History of Cricket, Volume 1 (to 1914)* (London: George Allen & Unwin, 1962).

²⁴⁶ Lazarus, “Cricket and National Culture,” 347.

representing it, but because the material practices it entailed “really constitute[d]” social development.²⁴⁷

Cricket’s subsequent Victorian appropriation only makes sense in light of James’s injunction to treat games socio-historically rather than just formally. Indeed, though his focus on cricket resonates with Roger Caillois’s aspiration to conduct a “sociology derived from games,”²⁴⁸ James is not under the impression that the type of game a society plays reveals its social order. For Caillois, cricket, a competitive game (*agon*), indicates an advanced, orderly society distinct from one animated by games of chance (*alea*) and contrary to one that indulges games oriented around sensory experiences (*ilinx*). While such an interpretation may well hold up regarding the Victorian prevalence of cricket, James notes that games of chance and pursuits of intoxication were coextensive with cricket in its pre-Victorian manifestations: “At their matches, cricketers ate and drank with the gusto of the time, sang songs and played for large sums of money. Bookies sat before the pavilion at Lord's openly taking bets” (*bb* 160-1). In other words, there was nothing Victorian about it.

E. P. Thompson suggests we assign the emergence of such organized games to the process of working-class formation in England. With urbanization, new divisions of labor, and the rise of leisure, cricket functioned as a salve for discontent. Its preindustrial spirit helped ameliorate “the historical processes of capitalist dislocation, expropriation, and a deepening alienation.”²⁴⁹ The same connotations contributed to its bourgeois appropriation amid anxieties

²⁴⁷ Ibid.

²⁴⁸ Caillois, *Man, Play and Games*, p.

²⁴⁹ Thompson’s *The Making of the English Working Class* and James’s *Beyond a Boundary* were both published in 1963. Had either been capable of reading the other’s work before publishing their own, we might’ve seen further cross-pollination between Marxist theory and game research. Cedric Robinson, *Black Marxism: The Making of the Black Radical Tradition* (Chapel Hill: University of North Carolina Press, 1983), 267.

regarding the moral implications of industrialization. Clearly, a game's social import is not reducible to perpetuating the values of its initial conditions. Otherwise, "the class of the population that seems to have contributed least" to cricket's formation could not have "convert[ed] it into a national institution" (BB 161) – the Victorian middle class.

So, how did cricket, largely unchanged in form, come to embody Victorian principles? As the Industrial Revolution buoyed class ascendancy for some, the transition from an agrarian to an industrial mode of production simultaneously inspired urbanization and novel demarcations of leisure time that ultimately brought rural games under the purview of the middle and upper classes – the nineteenth century witnessed the rise of governing bodies that standardized the rules of various sports. The rationale underpinning the synchronic integration of sport into the British curriculum exemplifies the value Victorians invested in certain forms of play. Tendentious interpretations of Thomas Arnold,²⁵⁰ the early nineteenth-century historian and headmaster of Rugby²⁵¹ school, were a significant seed of sport's moral elevation in England. Whereas for Arnold, the function of sports such as cricket and football (soccer) lay solely in engaging boys so as to prevent them from participating in other, undesirable activities, others elaborated this utility, figuring games as a means to inculcate positive virtues: "loyalty and self-sacrifice, unselfishness, co-operation, and *esprit de corps*, a sense of honor, the capacity to be a 'good loser' or to 'take it'" (BB 164). The so-called Father of the modern Olympic games, Pierre de Coubertin, is

²⁵⁰ James holds Arnold in high regard, likely because his emphasis on self-reliance spoke to James's own investments: his case for West Indian self-government, his voracious autodidacticism, and his intellectual pride. Indeed, from Arnold, one learns that one "must teach not knowledge not the power of acquiring it" (BB 164). James's debt to such resolutely English luminaries seems to complicate Cedric Robinson's contention that James's radicalism stems almost entirely from studying the Haitian Revolution and, therefore, African tradition. My interpretation is encapsulated by James's summary of *Beyond a Boundary* in the epigraph to this chapter. Robinson, *Black Marxism*, 241-286.

²⁵¹ Rugby school codified its namesake as a sport. It therefore had a maieutic hand in the evolution of numerous other manifestations of rugby football, including American gridiron.

exemplary in this regard. De Coubertin considered Arnold, in turn, the father of modern sport and wanted to expand what he saw as Arnold's pioneering deployment of games for moral education – a commitment more likely inspired by the internationally popular *Tom Brown's School Days* (1857) than Arnold's own writings.

Therein, Thomas Hughes renders Rugby school a microcosm of Victorian England's new age of discipline with headmaster Arnold serving as its protagonist. Despite presenting him favorably, Hughes plays down Arnold's veneration of intellection and religiosity over physicality by staging a symbiotic relationship between the two main characters Arnold pairs, Tom and Arthur. Hughes depicts Arthur's academic rigor, devout Christianity, and literary acumen as concomitant with a frailty only the rugged Tom can supplement with his strength, boldness, and competitive spirit. Thus, although Arnold figured righteous, God-fearing men as the solution to the social crises induced by industrialization, the no less ascetic, widely disseminated Victorian "puritanism" achieved a balance between body and mind (*BB* 39). That the most memorable descriptions in Hughes' didactic novel²⁵² were neither of classroom, nor chapel, but of cross-country, football, and cricket solidifies one of its messages: sport is a means of producing an upstanding British citizen. It remains a testament to how the

Victorians made [sport] compulsory for their children, and all the evidence points to the fact that they valued competence in it and respect for what it came to signify more than

²⁵² Hughes emphasizes that the text was not intended as entertainment but as pedagogy.

Several persons, for whose judgment I have the highest respect, while saying very kind things about this book, have added, that the great fault of it is 'too much preaching'; but they hope I shall amend in this matter should I ever write again. Now this I most distinctly decline to do. Why, my whole object in writing at all was to get the chance of preaching! When a man comes to my time of life and has his bread to make, and very little time to spare, is it likely that he will spend almost the whole of his yearly vacation in writing a story just to amuse people? I think not. At any rate, I wouldn't do so myself.

In the second half of the nineteenth century, even texts about the function of play were functional. Thomas Hughes, "Preface to the sixth edition," *Tom Brown's School Days* (London: Macmillan, 1869).

they did intellectual accomplishment of any kind. *The only word that I know for this is culture.* (BB 166) (emphasis own)

Of course, cricket and football's anteriority to the nineteenth-century did nothing to diminish their significance. On the contrary, comparable to the pre-industrial nostalgia that pervades Dickens's widely-read oeuvre, sport's pastoral redolence only redounded its moral elevation – a gift from an era uncorrupted.

Whereas Huizinga's claims that institutionalization and, subsequently, popularization connotes play's decline tout court²⁵³ – the Dutch historian likely more appreciative of cricket's juvenile genesis²⁵⁴ – James attributes cricket's political efficacy – good and bad – to precisely this process. Popularization amplifies a game's social importance because it proliferates the practices – from honing one's bowling to playing for the local club, from watching Sunday matches on the village green to partaking in school-based training exercises – it promotes. Because the practices a given game inspires “really constitute” a way of life, in this last instance, the Victorian way of life – the values immanent to that game warrant critical examination as means of establishing and maintaining cultural hegemony.

Cricket's Victorian refunctioning, however, demonstrates that it is not so much the game itself that ritualizes these values as it is the discourses and practices that surround them – the “metagame,” if you will.²⁵⁵ Regardless of whether cricket actually served as an effective tool of moral discipline, that some of modern sport's earliest proponents saw the primary purpose of organized play to be a kind of spiritual training indicates an imaginary that nonetheless rendered

²⁵³ Whereas James studied cricket precisely because of his interest in popular feeling, Huizinga clarifies his stance on the subject thus: “popular feeling is wrong.” *Homo Ludens*, 198.

²⁵⁴ “Really to play, a man must play like a child,” *Homo Ludens*, 199.

²⁵⁵ Boluk and LeMieux, *Metagaming*.

cricket part of Victorian life by investing it with particular significance, encouraging a popular desire for it. As such, one cannot read the life practices a game promotes off its formal constitution, they can only be understood in the context of execution. Nevertheless, James locates an “element of universality” in the non-reducibility of cricket to Victorianism (*BB* 166). By assigning a quasi-autonomy to games – insofar as their rule structures persist across different socio-historical manifestations – James insinuates cricket’s compatibility with multiple cultures and its potential to organize distinct ways of living. Indeed, if the British empire’s mobilization of cricket was the cause of its global spread, then the fungibility of cricket was the condition of its plural adoption. By the end of the nineteenth century, “the world wide renaissance of organized games... as an integral part of modern civilization was on its way” (*BB* 165), and, at its core, was the premise that sport cultivated a subjectivity synonymous with the ideal Victorian.

Black Skin, White Flannels: Cricket’s Overrepresentation of Man

When De Coubertin visited Arnold’s tomb in 1886, he remarked that he looked upon “the very cornerstone of the British empire.”²⁵⁶ De Coubertin’s praise captures the expanded critical stakes of examining the pedagogical refunctioning of cricket. Beyond auguring the hegemony of middle-class Victorian ideals at home, sport “had a specific role to play in the maintenance of colonial authority.”²⁵⁷ Headmasters throughout the empire included cricket in the educational program to train the colonized in imperial mores. Having studied at the Queen's Royal College in Port of Spain from 1910 to 1918, a prestigious secondary school set up and administered by British colonists, James had a unique vantage on this operation of power.

²⁵⁶ Catherine Beale, *Born out of Wenlock: William Penny Brookes and the British Origins of the Olympics* (Derby: DB Publishing, 2011), 118-119.

²⁵⁷ Lazarus, “Cricket and National Culture,” 349.

The idiom, derived from cricket, of “playing a straight bat” encapsulates the ethic the game was supposed to propagate.²⁵⁸ Literally, it refers to striking the ball with the bat perpendicular to the ground, a controlled maneuver that typically sends the ball in the intended direction because the bat’s straightness forecloses aberrant deflections off the edges. Indicative of a skilled batsman, “playing a straight bat” figuratively entails acting in an upright, honest, respectful, and morally correct manner. “That’s not cricket” serves as an antonym – a phrase characterizing behavior that flouts common decency. For James, cricket’s valuation of restraint ultimately inculcated an enduring “puritanism” in him coextensive with the civilizing goals of British empire. “Two people lived in me: one, the rebel against all family and school discipline and order; the other, a Puritan who would have cut off a finger sooner than do anything contrary to the ethics of the game” (*BB* 28). Akin to Tara Fickle’s “ludo-orientalism,” whereby “the design, marketing, and rhetoric of games shape how Asians as well as East-West relations are imagined and where notions of foreignness and racial hierarchies get reinforced,”²⁵⁹ James identifies a ludo-imperialism whereby games and game rhetoric promote behaviors in accord with colonial values.

In her writings on cricket, Wynter suggests that we understand the proliferation of sport throughout the British empire as the attempt to tacitly remake colonial subjects in the image of

²⁵⁸ Game metaphors are not typically the preserve of game studies, but as Tara Fickle suggests in *The Race Card*, the eponymous phrase exemplifies that games furnish profound means of sense-making. The charge of “pulling the race card” typically reframes an accusation of racism as a mere rhetorical move that gives the accuser an argumentative advantage – a charge that, moreover, defangs the identification of bigotry. That this idiom moreover functions to accuse the accuser of bad faith – of gaining an unfair advantage on the basis, most likely, of a marginalized subject position – demonstrates that the logic of games can help shore-up a political position that, in this case, disavows anti-racist critique.

²⁵⁹ Fickle, *The Race Card*, 3.

what she conceptualizes as “Man.”²⁶⁰ Following Michel Foucault, Wynter understands the human as an onto-epistemological construct that pervades Western thought, one that takes on metaphysical weight insofar as an image of the human grounds most philosophical systems. She traces the emergence of “Man1” to the Renaissance, wherein the human-as-religious gave way to a *homo politicus* – the rational political subject – invented in contrast to the ostensibly pre-rational beings Europeans encountered upon contact with the Americas circa 1492. “Man2,” the liberal *homo oeconomicus* we’re still indebted to, later formed amid a Darwinist episteme that demarcated the naturally selected (Europeans) from the naturally “dysselected” (racialized). This demarcation that “overrepresents” the European, valuing their supposedly innate traits while devaluing the traits of those constituted as other, necessarily disavows alternate ways of being.²⁶¹ The supposed objectivity of biological science has obscured sociogenic factors, like origin narratives, that shore up a white supremacist definition of what it means to be human.²⁶²

²⁶⁰ Wynter, “Beyond the Category of the Master;” Wynter, “In Quest of.”

²⁶¹ Sylvia Wynter, “Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation—An Argument,” *CR: The New Centennial Review*, 3 (3), 2003.

²⁶² For Wynter, storytelling is a cultural technique of hominization.

The paleontologist Juan Luis Arsuaga proposes that the human is not only a languaging being but also a storytelling species. In my own terms, the human is *homo narrans*. This means that as a species, our *hybrid* origins only emerged in the wake of what I have come to define over the last decade as the Third Event. The First and Second Events are the origin of the universe and the explosion of all forms of biological life, respectively. I identify the Third Event in Fanonian-adapted terms as the origin of the human as a hybrid-auto-instituting-languaging-storytelling species: *bios/mythoi*. The Third Event is defined by the singularity of the co-evolution of the human brain *with* – and, unlike those of all the other primates, *with it alone* – the emergent faculties of language, storytelling. This *co-evolution* must be understood concomitantly with the uniquely *mythmaking* region of the human brain, as the brain scientists Andrew Newberg, Eugene D’Aquili, and Vince Rause document.

Sylvia Wynter and Katherine McKittrick, “Unparalleled Catastrophe for Our Species? Or, to Give Humanness a Different Future: Conversations,” in *Sylvia Wynter: On Being Human as Praxis*, ed. Katherine McKittrick (Durham, NC: Duke University Press, 2015), 9-89, 25.

This disavowal is not merely discursive but practical. Wynter expands Judith Butler's insights regarding gender as performance, not substance, to "other, also performatively enacted roles" including the human – hence her oft-quoted phrase, "*being human as praxis*."²⁶³ Thus, she clarifies that Franz Fanon's "white masks" that colonial subjects don is not so much "*white*" as a "normative" set of desires, aspirations, customs, and habits.²⁶⁴ It is in cricket, Wynter argues, that the colonial subject performs the customs of Man and is, thus, accorded value. Recall Bondman, James's neighbor. It was only when displaying his batting skill on the cricket pitch that he received any recognition. Schiller's dictum – "Man only plays when in the full meaning of the word he is a man, and he is only completely a man when he plays" – acquires a new resonance. But just as that aesthetic education has an enduring impact, it wasn't just that one "played at" whiteness. Over iteration and duration, cricket playing and spectatorship supposedly promoted habits that persisted beyond the scene of play. James himself exemplifies the mobility this refinement of the sensibility afforded. His tenure as a sport reporter for the Manchester guardian, a rare occupation for a black man in England in the 1930s, implies that his assimilation to white society was, in part, predicated on his acumen as a cricket commentator.

For Fanon, one of the most incipient dimensions of colonialism is its impact on the psyche. When the colonized internalize the axioms of the colonizer, the ideals immanent to Man predispose negative feelings towards that which is its constitutive outside, namely, the racialized. In grappling with this phenomenon, Fanon restaged one of the oldest questions in political philosophy, which Gilles Deleuze and Felix Guattari trace back to Baruch Spinoza: "Why do

²⁶³ Sylvia Wynter, "Human Being as Noun? Or Being Human as Praxis?" Towards the Autopoietic Turn/Overtake: A Manifesto, Unpublished Essay, <http://library.memoryoftheworld.org/#/book/24d4e411-1df1-4b5b-8786-c13e45003350>, 8-9.

²⁶⁴ Wynter, "In Quest of," np.

people fight for their servitude as stubbornly as though it were their salvation?”²⁶⁵ The answer? Our desires are not our own.²⁶⁶ Against Freud’s model of desire as lack, Deleuze and Guattari conceive of the unconscious and, moreover, desire, as productive. We may have a conscious interest in winning a game. But this conscious interest presupposes an unconscious investment in a society that values such victories. Unconscious investments of desire make us “look for our interest in one place rather than another, to fix our aims on a given path, convinced that this is where our chances lie.”²⁶⁷ Desire shapes our behavior, and power is nothing but influence.

Wynter draws on evolutionary psychology to elaborate how these regimes of veridiction – wherein the valuation of whiteness is contingent on the devaluation of blackness – come to organize feeling by synchronizing “with the neurological functioning of the biochemical or opiate reward/punishment system of the brain.”²⁶⁸ Though Wynter had not developed this aspect of her thinking at the time she wrote of cricket, it’d be a small leap to enfold games, themselves systems of punishment and reward, into this operation of power that reinforces a particular affective disposition by manipulating dopamine release.²⁶⁹ *Pace* arguments that focusing on the non-representational precludes a critique of racialization,²⁷⁰ Wynter contends that the “overrepresentation” of whiteness manifests in non-representational ways: in the systems of

²⁶⁵ Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia*, trans. Robert Hurley, Mark Seem, and Helen R. Lane (Minneapolis: University of Minnesota Press, 1983), 29.

²⁶⁶ Daniel W. Smith, "Deleuze and the Question of Desire: Towards an Immanent Theory of Ethics," *Parrhesia* no. 2 (2007): 66-78, 74.

²⁶⁷ Deleuze and Guattari, *Anti-Oedipus*, 345.

²⁶⁸ Wynter, “Ceremony Found,” 211.

²⁶⁹ Chapter Four explores the video game’s intensified operation of punishment and reward that attach us to corporations.

²⁷⁰ Malkowski and Russworm, *Gaming Representation*, 1-3.

valuation rules uphold, in the modes of conduct games naturalize, and in the affective dispositions they foster.²⁷¹

In this tacit social conditioning, James suggests that the sense of self-determination that attends play is pivotal. When it came to inculcating the “public-school code” of conduct, cricket was masterful:

inside the classrooms the code had little success.... [W]e lied and cheated without any sense of shame.... [W]e submitted, or did not submit, to moral discipline, according to upbringing and temperament. But as soon as we stepped on to the cricket or football field... all was changed.” School boys of disparate races and classes put aside personal predilections for the “good of the whole.” (BB 25)

In other words, what students neglected to note was that the same British norms and ideals they resisted in the classroom were immanent to the cricket pitch: “the British reticence, the British self-discipline, the stiff lips, upper and lower” (BB 39). Material practices in the school context such as school grounds apportioned to and leisure time scheduled for playing cricket undoubtedly contributed to this sense of separation. But drawing a comparison to the attraction of self-directed reading as opposed to school-assigned reading, James argues that students justified their commitment to the game by virtue of a sense of “self-imposed discipline” distinct from the sense of external determination by organized education (BB 26). Put differently, if the students experienced cricket as but another instance of *being taught*, rather than an expression of their own interests, they would not have pursued it with the sincerity they did.

²⁷¹ Arguably, the endurance of the cricketing ethic is apparent in James’s disposition towards African-American college basketball players who, in league with book-keepers, created betting coups to alleviate their financial precarity. How could these men betray their school? James concludes that “these young people had no loyalties to school because they had no loyalties to anything” (BB 45). Being bound to the sanctity of the very boundary James deconstructs seemingly precluded finding kinship in this apt response to the plight of exploited athletes. Universities pay them sub-minimum wages under the guise of scholarships, often leaving them helpless on the job market unless they became professional athletes or, worse, with career-ending injuries before they could even be properly remunerated for their play.

James's school-boy recollections reinforce the importance of understanding, not dispelling, the magic circle because it is only in acknowledging the social construction of play as a free, voluntary activity that one can grapple with this peculiar operation of power where the pedagogy of play hinges on denying that it's teaching you anything at all. Clearly, some of modern sport's earliest proponents imagined the primary purpose of games to be moral education. This isn't to say that, in James, we find gamification *avant la lettre*; it's to say that games, in their modern form, are inextricably bound up with the kind of training games are ostensibly apart from. In light of James's reflections on his education, the viable comparison is thus: Just as contemporary gamification relies on making tasks feel less like work by introducing elements we've come to associate with the antithesis of work, namely, play, the disciplinary power of cricket relies on establishing a separation from the disciplinary structures it supports. By binding people to the sanctity of play's bounds, games tacitly bind people to broader systems of governance. Ultimately, it is not in spite of but because of play's construction as an activity free from the imposition of power, as self-directed, that popular games are such effective instruments for directing social development in the service of empire. A game's purchase on a given way of life derives, in part, from a common sense that it exists apart from the necessities that determine that way of life.

Cosmoludics: A Strategic Achronicity

Scholars have long considered play to be a voluntary activity that's free from the determinations of practical reality. In his recent monograph, Aaron Trammell contends that this definition precludes grappling with non-voluntary manifestations of play and, by extension, the ways that play can function as a means of subjection.²⁷² Recall, for example, the Mauthausen

²⁷² Trammell, *Repairing Play*, 1-20.

concentration camp: Among other gratuitous activities, Nazis enforced tiresome games of leapfrog to produce pliant, docile bodies. Trammell argues that, to deal with such phenomena, we need to think outside the white, European intellectual lineage that too readily figures play as an expression of freedom. Above all, he engages the resources of the black radical tradition²⁷³ to not only critique the Eurocentric play theories of Huizinga and Caillois, but also to rethink the concept of play itself.

We can understand this call to reinvent play in light of the work Hong Kong philosopher Yuk Hui has done to reinvent the concept of technology. In the “Question Concerning Technology,”²⁷⁴ Martin Heidegger famously argued that the function of modern technology is enframing. To clarify, he refers to the ancient Greek conception of *techne* as an instance of *poiesis*, a “bringing-forth.” Modern technology maintains this revealing function but the truth it discloses cleaves to the imperatives of contemporary epistemology. Guided by the physical sciences’ concern with the extraction and storage of energy, modern technology challenges the world to appear as resource. Take the Rhine. The old, artisanal, wooden bridge over the Rhine allows the river to be itself, to express its own flow and form. In contrast, the industrial hydroelectric plant renders the river an energy resource. Hence, modern technoscience entails that even what we understand as “sustainable” nonetheless fosters an impoverished relationship with the environment, obsessed as it is with extraction, storage and, ultimately, use. The same applies to social connections. As various commentators have noted, the quantification of followers, likes, and impressions on contemporary social media exemplifies the transformation of people into human resources.

²⁷³ Notably, James does not feature.

²⁷⁴ Martin Heidegger, “The Question Concerning Technology,” in *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York: Harper & Row, 1977), 3-35.

In the *Question Concerning Technology in China*, Yuk Hui takes issue with Heidegger's diagnosis. He contends that Heidegger's account of technology as enframing hinges on a specifically Western worldview that's become universal by virtue of globalization.²⁷⁵ As a counterpoint, he explores Confucianism and Daoism. Whereas the Western, colonial episteme founds a possessive orientation to the planet and, therefore, an extractive function for technology, Chinese thought suggests an alternate paradigm for technical activity guided by an appreciation of heaven and earth's kindness. Therefore, instead of treating technology as a homogenous, universal category, Hui proposes philosophy should apprehend technology in relation to cosmology and morality as *cosmotechnics*. Key here is the epistemic nature of Heidegger's argument. In positing a discontinuity with ancient Greek *techne* and emphasizing that scientific developments inform this break, Heidegger already suggested technological pluralism contingent on historical formations of knowledge.

Hui defines cosmotechnics as the unity of the "cosmic... and moral order through technical activities,"²⁷⁶ explaining that

I call it *cosmo*-technics because I am convinced that "cosmos" does not refer to outer space, but, on the contrary, to locality. Each culture has its own cosmology, which is a product of its own geography and the imagination of its people. Cosmologies are not purely scientific theories about space like astral physics, but embedded in daily life, in the way our selves relate to other humans, to non-humans, to other natural resources and the environment as a whole.²⁷⁷

Hui is indebted to the ontological turn in anthropology that, instead of considering "nature" to be a singular paradigm, respects that different cosmologies conceptualize different forms and

²⁷⁵ Yuk Hui, *The Question Concerning Technology in China: An Essay in Cosmotechnics* (Falmouth, UK: Urbanomic, 2016).

²⁷⁶ Hui, *Question*, 19.

²⁷⁷ Yuk Hui, *Art and Cosmotechnics* (Minneapolis: University of Minnesota Press, 2021), 41.

functions for nature.²⁷⁸ This approach attempts to stop marshaling the complexities of different conceptual systems under the sign of pre-determined academic categories, treating “every experience of another culture... [as] an occasion to engage in experimentation with our own – and far more than an imaginary variation, such a thing is the putting into variation of our imagination.”²⁷⁹ The “new anthropology of the concept,” writes Eduardo Viveiros de Castro, strives to counter-effectuate “a new concept of anthropology.”²⁸⁰ Hui’s technological pluralism is an extension of anthropology’s “multinaturalism:” different cosmologies constitute – and are constituted by – different senses of technology. No pluralism for its own sake, however, Hui states that the point of his cosmotechnical project is to “re-discover, or, to some extent, re-invent the concept of technics.”²⁸¹ Hence, we can understand Hui’s work to be an elaboration of an implication of Heidegger’s argument, namely, that the instrumental function of technology is indebted to a model of scientific causality that tends towards calculation. Hui explores alternate epistemes in search of different models with which to reimagine of the operation of technology today.

In calling for us to reimagine play outside the Western tradition, Trammell effectively asks us to do for play what Hui does for technology: a *cosmoludics*, if you will. By treating C. L. R. James as a game studies precursor, it has been my intention, in Nietzsche’s words, to give

²⁷⁸ Pieter Lemmens, “Cosmotechnics and the Ontological Turn in the Age of the Anthropocene,” *Angelaki* 25, no. 4 (2020): 3-8.

²⁷⁹ Patrice Maniglier, “La parente des autres. (A propos de Maurice Godelier, *Metamorphoses de la parente*),” *Critique* 701 (October 2005): 758-774.

²⁸⁰ Eduardo Viveiros de Castro, *Cannibal Metaphysics: For a Post-Structural Anthropology*, translated by Peter Skafish (Minneapolis, MN: Univocal, 2014), 43.

²⁸¹ Eduardo Viveiros de Castro and Yuk Hui, “For a Strategic Primitivism: A Dialogue Between Eduardo Viveiros de Castro and Yuk Hui,” *Philosophy Today* 65, no. 2 (2021): 391-400, 397.

game studies a different past in order to originate an alternate conception of play. Viveiros de Castro characterizes his research as a kind of “strategic primitivism” whereby the study of Amerindian perspectivism is, in essence, a means of reinventing anthropology. By extension, my turn to James – and perhaps the untimely meditation more generally – could be considered a kind of *strategic achronicity*, whereby stepping out of the linear march of time to convene with the past enables us to rethink the present.²⁸² Of course, unlike Hui’s study of Chinese philosophy, James’s standpoint hardly issues from another hemisphere. Rather, as Katherine McKittrick puts it, his perspective is from the “demonic ground” of the African diaspora:

the space of Otherness, the grounds of being human, poverty archipelagos, archipelagos of human Otherness, les damnés de la terre/the wretched of the earth, the color-line, terra nullius/lands of no one.²⁸³

And from this point of view, play looks quite different.

On the surface, cricket seems to be an activity that brings the practitioner into accord with imperial mores – a technique of the self proper to a Victorian worldview, a colonial cosmotechnics. Indeed, although Hui distances cosmotechnics from postcolonial theory because, he claims, this work is primarily narrative-based, and cosmotechnics pertains to practice,²⁸⁴ Wynter’s notion of “being human as praxis” quite clearly figures technical activity as constitutive of the colonial episteme, or “cosmogony.” By extension, we can understand the ritual retelling of origin myths – the practice of self-narration – that renew the European model of Man to be, themselves, cosmotechnical activities. Alongside this colonial form of *homo narrans*, Man the

²⁸² I initially explored this idea in a review of Patrick Jagoda’s *Experimental Games*. Doug Stark, “Better Problems.”

²⁸³ Katherine McKittrick, *Demonic Grounds: Black Women and the Cartographies of Struggle* (Minneapolis, MN: University of Minnesota Press, 2006), 123.

²⁸⁴ Hui, *Question Concerning Technology in China*, 302.

storyteller, Wynter's writings on cricket suggest that there is also a colonial *homo ludens*, Man the player.²⁸⁵ After Fanon, the purpose of conceiving of the human as a socially narrated and practiced (sociogenic) category, rather than biologically (phylogeny) and ontologically (ontogeny) given category, is not just to critique the tendentious ways in which the imperialist project has shaped what it means to be human; it's to open onto a "new science" that, recognizing the role of fabrication in the definition of the human as such, fosters multiple "genres of the human" non-reducible to the European model. Cricket was, of course, far from reducible to its disciplinary function. James shows that it became the basis of a Caribbean "counter-cosmogony," suggesting that same activity in the same place, let alone the same hemisphere, can have two distinct, cosmotechnical implications.²⁸⁶

Conclusion: Fugitive Play

James's cricket memoir is typically remembered for two interventions: establishing that what goes on within the magic circle of play is conditioned by its socio-economic context – hence the title, *Beyond a Boundary* – and substantiating the case for sport as an art form. As Kenneth Surin argues, the continued pertinence of James's aesthetic theory lies in its materialism. If cricket had a special role to play in ameliorating the alienation induced by the industrial revolution, then it performed a similar function in Trinidad: It allowed the expression of creative

²⁸⁵ Aside from her writings on cricket, Wynter had clearly read Erik H. Erikson's work on the role of play and imagination in evolution – *Toys and Reason: Stages in the Ritualization of Experience* (New York: W. W. Norton & Company, 1977) – which she cites in Sylvia Wynter, "On Disenchanted Discourse: 'Minority' Literary Criticism and Beyond," *Cultural Critique* 7 (1987): 207-244.

²⁸⁶ The special issue on cosmotechnics in *Angelaki* demonstrates that technological pluralism can unfold within a much smaller scale of territory than Hui's work implies. Of particular note for our purposes is Frédéric Neyrat's article on Afrofuturism as cosmotechnics, "The Black Angel of History: Afrofuturism's Cosmic Techniques," trans. Daniel Ross, *Angelaki* 25, no. 4 (2020): 120-134.

energies otherwise sublimated or repressed by racial capitalism.²⁸⁷ However, unlike Marxists who've rendered the aesthetic mere ideology or depict sport as isomorphic with capitalist axioms, James does not figure cricket as a mirror of the dominant mode of production.

James's greatest breach with bourgeois aesthetics is his refusal to see it as 'play,' as the... rest from labor and recuperation for labor. Rather the art of cricket or of any sports is seen as a creative activity in its own right and one intimately linked to human existence as is labor. In other words, the aesthetic ceases to be merely a residual social activity; it becomes centrally meaningful [as part of]... the *aesthetics of being alive*.²⁸⁸

Recall Schiller, who locates traces of play in nature whenever there is an abundance of resources: lions play when they have excess energy and are not under threat; plants send out more shoots than necessary when they are adequately nourished, squandering energy in a movement of carefree joy. Or think of Groos, who debunked this formula, citing malnourished polar bears who nonetheless play. Groos was a progenitor another vision of play that, I argue, we're still in the throes of: play as a means of adaptation. Although not thematized in terms of a philosophy of play, this vision is nascent in the Victorian implementation of cricket to civilize young boys and colonial subjects alike. The significance of both senses of play derives from identifiably liberal, Western philosophical predilections, ones Wynter might consider the preserve of *Homo oeconomicus*. The value Schiller invests in surplus play hinges on a veneration of harmony, in the aesthetic confirmation of the liberal subject's capacity to be free; the value Groos invests in adaptive play hinges on a veneration of progress, of civilizational development. James, I want to conclude, offers an alternate paradigm for play's social significance that cleaves to radical collectivism instead of liberal individualism.²⁸⁹

²⁸⁷ Robinson, *Black Marxism*, 267.

²⁸⁸ Wynter, "In Quest of,"

²⁸⁹ In his two-volume work that seeks to historicize and move beyond the paradigm of aesthetic autonomy embodied by theorists such as Theodor Adorno, Grant Kester contends that James offers an approach to aesthetics that doesn't

James's writings on Garfield Sobers are exemplary. Born in Bridgetown, Barbados, Sobers played for the West Indies between 1954 and 1974. Highly skilled in batting, bowling, and fielding, Sobers is considered cricket's greatest all-rounder, and one of the greatest cricketers of all time. Most famously, Sobers set the world record for the highest score in one Test innings against Pakistan in 1958: 365 runs. For James, Sobers was "a West Indian cricketer, not merely a cricketer from the West Indies..., the most typical West Indian cricketer that it is possible to imagine."²⁹⁰ He was nothing less than an artistic genius, albeit in a revised sense of the term, "where 'genius' does not describe an individual who transcends temporal or geographical situation, but one who... represents it in its compound and overdetermined tendencies."²⁹¹ The significance of this claim is clear in light of the contrast James establishes between Caribbean culture and English culture.

What do they know of cricket who only cricket know? West Indians crowding to Tests bring with them the whole past history and future hopes of the islands. English people, for example, have a conception of themselves breathed from birth. Drake and mighty Nelson, Shakespeare, Waterloo, the Charge of the Light Brigade, the few who did so much for so many, the success of parliamentary democracy, those and such as those constitute a national tradition. Underdeveloped countries have to go back centuries to rebuild one. We of the West Indies have none at all, none that we know of. To such people the three W's, Ram and Val wrecking English batting, help to fill a huge gap in their consciousness and in their needs. In one of the sheds on the Port of Spain wharf is a painted sign: 365 Garfield Sobers. (BB 233)

recapitulate this paradigm. Kester, *The Sovereign Self*. Adorno and James met one another in 1940. See Carlos Garrido Castellano, *Art Activism for an Anticolonial Future* (Albany: State University of New York Press, 2021), 107-138.

²⁹⁰ C. L. R. James, "Garfield Sobers," in *The Future in the Present: Selected Writings* (London: Allison and Busby, 1977), 213.

²⁹¹ James is one such genius. Neil Lazarus, "Cricket and National Culture in the Writings of C. L. R. James," in *C. L. R. James's Caribbean*, ed. Paget Henry and Paul Buhle (Durham, NC: Duke University Press, 1992), 92-110, 108. This notion of genius is comparable to Antonio Gramsci's "organic intellectual," which scholars have explored the ramifications of in the colonial context. Brett Levinson, "Feeling, the Subaltern, and the Organic Intellectual," *Angelaki: Journal of Theoretical Humanities* 6, no. 1 (2001): 65-74.

James's point is that Sobers and other cricketers provided West Indians with a sense of collective identity, one that, as various scholars have pointed out, members of the African diaspora remade in the wake of the middle passage.²⁹² Far from affirming the colonial moral order, cricket helped found a counter-cosmology by, James suggests, helping create a tradition for a people without a past. In quite a different sense to Huizinga, therefore, play can be said to have produced a culture.

This counter-cosmology wasn't just mythic but affective. For James, watching cricket is a participatory act that requires its own skills.²⁹³ When the West Indian crowd infamously shouted "Not a man move!" in response to Sobers's signature stroke, it manifested a unity Wynter characterizes as Carnival: the game no longer a spectacle but something the people live in.²⁹⁴ Moreover, in light of Wynter's deconstruction of Man, we might say that this collective, epiphanic moment is a fugitive unity. Fugitivity, writes Fred Moten, is a

desire for and a spirit of escape and transgression of the proper and the proposed. It's a desire for the outside, for a playing or being outside, an outlaw edge proper to the now always already improper voice or instrument.²⁹⁵

Beyond the wordplay that implies a departure from the normative codes of European Man, the collective shout – "not a man move" – connotes a recognition of that which was previously

²⁹² My reading of James thus cleaves more to Paul Gilroy's interpretation of the African diaspora as an enforced break from tradition that opened onto something new than Robinson's, which emphasizes the continuity of black radicalism with longstanding African tradition. For more on the differences between Robinson's racial capitalism and the interpretation of race in British cultural studies, see Marcel Paret and Zachary Levenson, "Two Racial Capitalisms: Marxism, Domination, and Resistance in Cedric Robinson and Stuart Hall," *Antipode* (2024). <https://doi.org/10.1111/anti.13054>.

²⁹³ "To watch cricket critically you have to be in good form, you must have had a lot of practice, you must have played it. . . . It is no more necessary to look at cricket this way than it is to study the counterpoint in order to listen to Bach" (BB 35).

²⁹⁴ Wynter, In Quest of. Wynter is, drawing on Mikhail Bakhtin, *Rabelais and His World*, trans. Hélène Iswolsky (Cambridge, MA: MIT Press, 1968).

²⁹⁵ Fred Moten, *Stolen Life*, vol. 2 (Durham, NC: Duke University Press, 2018), 131.

impossible, a revision of what we thought we knew a body could do. But instead of merely venerating the exceptional individual, James implies that such epiphanies doubled as a transindividuation of a nation, for without the sense of collectivity cricket fostered, there was no entity to be autonomous from Empire. Sobers's representation of the West Indies, from 1954 to 1974, coincided with the period in which the Caribbean islands vied for self-governance. Hence, James proposes that the aesthetic communion cricket iterated not only precipitated psychic and cultural decolonization, but also state-level decolonization. Trinidad and Tobago achieved independence in 1962.

This willingness to take popular culture seriously as a political force led Stuart Hall, a linchpin of the Birmingham School, to propose that James anticipated what we now know as British cultural studies.²⁹⁶ Indeed, there's an irony to contemporary debates about how best to apply the methods of cultural studies to game research.²⁹⁷ For James,²⁹⁸ it's the other way

²⁹⁶ Hall writes that

James steadfastly refused simply to read off cultural things against the economic base. His Hegelianism was a notion connective of historical movement, of whole classes and of esthetic production. He saw such things as one, as not separated into different practices, a notion of collective and creative totality. These were also James's politics. This complex, connective view enabled him to argue against attempts to create a revolutionary movement by making divisions between the black and the white sections of the revolutionary class, or by making divisions between the party and the masses. The movement would be made by the masses, or not made at all. Anything that does not trust the instincts and creative life of the masses would be a deformation, bureaucratic and Stalinist.

Hall, "Portrait", 15.

²⁹⁷ Constance A. Steinkuehler, "Why Game (Culture) Studies Now?," *Games and Culture* 1, no. 1 (2006): 97-102; Garry Crawford and Jason Rutter, "Digital Games and Cultural Studies," in *Understanding Digital Games*, ed. Jason Rutter and Jo Bryce (London: SAGE Publications, 2006), 148-165; Jon Dovey and Helen Kennedy, *Game Cultures: Computer Games as New Media* (Maidenhead: McGraw-Hill Education, 2006); David B. Nieborg and Joke Hermes, "What is Game Studies Anyway?," *European Journal of Cultural Studies* 11, no. 2 (2008): 131-147; Adrienne Shaw, "What is Video Game Culture? Cultural Studies and Game Studies," *Games and Culture* 5, no. 4 (2010): 403-424; Murray, *On Video Games*; Frans Mäyrä, "Game Culture Studies and the Politics of Scholarship: The Opposites and the Dialectic," *Games and Culture* 15, no. 6 (2020): 671-687.

²⁹⁸ The same can be said of Clifford Geertz who, as I noted earlier, treated the Balinese cockfight as paradigmatic for the study of cultural arts.

around: studying the game of cricket was the model for the study of culture more generally. But this interpretation threatens to position *Beyond a Boundary* as a step on the road to contemporary cultural studies when, especially if read through Wynter, it suggests a still pertinent contribution. Cultural studies is, like pre-ontological turn anthropology, somewhat averse to metaphysical questions. For Wynter, however, philosophy is inevitably cultural, the very categories we use to organize experience indebted to a chain of sociogenic operations – or cultural techniques – that maintain and propagate a given worldview. In light of Hui’s assertion that “each culture has its own cosmology, which is a product of its own geography and the imagination of its people,”²⁹⁹ popular culture appears to be grist for the philosophical mill, a means of rethinking concepts like technology, play, and the human.

In *Art and Cosmotechnics*, Hui proposes that aesthetic categories are also contingent on the cultural formations they derive from. The purpose of localizing aesthetic experience is, again, to search for an alternate origin. To stick with Schiller, we might say that the very notion of play as the harmony of sense drive and rational drive is ordained by a particular model of opposition that tends towards reconciliation. In Daoist thinking, explains Hui, “contradiction doesn’t mean there is need for reconciliation, since contradiction is only a manifestation of the Dao. Dao is neither being nor nothing, but rather a way of comprehending the relation between being and nothing as an oppositional continuity and unity.” Hence, Daoist cosmology precipitates an alternate function for art. The *shanshui* landscape paintings do not entail a sublime experience that ultimately affirms the subject; rather, they inspire “a return to the ground through the dissolution of the subject.”³⁰⁰ Likewise, I’ve figured James as an avatar of a diasporic cosmology

²⁹⁹ Hui, *Art and Cosmotechnics*, 41.

³⁰⁰ Ibid, 45.

that grounds a sense of playing games that errs from the liberal tradition. From James's standpoint, play appears not separate from worldly concerns but embedded in a way of life; not a voluntary pursuit, but a means of subjection; not concordant, but discordant; not individual, but collective; not free, but fugitive. That athletes and scholars alike credit *Beyond a Boundary* with unsettling the habitual notion that games are just games is a testament to the power of criticism to transform how we think about the politics of play.³⁰¹

³⁰¹ See David Featherstone, Christopher Gair, Christian Høgsberg, and Andrew Smith, eds., *Marxism, Colonialism, and Cricket: C. L. R. James's Beyond a Boundary* (Durham, NC: Duke University Press, 2018).

CHAPTER 2: MILITARY PLAY: PIAS, CROGAN, AND CONTINGENCY

I recently learned something quite interesting about video games. Many young people have developed incredible hand, eye, and brain coordination in playing these games. The air force believes these kids will be our outstanding pilots should they fly our jets.
Ronald Reagan, "Remarks During a Visit to Walt Disney World," 1983

If it is true that fine motor skills and reaction speeds are as relevant to using actual radar screens and the interfaces of word processors as they are to playing action games; if logical closure is necessary for both the adventure game and the telephone network or the hypertext; if the same problem-solving methods are applicable to airport management or war waging just as much as they are to strategy games; and... if computer games can be said to derive from such diverse areas of knowledge as experimental psychology and computer science, meteorology and narratology, mathematics and electrical engineering – then it might indeed be permissible to speak of an "episteme of the computer game."
Claus Pias, *Computer Game Worlds*, 2017

With Nietzsche, there is the perspective of a new, superhuman self-fashioning beyond the brink of old cultural programs, while with [recent media theory,] there is not much left to do apart from accept the inevitable without self-delusion. It is the moral obligation of prisoners, as it were, to study their chains so as not to mistake them for wings.
Geoffrey Winthrop-Young, "Going Postal," 2002³⁰²

Introduction: Training for the Military?

With his eyesight failing, Friedrich Nietzsche began to explore the use of typewriters in the early 1880s as a means of continuing his work. He acquired the portable Malling-Hansen Writing Ball directly from its inventor and tried it during his 1882 stay in Genoa. Nietzsche never did integrate the defective or damaged device into his regular practice, but the experience left an impression. In a letter to close friend Heinrich Köselitz (also known as Peter Gast), he made the now infamous remark that "our writing tools are also working on our thoughts" (*unser*

³⁰² Geoffrey Winthrop-Young, "Going Postal to Deliver Subjects: Remarks on a German Postal a Priori," *Angelaki* 7, no. 3 (2002): 7-16.

Schreibzeug arbeitet mit an unseren Gedanken). Friedrich Kittler – who repeatedly invokes Nietzsche’s line in *Gramophone, Film, Typewriter* – reminds us that such philosophical perspectives are rare: “In contrast to illuminators, painters, scientists, historians, and poets,” philosophers have largely neglected the “very medium” with which they practice their craft.³⁰³ Thus, Nietzsche’s revelation that the typewriter was “working on” or, perhaps more accurately for the construction *mitarbeiten an*, “collaborating with” his thoughts is significant in the history of philosophy; he construes the “very medium” not as a passive receptacle or vehicle for human thought but, rather, as a participatory agent in the thinking process.

In de-centering the human and affirming the autonomy of his writing tool, Nietzsche presages what has become known as the practice of media philosophy (*Medienphilosophie*). Though often considered a uniquely German enterprise,³⁰⁴ media philosophy broadly conceived denotes an intellectually heterogeneous and transcontinental pursuit³⁰⁵ invested in how (often technical) media problematize and contribute to traditional philosophical concerns such as ontology, epistemology, ethics, and aesthetics. Importantly, media philosophy is typically not so concerned with media representations, audience receptions, or even simply bringing philosophy

³⁰³ Friedrich A. Kittler, "Towards an Ontology of Media," *Theory, Culture & Society* 26, no. 2-3 (2009): 23-31, 26.

³⁰⁴ Various exemplified by Frank Hartmann, *Medienphilosophie* (Stuttgart: UTB, 2000); Sybille Krämer, *Medium, Messenger, Transmission: An Approach to Media Philosophy* (Amsterdam: Amsterdam University Press, 2015); Siegfried, *Cultural Techniques*; Wolfgang Ernst, *Chronopoetics: The Temporal Being and Operativity of Technological Media* (New York: Rowman & Littlefield, 2016).

³⁰⁵ Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge: MIT Press, 1994); Gilbert Simondon, *On the Mode of Existence of Technical Objects*, trans. Cecile Malaspina and John Rogove (Minneapolis: Univocal, 2017); Gilles Deleuze, *Cinema 2: The Time-Image*, trans. Hugh Tomlinson and Robert Galeta (Minneapolis: Minnesota University Press, 1989); Vilém Flusser, *Towards a Philosophy of Photography* (London: Reaktion Books, 2000); Bernard Stiegler, *Technics and Time, 1: The Fault of Epimetheus*, trans. George Collins and Richard Beardsworth (Stanford: Stanford University Press, 1998); Mark B. N. Hansen, *Feed-Forward: On the Future of Twenty-First Century Media* (Chicago: University of Chicago Press, 2015); John Durham Peters, *The Marvelous Clouds: Toward a Philosophy of Elemental Media* (Chicago: University of Chicago Press, 2015); Armond R. Towns, *Black Media Philosophy* (Berkeley: University of California Press, 2022).

to bear on media technologies (a philosophy *of* the media). Rather, media philosophy seeks to account for how media function as agential and autonomous things to *think with* insofar as they subtend, reshuffle, and inaugurate styles of perceiving, thinking, and acting. Where some approaches emphasize the normative role of media play in a given historical *dispositif*, more speculative trajectories explore how philosophy might enter into creative collusion with new media art and artificial intelligence to push the horizons of the thinkable.³⁰⁶

What would a media philosophical video game philosophy look like? Certainly, rather than bringing philosophy to bear on video games (philosophy *of* video games), addressing the philosophical import of video game representations, or arguing about what a game is, a video game philosophy would consider how video games engender certain patterns of mental activity and, moreover, mediate the formation of certain concepts. For example, Timothy Barker treats video game play as a means of accessing properly digital conceptions of time. He argues that the indie game, *That Dragon, Cancer* (2016),

offers the player ways to occupy another's memory and "play through," in a deeply affecting way, the trauma of losing a child to cancer. Games such as this do not simply offer the player a way of passing the time through play. Rather, they illustrate the play element of digital culture by offering a mode of being in multiple times simultaneously, with the player interacting in the time of hardware and software, regulated by the console's internal clock but also interacting out of this time in the diegetic world of the game, where players can apparently relive a past that was never theirs.³⁰⁷

As such, *That Dragon, Cancer* fosters an experience of time that allows players to grasp the concept of "contemporaneity," which, in contrast to the linearity of modern time, and the non-

³⁰⁶ Exemplary in this regard is the work of Luciana Parisi, "The Alien Subject of AI," *Subjectivity* 12 (2019); Beatrice M. Fazi, *Contingent Computation: Abstraction, Experience, and Indeterminacy in Computational Aesthetics* (New York: Rowman & Littlefield, 2018); Reza Negarestani, *Intelligence and Spirit* (London: Urbanomic, 2018).

³⁰⁷ Barker, "Cultural Techniques of Play," 103-4

linearity of postmodern time, is characterized by a conjunction of multiple, conflicting temporalities.³⁰⁸ Along these lines, Barker suggests that video games, more generally, help people adapt to our fast-paced world by habituating us to its technological rhythms.

Barker's approach to the speculative *potential* of the video game provides a backdrop for this chapter's discussion of arguments regarding the stultifying *limits* of video games as things to think with. Specifically, I address an issue raised by the video game's historical intertwinement with the military-industry-complex: the extent to which these cybernetic machines, overdetermined by their techno-epistemic conditions, continue to perpetuate the ways of thinking from which they derived. The first section reconstructs parts of this history, drawing primarily on Claus Pias's genealogy, *Computer Game Worlds*.³⁰⁹ I pay particular attention to how the prehistory of the time-critical action game is also a history of eliminating symbolic mediation and inducing tacit optimization. The second section considers the lasting implications of the

³⁰⁸ Juliane Rebentisch, "The Contemporaneity of Contemporary Art," *New German Critique* 42:1 (2015): 223–237, 233–234.

³⁰⁹ I am focusing on Pias's *Computer Game Worlds* because, while the historical threads it follows intersect with the military, they are by no means reducible to it. His genealogy lends itself to my own arguments that wish to go beyond totalizing confluences of video game training effects with militarization. That said, there are numerous histories of the video game's military-industrial history that provide the backdrop for this essay's focus on Pias and Crogan's monographs. Tim Lenoir, "All but War Is Simulation: The Military-Entertainment Complex," *Configurations* 8, no. 3 (2000); Simon Penny, "Representation, Enaction, and the Ethics of Simulation," in *First Person: New Media as Story, Performance, and Game*, ed. Noah Wardrip-Fruin and Pat Harrigan (Cambridge: MIT Press, 2004), 73–84; Tim Lenoir and Henry Lowood, "Theaters of War: The Military-Entertainment Complex," in *Collection, Laboratory, Theater: Scenes of Knowledge in the 17th Century*, ed. Johann Anselm Lazardig, Ludger Schwarte, and Helmar Schramm (Berlin: Walter de Gruyter, 2005), 427–456; Dyer-Witheford de Peuter, *Games of Empire*; Roger Stahl, *Militainment, Inc.: War, Media, and Popular Culture* (New York: Routledge, 2010); Matthew Thomas Payne, *Playing War: Military Video Games after 9/11* (New York: New York University Press, 2016); Pat Harrigan and Matthew G. Kirschenbaum, eds., *Zones of Control: Perspectives on Wargaming* (Cambridge, MA: MIT Press, 2016). Of particular note, given this essay's concern with training, is Anders Engberg-Pedersen's research into the training effects of nineteenth-century wargaming (2015), the computer-based military simulation's status as an aesthetic exercise (2017), and the military's general turn to aesthetic concerns (2023). In the next chapter, I address this work, which pays far more attention to the player than the game and, thus, the vicissitudes of practice than the determinisms of technological schematism. Anders Engberg-Pedersen, *Empire of Chance: The Napoleonic Wars and the Disorder of Things* (Cambridge: Harvard University Press, 2015); Anders Engberg-Pedersen, "Technologies of Experience: Harun Farocki's Serious Games and Military Aesthetics," *Boundary 2* 44, no. 4 (2017); Anders Engberg-Pedersen, *Martial Aesthetics: How War Became an Art Form* (Stanford, CA: Stanford University Press, 2023).

video game's historical *a priori vis-à-vis* their propensity to train their users. I engage Patrick Crogan's contention in *Gameplay Mode*, namely, that video games are the "reproduction rather than simply the 'product' of [...] a Cold War mentality," positioning his claims as important considerations for any attempt to think with the medium (*GM* 105). This diagnosis of video games recalls Paul Virilio's assessment of moving images, and the third section turns to Gilles Deleuze, who, despite Virilio's critique, maintained a faith in the power of cinema to transcend its historical conditions. Focusing on Deleuze's writings on the digital image, I argue that the problem of video game training is best understood in the context of the neoliberal control society, not militarism. The chapter concludes by attempting to recoup the very training function for which the video game has been condemned. Drawing on Mark Hansen, my contention is that Pias and Crogan place in relief what I figure as a creative consequence of video game play: brokering our corporeal, pre-reflective adaptation to and, thus, agency within our contemporary media ecology. It is by virtue, not in spite, of video games cybernetically working on us that they enable ways of thinking about and living in digital culture.

Claus Pias: A Little History of the Action Video Game

Largely overlooked by Anglophone game studies, Claus Pias's attempt to answer the question "Why are there computer games at all?" provides one of the earliest and still most rigorous accounts of the video game's military-industrial heritage (*CGW* 7). *Computer Game Worlds* traces the heterogeneous epistemologies, institutional practices, and technological developments that served as historical *a priori* for what we now understand as different genres of video game: time-critical (action), decision-critical (adventure), and configuration-critical (strategy). Split into three parts focused on each of these in turn, the "Action" section of *Computer Game Worlds* traces a genealogy that concludes with the emergence of the media

objects many consider to be among the first action video games – *Tennis for Two* (Higinbotham, 1958), *Spacewar* (Russell, 1962), *Pong* (Atari, 1972) – and passes through bodies of knowledge explicitly developed for warfare and scientific management (*CGW* 15-123). The following reconstructs some of these conspirations of history that gave rise to what Pias identifies as the four primary attributes of the action game:

1. Real-time Control: “visual interaction between humans and machines [occurs] in real time.”
2. Grammatized Time and Space: “play consists of producing temporally optimized sequences of action out of determined options.”
3. User measurement: “[The video game] produces and stores knowledge about its player in the form of data.”
4. User optimization: Players not only have their responsiveness *tested* but also *trained* “regardless of whether score is being kept.” (*CGW* 18)

If the video game “can be said to test and train the sensorimotor capacities of their users, then, at the very latest, their prehistory began with Wilhelm Wundt’s institutionalization of experimental psychology” in late nineteenth century Germany (*CGW* 18). Wundt and his student, Max Friedrich, made early attempts to measure subject reaction time as part of a pre-computational, telegraphic system. Not only did this media network prefigure “the basic circuitry of a computer” (*CGW* 20) but, as Friedrich regales vis-à-vis his advisor’s improved reaction time, it also precipitated the notion that the rate of human perception was neither given nor immutable. The experiments proved that both perception and reaction speed could be optimized through training or by altering the material dimensions of the symbol being perceived (e.g. a number).

Meanwhile, in the USA, psychological experiments with animals explored forms of testing and optimization not predicated on symbolic comprehension. Following years of examining pigeon, rat, monkey, cat, and ape intelligence by way of mazes and puzzle boxes, comparative psychologist Robert M. Yerkes advanced the thesis in 1916 that “problem solving could not be regarded as coincidental but rather as an indication of comprehension” (CGW 23). This insight later resolved a US military problem during WWI: evaluating immigrants and (the mostly African-American) illiterate men without massive bureaucratic effort. Data gathered from animal experiments informed the construction of exams non-English speakers or readers could demonstrate aptitude in. These tests determined recruits’ mental fitness for the military without symbolic mediation.

On the one hand, Friedrich’s reaction speed experiments implied an epistemological shift from research into the interpretation of semantic content towards conceptualizing the human as an optimizable functionary within a system. Army mental tests, on the other hand, not only marked a further theorization of aptitude not grounded in symbolic comprehension but also presaged the implementation of user-friendly design.

To a certain extent, illiteracy is the precondition for playing action games, which are based on the rhythmic feedback between audiovisual stimuli and sensorimotor reactions. It is no different in the case of user interfaces, which are not understood by reading handbooks or source code but rather by clicking and toying around, that is, by observing which stimuli lead to particular reactions on the screen. (CGW 65)

These advances in non-symbolic, self-descriptive depiction lay the ground for future graphically mediated human-computer interaction. In the history of media technologies, we often owe innovation to either disability or the military.

What these early reaction-time experiments and aptitude tests lacked, however, was a means of conceptualizing or applying sequential and continuous tracking. To place movements

like shooting a gun into a computer, one must break “apart continuous tasks into measurable (computable) units of time and space” (CGW 31). Indeed, computer game play is all about adhering to what Alexander Galloway, borrowing from Philip Agre,³¹⁰ refers to as “grammars of action.” Galloway explains:

Video games create their own grammars of action; the game controller provides the primary physical vocabularies for humans to pantomime these gestural grammars. But beyond the controller, games also have their own grammars of action that emerge through gameplay. These grammars are part of the code. They help pass messages from object to object inside the machine’s software. But they also help to articulate higher-level actions, actions experienced in common game occurrences such as power-ups or network lag.³¹¹

Before video games could “create their own grammars of action,” actions had, in Bernard Stiegler’s terms, to undergo “grammatization:”³¹² the process, in this case, by which language, gestures, and bodies are rendered informatic by mechanical and industrial techniques. That is to say, action had to be analyzed (broken down) and standardized before it could be computed.

Early twentieth-century scientific management was crucial in this grammatization process. Rather than measuring the best reaction times of particular subjects as Wundt and Friedrich’s experiments did, Frederick Winslow Taylor’s pursuit of workplace efficiency sought to produce models in general. The *Principles of Scientific Management* (1919) advocates for breaking down labor activities into standardized, temporal segments. Subsequently, these standards were to inform: the selection, training and development of the worker; cooperation between workers to ensure accordance with standards; and equal division of labor between the

³¹⁰ Philip E. Agre, “Surveillance and Capture: Two Models of Privacy,” in *The New Media Reader*, ed. Noah Wardrip-Fruin and Nick Montfort (Cambridge: MIT Press, 2003), 737-760.

³¹¹ Galloway, *Gaming*, 4)

³¹² Bernard Stiegler, *Symbolic Misery, Volume 1: The Hyperindustrial Epoch*, trans. Barnaby Norman (Cambridge: Polity Press, 2014), 54-56.

management and the workmen.³¹³ Hence, Taylorism not only developed standards for action-in-time but also, in turn, recursively enforced those standards, rendering them actual and embodied through worker performance. Frank and Lillian Gilbreth's motion studies were similarly preoccupied with streamlining the labor process but were more concerned with space than time: drawing up gridded overlays for workstations and taking sequential photographs in a bid to identify and, consequently, eliminate unnecessary motion.³¹⁴

Both projects can be understood as proto-systems-theoretical approaches to the workplace: Taylor treated workers as individuals performing particular functions within a larger system, the scientific principles effectively a heuristic for ascertaining how best to program that system; the Gilbreths, in measuring motion in general rather than workers and tools as discrete entities, simultaneously developed a concept and a language that smoothed over the boundary between human and machine. Moreover, in considering worker motivation thermodynamically, both attempted to counteract motivational entropy by encouraging self-evaluation practices whereby the workers tested their efficiency by competing against workplace standards. Self-evaluation established a feedback loop not dissimilar to a game: standards provided the rules and goals, and time-keeping devices displayed the outcome. Such practices differ from cybernetic systems like video games only insofar as the feedback does not happen automatically in real-

³¹³ Frederick Winslow Taylor, *The Principles of Scientific Management* (New York: Harper & Brothers, 1919), 36-37.

³¹⁴ Frank B. Gilbreth and Lillian M. Gilbreth, *Fatigue Study: The Elimination of Humanity's Greatest Unnecessary Waste: A First Step in Motion Study*, 2nd ed. (New York: The Macmillan Company, 1919).

time. Far from the expenditure of excess energy, therefore, moments of levity were figured as negentropic.³¹⁵ Before “Taylorism 2.0,” there was gamification 0.1.³¹⁶

This way of treating humans servo-mechanically – part of automatic systems that sense errors and deviations, correcting themselves through negative feedback – gained its clearest expression twenty years later in Norbert Wiener’s cybernetics. It’s instructive to treat Wiener’s brand of cybernetics as a response to a particular historical problem in the early 1940s: creating an Anti-Aircraft (AA) gun that could calculate and predict the flight path of an enemy plane. In this circumstance, the inner psychology of the enemy pilot mattered little – physiology and inner mental states could be black-boxed. What mattered was how accurately their movements could be anticipated. Referring to himself and Julian Bigelow in 1941, Wiener writes:

We realized that the "randomness" or irregularity of an airplane's path is introduced by the pilot; that in attempting to force his dynamic craft to execute a useful manoeuvre, such as straight-line flight or 180 degree turn, the pilot behaves like a servo-mechanism, attempting to overcome the intrinsic lag due to the dynamics of his plane as a physical system, in response to a stimulus which increases in intensity with the degree to which he has failed to accomplish his task.³¹⁷

Hence, the elision of human and machine initially constituted a pragmatic route “to obtain as complete a mathematical treatment as possible of the over-all control problem, [...] assimilat[ing] the different parts of the system to a single basis.”³¹⁸ As history tells, however, it

³¹⁵ This is the late nineteenth-century recreation perspective on play embodied by M. Lazarus, *About the Attractions of Play* (Berlin: F. Dummler, 1883).

³¹⁶ Gamification scholars have proposed that we can understand gamification as Taylorism 2.0. Conversely, Pias argues that Taylorism 1.0 was when “games suddenly became work, and work became a game;” “*homo ludens* [synthesized] with *animal laborans*” to “form a new genre of being, one that was supposed to be embodied by the worker” (CGW 44). Jennifer deWinter, Carly Kocurek, and Randall Nichols, “Taylorism 2.0: Gamification, Scientific Management and the Capitalist Appropriation of Play.” *Journal of Gaming & Virtual Worlds*, 6:2, 2014: 109-127.

³¹⁷ Quoted in Peter Galison, “The Ontology of the Enemy: Norbert Wiener and the Cybernetic Vision,” *Critical Inquiry* 21, no. 1 (1994): 228-266, 236.

³¹⁸ *Ibid*, 251-2

was only by virtue of a series of small leaps that Wiener and his team applied the cybernetic conceptualization to other areas: Allied anti-aircraft operators began to resemble the foe, then humans in general. Eventually, all worldly phenomena took on the character of a cybernetic system, making “an angel of control and a devil of [all forms of] disorder.”³¹⁹

Peter Galison argues that as cybernetics propagated out into other contexts as a descriptive framework and a principle of system design, it behoves us to remember that Wiener’s theory was originally premised on the picture of a particular kind of enemy:

neither invisible nor irrational [...] this was an enemy at home in the world of strategy, tactics, and manoeuvre, all the while thoroughly inaccessible to us, separated by a gulf of distance, speed, and metal. It was a vision in which the enemy pilot was so merged with machinery that (his) human-nonhuman status was blurred.³²⁰

If humans and machines could be unproblematically analogized from a “scientific standpoint” it is because the scientific standpoint of the 1940s was a perspective on men and machines at war.³²¹ In Galison’s reading, cybernetic thought, deterritorialized from its initial conditions, threatens to perpetuate something of that wartime, Manichean worldview.³²²

Wiener’s AA gun never did come to fruition but a technical materialization of the cybernetic, human-computer interface nevertheless emerged on a large scale in another martial context: the US military’s Semi-Automatic Ground Environment (SAGE). Originally designed in

³¹⁹ Ibid, 266.

³²⁰ Ibid, 233.

³²¹ Ibid, 252.

³²² While apropos for a specific constellation of cyberneticists, histories of science and technology have complicated this totalizing paradigm, showing that cybernetics is a pluralistic enterprise politically, geographically, and epistemologically. Project Cybersyn, conducted under Chile’s first democratically elected Socialist president, Salvador Allende, is a case and point. Not incidentally, pioneer of neoliberalism, Augusto Pinochet, violently superseded Allende’s rule in September 1973. Eden Medina, *Cybernetic Revolutionaries: Technology and Politics in Allende’s Chile* (Cambridge, MA: MIT Press, 2011); Ronald Kline, “Where are the Cyborgs in Cybernetics?,” *Social Studies of Science* 39, no. 3 (2009): 331-362.

the late 1950s, SAGE constituted a Cold War effort to head-off Soviet attacks. Hooked up to radar equipment, mainframe computers converted analog signals into digital code and then, by way of cathode ray tubes, presented a legible display. The computers developed tracks for the reported targets and automatically calculated which defenses were within range. Human operators interacted with the displays using light guns: selecting targets and defenses, and issuing commands, which were automatically sent via teleprinter to the respective site. The SAGE project subsisted on the performances of a nationwide software, hardware, and human infrastructure. In many ways, it marked a fairly direct progenitor of later personal computing networks.³²³

For our purposes, SAGE combined several media-technological benchmarks that lay the groundwork for the action video game: real-time control, graphical displays, and data storage. Less obvious is how SAGE's grammatization of time also served to optimize SAGE operators. As Pias explains, from the perspective of the computer cycle, all allies, enemies, humans, and machines had the same logical status in this environment:

The rhythmic synchronization of users and screens in the case of games or interfaces, that is, the ergonomics of the computer, is [...] only a tertiary process that takes place on top of a primary synchronization of processor and bus pulses and on top of a secondary synchronization of interrupt orders and device requests. [...] [I]t is only at these moments that the user is given a chance to exist and to respond to the requests at hand. (*CGW* 76-77)

To an extent, therefore, SAGE's logic of interruption made Wiener's cybernetic vision of the human as a black-boxed information processor actual. Just as Wundt and Friedrich recognized that the machine measured much faster than the human – linking the stopwatch automatically into the telegraphic circuit rather than having an observer monitor it – the operator was the

³²³ Kylie King and Brett Zehner, "The Soft Infrastructure of Data Exhaust at RAND," *Cartha* 9 (2021).

slowest component in this massive information processing system. Long before software patching became ubiquitous, SAGE already patched its weakest, human links.

Several more developments needed to occur before action games such as *Spacewar* (1962) could come into existence, as much entertainment does, through “an abuse of army equipment:”³²⁴ above all, the appropriation of computational commensurability. You can’t hack a thermodynamic machine like the steam engine – changing it into something else – because you can’t manipulate the laws of thermodynamics. Conversely, digital computers can be manipulated to a number of ends – including quaint space battles between MIT students – by virtue of all channels being commensurable on one programmable system. It is this media-technical *a priori* that grants the human the appearance of now controlling the trajectory of their coupling with the computer. Indeed, if up until this point in the narrative, the position of the human in relation to their various machines has been one of subjection – the human optimized as a functionary within a broader apparatus – hacking seems to mark an inversion. However, as Pias points out, these creativities remain within a new set of parameters:

The media-technical *a priori* of the hacker and the contingency of the hacker’s playfulness are [...] part of the universality of the Turing machine itself. Every symbolic operation of a computer is an example of “proper” use, and in this sense there are no “alternative” or “false” applications – there are only unrealized virtualities. Every running program is legitimate. There are no true or false games; at the most, there are game freezes and program crashes. (*CGW* 88)

But this is not to suggest that the hacking practices of the early 1960s that gave us the likes of *Spacewar* were fundamentally compromised in any commonsense way. Rather, Pias’s diagnosis implies the ineffectiveness of binaries such as use vs. misuse, complicity vs. subversion, and domination vs. resistance when it comes to media technologies. Played with friends for fun or

³²⁴ Friedrich A. Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford: Stanford University Press, 1999), 96-97.

run as a framerate diagnostic, *Spacewar* indiscriminately tested and updated human sensorimotor and computer hardware capabilities alike. The history of the video game is one of mutual adaptation.

It would be several more years before video games would begin their rise to major commercial success. Pias concludes his genealogy of the action game with Atari's *Pong* in 1972, a popular title only possible because of developments in psychology, industrial management, cybernetics, military logistics, and Cold War infrastructure. Hence, technological and epistemological innovations that responded to particular military or industrial problems eventually found their way into arcades, bars, and living rooms. Nolan Bushnell famously stated that "to be successful, I had to come up with a game people already knew how to play; something so simple that any drunk in any bar could play."³²⁵ Pias reminds us that drunks and gamers were joining gorillas and illiterates on the list of those who benefitted from self-descriptive interfaces (*CGW* 117). Likewise, as the *Pong* player vied to integrate herself punctually into the ball's to-and-fro, she joined the industrial worker, SAGE operator, and Friedrich's advisor: all these information processors sought to optimize their perception and reaction time to keep up with the rhythms of the machine.

If *Pong* differentiates itself, it does so by placing this process of machinic synchronization in relief. The goal of tennis, of course, is not to hit the opponent but to locate their absence. Just as the user only exists as part of the circuit by virtue of the logic of interruption, so too is it only at the time-critical moment of the ball contacting the paddle that the player can assert their presence in *Pong*.³²⁶ Toys have long allowed people to come to terms with

³²⁵ Scott Cohen, *Zap! The Rise and Fall of Atari* (New York: McGraw-Hill, 1984), 23.

³²⁶ Pias, "The Game Player's Duty".

the social and technical conditions of their times, and, in this case, action games express something of the military-industrial circumstances to which they owe their creation. The problem with entertainment media, however, is that they hardly signal themselves as things to think critically about. To what extent do video games tacitly reproduce, rather than explicitly represent, the cybernetic, predictive, and Manichean mentality they are indebted to?

The Only Winning Move is Not to Play

The humble goal of *Computer Game Worlds* is to chart how the video game came into being. As Pias concludes:

If it is true that fine motor skills and reaction speeds are as relevant to using actual radar screens and the interfaces of word processors as they are to playing action games; [...] and [...] if computer games can be said to derive from such diverse areas of knowledge as experimental psychology and computer science, meteorology and narratology, mathematics and electrical engineering – then it might indeed be permissible to speak of an “episteme of the computer game.” (*CGW* 324)

The stakes of this epistemic archaeology are not easily translated into the language and preoccupations of contemporary game research. Pias’s approach is not invested in how we can interpret individual video games, what players do with them, or even the ideologies they represent. Rather, drawing on the language of his former advisor, *Computer Game Worlds* asks questions concerning “the transference of epistemic processes to technical things” (*CGW* 9) so as to better understand how the video game’s hardware and software shapes “the very schematism of perceptibility.”³²⁷ Therefore, Pias doesn’t pretend to offer an answer to, say, what his analysis might mean for political struggle. As Geoffrey Winthrop-Young remarks regarding the grim disposition of post-Kittler German media theorists, often research into technological subjection is not about articulating forms of resistance – that Nietzschean, transcendent impulse is long gone –

³²⁷ Kittler, *Grammophone*, xli.

but about “accept[ing] the inevitable without self-delusion[:] It is the moral obligation of prisoners, as it were, to study their chains so as not to mistake them for wings.”³²⁸

Though Patrick Crogan does not cite Pias’s monograph in *Gameplay Mode* (2011), his argument that the video game not only owes much to a Cold War mentality but actively reproduces and disseminates it into popular culture explores the continued implications of the history Pias traces. His opening analysis of *Spore* (Maxis 2008), a life simulation game in which the player guides the evolution of a species from microscopic organisms to complex beings capable of space travel, goes some way to exemplify his thesis. Where some video games series have explicit military content (e.g. *Call of Duty* (Activision 2003-)) and others have clear, continued ties to the military (e.g. *America’s Army* (United States Army 2002-)) or foreground their status as training simulations (e.g. *Microsoft Flight Simulator* (Microsoft 1982-)), *Spore* is only tacitly redolent of militarism:

It is there in the permanent warring across biological and sociocultural phases of *Spore* gameplay, in the routine terms for these modes (tactical realtime strategy), and in the game victory conditions (win the race to an objective or defeat the ultimate enemy). It is also to be found in less explicit ways, inhabiting the technological lineages of digital computing, visual displays and interactivity, virtual space simulation, and software development. It is there in the teleological tweaking of evolutionary principles that inform the key game dynamic of competitive creature evolution: game goals dictate the direction and prerogatives of evolution. (*GM* xii-xiii)

Moreover, deeply embedded in the simulation technologies that underpin *Spore* is that cybernetic *Weltanschauung*: “the impulse to model phenomena by hypothetically extending and extrapolating its future to see how that future may be predicted, modeled, and controlled. (*GM* xiii).

³²⁸ Winthrop-Young, “Going Postal,” 156.

In this light, video game researchers have too readily mistaken our chains for wings. Following early figures such as Espen Aarseth³²⁹ and Gonzalo Frasca,³³⁰ scholars have consistently erred in treating video games as cultural forms that offer critique or emancipatory flights of the imagination through simulation.³³¹ On the contrary, Crogan argues that the video game's simulation of complex processes is, itself, intimately tied to and, moreover, reproduces a desire to predictively model and control reality. It is in this way that the video game inducts its user into what Paul Virilio refers to as logistics: "the procedure following which a nation's potential is transferred to its armed forces, in times of peace as in times of war"³³² We may even go so far as to interpret Crogan's diagnosis as an extension of Virilio's arguments regarding the concomitance of imaging techniques and martial ballistics, whereby the intertwined history of war and cinema suggests that our moving image media fundamentally militarize perception. After all, Virilio mentions video games in the same breath, interpreting the racist sex game *Custer's Revenge* (Mystique 1982) as a transmogrification of orgasm into the blink of a red light.³³³

³²⁹ Espen Aarseth, *Cybertext: Perspectives on Ergodic Literature* (Baltimore: Johns Hopkins University Press, 1997).

³³⁰ Gonzalo Frasca, "Videogames of the Oppressed," in *First Person: New Media as Story, Performance, and Game*, ed. Noah Wardrip-Fruin and Pat Harrigan (Cambridge, MA: MIT Press, 2004), 85-94.

³³¹ Building on Crogan, Dennis Jansen elaborates this critique of what he terms "ludic cyborgism," which, while an instructive corrective to some of the more naively optimistic interpretations of simulation, somewhat naively reduces Haraway's cyborg to a techno-utopian figure, as if Haraway is unaware of the military history of technology. The manifesto is best understood in the context of 1980s feminist theory as working against more essentialist conceptions of femininity. Daniel Jansen, "Ludic Cyborgism: Game Studies, Cyborgization, and the Legacy of Military Simulation in Videogames," *Press Start* 6, no. 1 (2020).

³³² Paul Virilio and Sylvère Lotringer, *Pure War*, trans. Mark Polizzotti and Brian O'Keefe (New York: Semiotext(e), 1997), 24.

³³³ Paul Virilio, *War and Cinema: The Logistics of Perception*, trans. Patrick Camiller (New York: Verso, 1989), 29.

Of particular pertinence to thinking with video games, Crogan proposes that the medium is unable to precipitate radical encounters with novelty because video games inevitably “play out... the war on contingency” (*GM* 36). As Robin Mackay explains, “at its simplest ‘contingency’ refers to the attempt to think events that take place but *need not take place*: events that could be, or could have been, otherwise.” As opposed to proceeding by rational necessity in the sense of being, in principle, predictable or “already written” “contingency, real contingency, is that which thinking can grasp only *as event*.” Subsequently, Mackay describes two ways in which indeterminacy becomes operative within a system of thought: on the one hand, as risk to be managed within pre-determined parameters; on the other, as an event exceeding and transforming what we thought we knew.³³⁴ In video game play, Crogan argues, contingencies is never present radical opportunities, they only ever appear as risks to be managed:

The logistical gametime... deemphasizes the ethical positioning of the user/audience in favor of the demands of training for control. For fun, gamers repeat history in order to develop their control over events. They experience them ergodically – that is, as so many challenges modeled in the event space. Ergodic time prevails over the arrival of the event so that it always arrives in the familiar form of a recognizable and surmountable aporia to be negotiated in play, even when it is encountered for the first time. (*GM* 85)

Hence, even when video games “contrive contingency,”³³⁵ playing them cultivates a disposition that forecloses transformative encounters with it – a problem Chapter Five returns to. Following Barker, we might say that the implication of Crogan’s thesis is that video games fundamentally cultivate a militarized “way of living in and thinking about the world.”³³⁶ If play produces culture, gaming produces a militarized culture.

³³⁴ Robin Mackay, “Introduction: Three Figures of Contingency,” in *The Medium of Contingency* (London: Urbanomic, 2011), 1-8, 1.

³³⁵ Thomas Malaby, “Beyond play: A New Approach to Games,” *Games and culture* 2, No. 2, 95-113 (2007), 96.

³³⁶ Barker, “Cultural Techniques of Play,” 87.

In John Badham's 1983 *Wargames*, the collapse of simulation and reality almost allows a game of "Global Thermonuclear War" to become an actual global thermonuclear war. To stop Joshua, the ghost in WOPR's (War Operation Plan Response) machine, from destroying the world, David Lightman and Stephen Falken convince it to play a game of tic-tac-toe against itself. The long string of draws prompts Joshua to recognize the futility of these no-win scenarios. Then, cycling through all the nuclear war scenarios it had devised, Joshua realizes they all end in draws, too. Having effectively discovered the notion of mutually assured destruction, Joshua concludes that, in this "strange game," "the only winning move is not to play."

If we accept Crogan's contention, when it comes to these strange games we call video games, is the only winning move not to play? Clearly, video games – played on their own, industry designed terms – at best reproduce and at worst reinforce a Cold War epistemology; they not only render objects as targets, contingency as a manageable variable, and life as quantifiable and optimizable but also train players to think about the world similarly. Drawing on Stiegler, Crogan proposes that this "drive to foreclose the future" inherent in the video game threatens to shut "off the future as such" insofar as it contributes to a technocultural milieu increasingly toxic to the vital individuation of the new (*GM xxi*). Hence, the video game contributes to what Stiegler, resuscitating Max Horkheimer and Theodor Adorno, considers the standardizing and psychosomatically stultifying effects of the culture industry.³³⁷ In Nietzsche's parlance, the way video games autonomously work on our thoughts is largely reprehensible and, thus, we should do our best to work against them.

³³⁷ Theodor W. Adorno and Max Horkheimer, *Dialectic of Enlightenment*, trans. John Cumming (New York: Continuum, 1972); Bernard Stiegler, "Suffocated Desire, or How the Cultural Industry Destroys the Individual: Contribution to a Theory of Mass Consumption," *Parrhesia* 13 (2011).

Are there ways to take the video game's heritage into account without coming to the same conclusion? Can something generative still be made of this technology collaborating with our thoughts? In Ian Bogost's good-spirited review of *Gameplay Mode*, he lauds Crogan's rare account of "Cold War military technology's unseen influence on video games," one that should give us pause regarding even "the purportedly progressive uses of games for education and social good [that so often] wind up becoming attempts to account for their own future efficacy." He does, however, take issue with the conclusion: "the assumption that such origins can only ever stain the medium until we cast it off through the same predictable critiques leftist cultural critics have provided for decades." As a counterpoint, he proposes that Crogan misses

the fact that *logistics itself* is a toy worth playing with, a feature of the world that both haunts and intrigues us. In that sense, gameplay mode not only makes us complicit in the Cold War's logics, but also provides us with the pleasure—and the honesty—of fessing up to that complicity.³³⁸

We can empathize with Bogost's desire to not take Crogan's convincing arguments as cause for a wholesale rejection of video gaming. Critical positions that condemn anything associated with something bad as complicit and, thus, not worth engaging with are, of course, more stultifying than the video games themselves. But in moving to recoup video game play, Bogost makes a move common in games research that seems to run against some salient implications of Crogan's work: reserving an arbitrary value for the practice of play. Play has always been an activity particularly conducive to learning, and part of Crogan's argument is that playful experimentation with technologies bequeathed by the military-industrial complex affect and transform us in ways that are difficult to comprehend. Indeed, the logical extension of Crogan's analysis seems to be that, even before video games came on the scene, forms of playing out the future in that

³³⁸ Ian Bogost, "Pretty Little Hate Machines: A Review of *Gameplay Mode*," *Game Studies* 12, no. 1 (2012).

subjective, “as if” mood, are part and parcel of the predictive modeling we should be cautious of. Just as making a self-aware joke about what a terrible person you are and, nevertheless, continuing to be a terrible person doesn’t really change anything, “[f]essing up to [...] complicity” – and, indeed, taking pleasure in that confession – seems at best a first step in coming to terms with the connotations of Crogan’s project.

Deleuze Contra Virilio

In a 2017 monograph on the representation of race, gender, and sexuality in video games, the authors open by asking: When will game studies have its “Laura Mulvey moment?”³³⁹ While I am aware that this question pertains to the feminist turn in film studies, it also speaks to the peculiar disconnect between game studies and film and media studies. I, for one, am not eager for us to recapitulate 1980s apparatus theory, not least because I’d prefer not to grade twenty papers on the male gaze in my game studies courses alongside the twenty in my film studies courses, but, more to the academic point, because film and media theory has since taken a keen interest in the vicissitudes of consumption practices that complicate any attempt to read politics off of a screen.³⁴⁰

Game studies never really had to overcome this problem because video games were always conceived of as interactive media. From the jump, we had to deal with the fact that video games are different every time we play them and, moreover, that players always expressed some margin of agency in consuming them – a supposedly unique trait that, by dint of self-balkanization, seems to have made game and media scholars alike incapable of recognizing that

³³⁹ Malkowski and Russworm, *Gaming Representations*, 1.

³⁴⁰ For a recent application of apparatus theory to video games – one that could be productively placed in conversation with Crogan’s oeuvre, concerned as it is with the “technicity of ideology” – see Justin Keever, “Videogames and the Technicity of Ideology: The Case for Critique,” *Game Studies* 22, no. 2 (2022).

this eminently enacted medium quite perfectly embodies some of the problems of technical practice we are now dealing with in media and cultural studies writ large. Indeed, for game studies, time is strangely out of joint. Frameworks now passé in other fields are regularly recycled as novelties, and because game scholars generally display remarkable piety to the theories they recapitulate, picking concepts from the archival smorgasbord seldom involves reckoning with the issues that attended them in other disciplinary contexts.³⁴¹ This is a shame because, as this dissertation strives to show, we can save ourselves a lot of cognitive labor by learning from the critical moves of those who came before us, and all higher forms of complexity rely on a little delegation.

Along these lines, if we interpret Crogan as Virilio for gamers, then, to chart a way forward from Crogan's critique, we might follow Gilles Deleuze who, despite Virilio's damning diagnosis of moving image media, maintained a stubborn commitment to the potential of "thinking cinema through cinema."³⁴² The problem, from Deleuze's perspective, was not so much that cinema was indebted to the military but that, especially in its digital form, it was inevitably plugged into the society of control, a social formation practically synonymous with neoliberalism.

It is not until Deleuze's books on cinema that he engages the digital image as we understand it today: "a picture encoded in digital form and stored on digital media (magnetic,

³⁴¹ Lutz and Kunzelman note that Alenda Chang's critical engagement with ecocriticism – the theoretical framework of her monograph, *Playing Nature* – is rare in game studies. Cameron Kunzelman and Michael Lutz, hosts. "Episode 22." *Game Studies Study Buddies*, Ranged Touch, accessed June 15, 2024. <https://rangedtouch.com/game-studies-study-buddies/>.

³⁴² Gilles Deleuze, *Cinema 2: The Time-Image*, 165.

optical, or solid state).”³⁴³ Digital media, following “the pressure of television, then of the electronic image,” precipitated nothing less than a “crisis” for cinema.³⁴⁴ Typically, Yuk Hui explains, there are two types of digital objects. The first emerges from an “objectification of data” and, the second, a “datafication of objects”:

the first follows the system of mapping or mimesis (for example, the production of digital images, digital video, etc., which are visually and repetitively distributed throughout the physical world), whereas the second takes place by means of attaching tags to objects and coding them into the digital milieu (by means of this digital extension, the object then obtains an identity with a unique code and/or set of references).³⁴⁵

For the sake of comprehension, let’s consider this split phenomenologically. The objectification of data is when a digital medium makes a digital image that is perceptible to humans; the datafication of objects is when metadata is attached to images already perceptible to humans as objects in the world in order to make it them legible to and communicable between digital machines.

If phenomenology connotes the study of phenomena as they appear to a centered, human subject with a limited horizon to perceive the world, then Deleuze, following Henri Bergson, rejects the phenomenological notion of the image. Instead, we must understand Deleuze’s image to be part of “a machinic assemblage of images in a state of universal variation in which privileged instances of subjective perception are always subsumed in a mobile constellation of relationships with other images.”³⁴⁶ Quoting Bergson, Deleuze writes that “every image is

³⁴³ Richard Kroon, *A/V A to Z: An Encyclopedic Dictionary of Media, Entertainment and Other Audiovisual Terms* (McFarland, 2014).

³⁴⁴ Gilles Deleuze, *Cinema 1: The Movement-Image*, trans. Hugh Tomlinson and Barbara Habberjam (Minneapolis: University of Minnesota Press, 1986), x.

³⁴⁵ Yuk Hui, *On the Existence of Digital Objects* (Minneapolis, MN: Minnesota UP, 2016), 50.

³⁴⁶ John Johnston, “Machinic Vision.” *Critical Inquiry*, 26:1, 1999: 27-48, 35

'merely a road by which pass, in every direction, the modifications propagated throughout the immensity of the universe.' Every image acts on others and reacts to others, on 'all their facets at once' and 'by all their elements.'"³⁴⁷ As elements in the world, images are therefore not limited to human consciousness as mere phenomena but are real individuations of things. Whereas Hui's digital image is only "visual," Deleuze's non-phenomenological digital image signifies both objectified data and datafied objects. Not only are those objects constructed by digital computers perceptible to humans called "digital images" but also those statistical, digitally coded "operational images" – "images made by machines for other machines."³⁴⁸

With this non-phenomenological notion of the digital image in mind, we can better understand its significance for cinema. Though Deleuze does "not claim to be producing an analysis of the new images, which would be beyond our aims" he does "indicate certain effects whose relation to the cinematographic image remains to be determined."³⁴⁹ The most significant, perhaps, is that where film recording had an out-of-field – that which is out of the frame of the camera – the digital images "no longer have any outside,"³⁵⁰ "only the vast telecommunications networks that support it and in which it is instantiated as data. Instead of an outside, the digital image seems only to have an electronic underside, so to speak, which cannot be rendered visible."³⁵¹ Just as the time-image of modern cinema emerged from a crisis of the movement-

³⁴⁷ Deleuze, *Cinema 1*, 58.

³⁴⁸ Trevor Paglen, "Operational Images," *e-flux* 59 (2014). Available at: <https://www.e-flux.com/journal/59/61130/operational-images/>. In Virilio's terms, the operational image can be a form of "objective perception – how machines might perceive things – [that] will be forever beyond us." Paul Virilio, *The Vision Machine*, trans. Julie Rose (Bloomington: Indiana University Press, 1994), 73.

³⁴⁹ Deleuze, *Cinema 2*, 265.

³⁵⁰ Deleuze, *Cinema 2*, 265.

³⁵¹ Johnston, "Machinic Vision," 40.

image in classical cinema, the “electronic image, that is, the tele and video image, the [digital] image coming into being, either had to transform cinema or to replace it, to mark its death.”³⁵²

For cinema to relaunch the “will to art” it would have to set up, as Deleuze suggests in his “Letter to Serge Daney” (1986), “specific relationships with” the dominant technical media of the time: “video..., electronic and digital images” and ultimately “develop a new form of resistance [to] combat” “surveillance and control.”³⁵³ Indeed, “[t]he new automatism” – the digital image – “is worthless in itself if it is not put to the service of a powerful, obscure, condensed will to art, aspiring to deploy itself through involuntary movements.”³⁵⁴ A continuation of the artistic will of the *time-image* – “the actual image . . . enter[ing] into relation with its *own* virtual image as such” – the cinema of the digital image intensifies this “image which is double-sided, mutual, both actual and virtual.”³⁵⁵ In the digital image’s “perpetual reorganization..., a new image can arise from any point whatever of the preceding image.”³⁵⁶ As Deleuze writes in *The Fold*, where both iconic and photographic images always “have a model on [their] outside,” digital images can be non-representational and issue from “calculus without a model.”³⁵⁷ Simply put, whereas film and painting necessarily proceed from existing images in the world, imitating models, the digital holds the potential, the power of the false, to generate new images – new presentations as opposed to re-presentations.

³⁵² Deleuze, *Cinema 2*, 265.

³⁵³ Deleuze, *Negotiations*, 76.

³⁵⁴ Deleuze, *Cinema 2*, 266

³⁵⁵ Deleuze, *Cinema 2*, 273.

³⁵⁶ Deleuze, *Cinema 2*, 265.

³⁵⁷ Gilles Deleuze, *The Fold: Leibniz and the Baroque*, trans. Tom Conley (Athlone Press, 1993), 27.

But what is this configuration of surveillance and control cinema must combat? In his “Postscript on Control Societies” (1990), Deleuze articulates a new diagram of power. If the passage from Michel Foucault’s sovereign power to disciplinary power is characterized by the shift from direct commands from a king or authority figure (to tax, to execute, and so on) to mechanisms regulating the behavior of individuals in the social body by organizing space (e.g. architecture), time (e.g. timetables) and activities (e.g. drills, postures, movements) with the aid of surveillance systems and institutions such as prisons, hospitals, asylums, schools, and barracks, then the mechanisms of control no longer function solely by means of enclosure, nor even by addressing subjects at the scale of the individual. The control society creates channels of apparently free movement that are truly in constant contact with power. One is perpetually, as the Latin etymons of control imply, against the wheel.

A control is not a discipline. In making freeways, for example, you don’t enclose people but instead multiply the means of control. I am not saying that this is the freeway’s exclusive purpose, but that people can drive infinitely and “freely” without being at all confined yet while still being perfectly controlled. This is our future.³⁵⁸

Thus, whereas disciplinary power functions through *molding* – confinement or structuration – the control society operates through *modulation*: fluctuation, deterritorialization and reterritorialization.³⁵⁹ This modulation not only regularly places identity categories into variation (race, gender, criminality, etc.)³⁶⁰ but also doesn’t even treat humans as individuals, preferring

³⁵⁸ Gilles Deleuze, “Having an Idea in Cinema,” in *Deleuze and Guattari: New Mappings in Politics, Philosophy and Culture*, ed. Eleanor Kaufman and Kevin Jon Heller (Minneapolis: University of Minnesota Press, 1998), 18

³⁵⁹ Yuk Hui, “Modulation after Control,” *New Formations*, 84:5, 2015: 74-91.

³⁶⁰ Although we tend to focus on the experience of being subjected to algorithmic identity categories, this operation of power is quite open to anti-essentialism, and effectively reifies Butler’s gender performativity theory technologically: One’s gender is dictated by one’s observable behavior, your category decided on the basis of correlations with previous users, categories that are, themselves, an amalgamation of user habits. See John Cheney-Lippold, *We Are Data: Algorithms and the Making of Our Digital Selves* (New York: New York University Press, 2017).

“dividual” administration – that is, the management of “molecular” units smaller in scale than the molar level of an individual body, like affects, intensities, energies, data, and other “samples” extrapolated from activities and behaviors.³⁶¹ Because this operation of power no longer addresses us as individuals, it circumvents our traditional means of refusal.³⁶²

Perhaps depressed by mathematical Frenchmen interrupting his lectures to speak about potatoes,³⁶³ Deleuze’s usual vitality is absent from this late-career essay. There’s no mention of cinema, let alone its potential to resist or go beyond the machinations of control. As part of the telecommunications circuit that has “no outside,” digital images seem to be thoroughly captured. Hence, although the digital has this great capacity for “perpetual reorganization” and “constant variation within an omni-directional space,”³⁶⁴ “these variations [are] being ordered through axiomatics that remain tied to representational clichés on the one hand, and to the circulation of capital on the other.”³⁶⁵ Deleuze’s final word on the digital, then, suggests that it “spoiled” the “will to art.” The replacement of “nature” with “information,” and the “eyes of nature” with the “brain-city, the third eye,” is ultimately a submission of aesthetics to the technological, a triumph of the society of control.³⁶⁶

³⁶¹ Deleuze, *Negotiations*, 180-2.

³⁶² Mark B. N. Hansen, “Foucault and Media: A Missed Encounter?” *South Atlantic Quarterly*, vol. 111, no. 3 (2012): 497–528, <https://doi.org/10.1215/00382876-1596254>, 499.

³⁶³ Seb Franklin, “Periodizing (with) Control,” in *Control Culture: Foucault and Deleuze after Discipline*, ed. Frida Beckman (Edinburgh: Edinburgh University Press, 2018), 44-62, 31.

³⁶⁴ Deleuze, *Cinema 2*, 265.

³⁶⁵ Stephen Zepke, “‘A Work of Art Does not Contain the Least Bit of Information’: Deleuze and Guattari and Contemporary Art.” *Performance Philosophy*, 3:3, 2017: 751-765, 758.

³⁶⁶ Deleuze, *Cinema 2*, 265.

Cybernetics is the science of control and, it should come as no surprise, therefore, that the majority of writing on video games in a Deleuzian vein have figured the new medium as the control society incarnate. Against attempts to critique the ideological ramifications of historical simulation game, *Civilization III*, Galloway argues that it should be understood as an "allegory" – or, more accurately, an “allegortihm” – of contemporary society, organized as it is by information processing.³⁶⁷

So “history” in *Civilization* is precisely the opposite of history, not because the game fetishizes the imperial perspective, but because the diachronic details of lived life are replaced by the synchronic homogeneity of code pure and simple.³⁶⁸

This critique is not reducible to the AAA studio: even the indie, “politically progressive” game operates the same. Seb Franklin arrives at a similar conclusion, but instead of “allegories,” he, like Pias, understands video games as outgrowths of the “control episteme.”³⁶⁹ Going back further than Pias, however, Franklin demonstrates that

the military origins of cybernetics are not the source of its malign implications. Rather, the self-steering gun sight of Wiener’s... ultimately unsuccessful wartime experiments represents but a single, telling realization in electrical components and metaphors of the digital concept of pure relationality that already informed nineteenth-century dreams of political economy (Babbage) and governance (Hollerith).³⁷⁰

Along these lines, my contention is that the forms of preparation, optimization, and anticipation Crogan cites are not necessarily military but, rather, expressions of a more fundamental tendency

³⁶⁷ Galloway, *Gaming*, 91.

³⁶⁸ Galloway, *Gaming*, 103.

³⁶⁹ Seb Franklin, *Control: Digitality as Cultural Logic* (Boston, MA: MIT Press, 2015), 78. Not incidentally, Pias’s dissertation on video games got him so immersed in cybernetics that his next project involved collating transcripts from the Macy Conferences, which were foundational for cybernetics. Although Franklin goes back as far as Charles Babbage, Pias’s “episteme of the computer game” may well be synonymous with Franklin’s “control episteme.” Claus Pias, ed., *Cybernetics: The Macy Conferences 1946-1953: The Complete Transactions* (Zurich: Diaphanes, 2016).

³⁷⁰ Franklin, *Control*, 134.

to control the future that animates our neoliberal moment – a tendency that our contemporary forms of play indulge to a deleterious degree. Instead of grappling with whether or not video games are tacitly training us for the military, therefore, we might ask: Are we training for the control society?

Conclusion: Recouping Video Game Training

To trace the epistemological and technological *a priori* for the action game is to trace a history of optimization techniques for the purposes of industrial and military efficiency. Often in this story, boundaries between humans and machines blur as activities are conceived systemically, according to concepts such as speed, motion, energy, cybernetics, logistics, and so on. The human frequently constitutes the weakest link in the operational chain, but instead of saying “goodbye,”³⁷¹ we are, more often than not, exercised by virtue of local workstations or interfaces so that we can better dance to the beat of the machine. Since Wundt and Friedrich’s reaction experiments measured the human by the speed of response, these testing and training processes frequently articulated humans not as privileged interpreters of symbolic meaning but as information processors in a system valued for its efficiency.³⁷² The SAGE operators epitomized how becoming an information processor necessitated a training of largely non-conscious, pre-reflective abilities to perceive and react. Today, the video game seems to mark the

³⁷¹ Undoubtedly, such machines nevertheless have their exclusions. David Parisi, “Game Interfaces as Disabling Infrastructures,” *Analog Game Studies* 4(5), 2017. <https://analoggamestudies.org/2017/05/compatibility-test-videogames-as-disabling-infrastructures/>

³⁷² This situation resonates with Martin Heidegger’s warning that if philosophy concerns the preservation of truth and reasoned decision-making, then our current epoch bears witness to the transformation of philosophy into that which is not philosophy: the cybernetic pursuit of efficiency. Martin Heidegger, “The End of Philosophy and the Task of Thinking,” in *Basic Writings*, ed. David Farrell Krell (New York: HarperCollins, 1993), 427-449.

apotheosis of this history: if not to prepare players for war as Ronald Reagan once hoped, then to transform them into algorithmic subjects fit for our control society.³⁷³

Can the video game's propensity to train its players – or, in Barker's terms, "cultivate" them – in a manner that largely circumvents their conscious apprehension be construed as anything other than exploitation? Certainly, in Pias's genealogy, such optimization occurs almost unanimously in the service of putting the human to work as part of a broader, value-producing apparatus. I want to argue, however, that we don't need to throw the training baby out with the technocapitalist bathwater. Although Mark Hansen would later consider the control society's individual address to be a fundamental ethical problem because it eludes our higher cognitive capacity to "refuse,"³⁷⁴ in an earlier work, his reading of Walter Benjamin suggests on way of moving beyond condemnation.

The purpose of Hansen's *Embodying Technesis* (2000) was to challenge the (then) widespread reduction of technology's effects to language by poststructuralism, arguing that technologies fundamentally alter our sensory experience and drastically affect what it means to be human in embodied ways.³⁷⁵ Amid the various theoretical approaches to technology Hansen takes to task, Benjamin offers a saving grace. Benjamin's writings on how technology delivers pre-verbal, material interventions ("shocks") to the human nervous system at a level below the neocortex, somewhere between the conscious and the unconscious, suggest a way of dealing

³⁷³ James Ash argues that interfaces do not so much stultify as capacitate their users to better sense space and time "for the explicit purpose of creating economic value for the designers and creators of these interfaces." *Interface Envelope*, 3.

³⁷⁴ Hansen, Foucault and Media, 499.

³⁷⁵ Mark B. N. Hansen, *Embodying Technesis: Technology Beyond Writing* (Ann Arbor: University of Michigan Press, 2000).

with the embodied impacts that media have, impacts that, as N. Katherine Hayles summarizes, are supported by contemporary neuroscience:

Hansen follows Benjamin in picking up on Freud's speculation about a “dead cortical layer” that insulates the neocortex from precognitive perceptions. Although Freud's neurophysiological speculations have been discredited, there is ample contemporary evidence from such researchers as Antonio Damasio that cognition extends throughout the body and includes emotions, kinesthesia, proprioception, and other sensations located in the lower brain, limbic system, and central nervous system. Although such sensations can be given verbal expression, they originate as nonverbal perceptions and need not be brought into language at all.³⁷⁶

By attending to these shocks, Benjamin and, subsequently, Hansen explores a realm of experience that precedes linguistic expression and representational consciousness, attesting to a way in which we encounter technology in its materiality.

In addition to accounting for the pre-verbal, material dimension of our relationship with technology, Hansen figures this material contact as a means of creativity – not merely another vista for colonization by capitalism. Specifically, Hansen contends that Benjamin ultimately poses a form of “mimetic corporeal agency.”³⁷⁷ Innervations – the shocks given to the human nervous system by technologies such as cinema – serve to “train our corporeal, mimetic faculty to register the subrepresentational, molecular rhythms of the lifeworld.”³⁷⁸ Unlike conscious reflection, this mimetic training of a “certain bodily capacity [...] [, a] degree of tolerance for shock” is an attunement that facilitates a way of living.³⁷⁹ The mimetic corporeal faculty thus

³⁷⁶ N. Katherine Hayles, "Foreword: Clearing the Ground," in *Embodying Technesis: Technology Beyond Writing*, by Mark B. N. Hansen (Ann Arbor: University of Michigan Press, 2000), vii.

³⁷⁷ Hansen, *Embodying Technesis*, 245.

³⁷⁸ Ibid.

³⁷⁹ Ibid, 248.

emerges as a means by which the human brokers her embodied adaptation to and, thus, agency within her environment for life – populated as it is by technologies operating at speeds, scales, and temporalities otherwise not cut to human measure. In other words, it is partly by virtue of this embodied adaptation that human perceptual ratios become cut to the measure of technologies that initially seem incommensurate with them. Hence, if we are to conceive of subjectivity as a collective achievement by an ensemble of human and non-human agents – computational media affording access to a heretofore largely invisible “domain of sensibility” as Hansen explores elsewhere³⁸⁰ – then cultivating mimetic corporeal agency constitutes a process by which the human comes to more actively participate in those ensembles.

Of course, the genealogy of the time-critical action game, like any history of humans and technology, is one of “epiphylogenetic” co-evolution: an unfolding, recursive reciprocity.³⁸¹ From one perspective, the technology is increasingly refined to match the human: graphical mediation, self-descriptive interfaces, and real-time feedback. From another, the human user undergoes refinement: learning to act within grammatized space and time, to insert themselves into accelerating computational rhythms. Undoubtedly, various economic forces and state interests have hands in directing this co-evolution and, therefore, we should, as Crogan and Pias do, maintain a healthy skepticism of its inclinations – inclinations that, after Bergson, we might consider, like the waterway, “canalizations:” “the tapering down of a possibility space for some effective purpose.”³⁸² Nevertheless, the forms of life we live seldom afford thinking and acting in

³⁸⁰ Mark Hansen, *Feed-Forward* 5.

³⁸¹ Stiegler, *Technics and Time*, 140.

³⁸² Tano S. Posteraro, “Canalization and Creative Evolution: Images of Life from Bergson to Whitehead and Beyond,” *Bergsoniana*, 2, 2022, <https://doi.org/10.4000/bergsoniana.553>, paragraph 7.

accordance with the connotations of technological critique. We may well condemn the exploitative effects of various technologies but, after that, we have to go on living with and through them anyway.

By attending to the industrial and military origins of the video game throughout this chapter, it has been my intention to foreground and recoup its pre-reflective training function. Hansen's reading of Benjamin is instructive insofar as it suggests that the attunements of sense video games perform cannot be reduced to the ends of military logistics or value extraction. Rather, they cultivate our corporeal, mimetic faculty in a manner that pertains to living more generally – exercising us so as to better accommodate the rhythms and ratios of our technologically proliferated world. It is in this way that entering into complicity with industry-made video games takes on a creative and agential import: developing a sensibility to the temporalities and grammars of digital media that might otherwise elude apprehension or overload attention. Play, as the repeated practice of opening oneself to being worked on by the video game, constitutes a propaedeutic to thought. This pre-reflective capacitation enables reflective, collaborative thought with, through, and about digital media.

Coda: Reframing Gaming

Turning to the work of Harun Farocki and David Sudnow, respectively, the following two chapters deal with the ways in which video games can host more reflective, critical engagements with digital culture. Indeed, Crogan suggests that future “battle for criticality” against the video game's more deleterious tendencies are possible (*GM* 174), but will largely take place in the realm of what, since the publication of *Gameplay Mode*, Stephanie Boluk and Patrick LeMieux have termed the “metagame,” which encompasses everything that occurs “about, within, around,

and even without videogames.”³⁸³ If media, as Hansen writes, constitute our “environments for life,”³⁸⁴ then metagames are the discursive, practical, ideological, and technological “environments for games” that shape what it means to play.³⁸⁵ According to Boluk and LeMieux, the greatest trick the video game industry ever played was convincing us that video games were games in the first place. This assumption reinforces what they call the “standard metagame,” which

continues to obfuscate all manner of practical play, conflating voluntary choice with involuntary mechanics. As a result, twiddling dual thumbsticks with two thumbs; viewing the display straight on from a certain distance; and even progressing in the game by scrolling left to right, accumulating points, unlocking content, and reaching the credits are voluntary choices but have become tacitly understood as the ‘normal’ or ‘correct’ way to play.³⁸⁶

By treating video games as, instead, technologies with which we make games, they divest play from its reified, late capitalist form and effectively make people instead of corporations the agents of game culture. Their metagaming approach transforms the history of ready-made games into the messy “history of play”³⁸⁷ – a move that, in light of Galloway’s critique of *Civilization III*, effectively historicizes a medium that fundamentally erases history proper: “the slow, negotiated struggle of individuals together with others in their material reality.”³⁸⁸ Or, as his former advisor puts it: “History is what hurts.”³⁸⁹

³⁸³ Boluk and LeMieux, *Metagaming*, 68.

³⁸⁴ Mark B. N. Hansen, “Media Theory,” *Theory, Culture & Society* 23, no. 2-3 (2006): 297-306.

³⁸⁵ Boluk and LeMieux, *Metagaming*, 15.

³⁸⁶ *Ibid*, 280-1.

³⁸⁷ *Ibid*, 17.

³⁸⁸ Galloway, *Gaming*, 103.

³⁸⁹ Frederic Jameson, *The Political Unconscious: Narrative as a Socially Symbolic Act* (Ithica, NY: Cornell University Press, 1981), 90.

PainStation (2001) by //////////fur//// art entertainment interfaces is one of Crogan's primary examples of a piece that interrupts the smooth operation of simulation by reminding us of its historical context. Instead of simply punishing players with "symbolic death,"³⁹⁰ this version of *Pong* punishes players with electric shocks and mini-whips whenever they can't keep up with the rhythm of the machine. Particularly when staged in front of a crowd, Crogan contends that *PainStation* "theatricalizes" the gaming situation in Samuel Weber's sense: that "*problematic process of placing, framing, situating rather than as a process of representation.*"³⁹¹ In other words, it produces an effect, and that effect is to suspend *Pong*'s usual implications, enabling a different kind of engagement. In this case, our attention is drawn to the disciplinary dimensions of the gaming machine. A peculiarity of critiquing play: Instead of suspending reality to see it anew, as theatrical reframing typically does, one effectively suspends the suspension, returning it to reality. Soberingly, such performance pieces merely reproduce "an everyday life that has already left art behind."³⁹² As Gustav Metzger once wrote: "There is little doubt that, when it comes to computer art, the true avant-garde is the military."³⁹³

Before Boluk and LeMieux conceived of metagaming, Henry Lowood argued that Machinima – "machine" + "cinema," movies made in game engines – already leveraged video games as platforms for player creativity to historical effect. Artifacts of specific play performances, machinima double as documentaries of virtual life. Akin to theatricalizing, chapter

³⁹⁰ Pias, "The Game Player's Duty," 173.

³⁹¹ Samuel Weber, *Theatricality as Medium* (New York: Fordham University Press, 2009), 315.

³⁹² Pias, "The Game Player's Duty," 179.

³⁹³ Gustav Metzger, untitled (1969), *Bit International* 7 (1971): 27-34, quotation 28. We should, moreover, note that *PainStation* is about as avant-garde as a James Bond movie. Irvin Kershner's 1983 *Never Say Never Again*, featuring Sean Connery, depicts a video game called *Domination*, which shocks the losing player at the end of each round with an intensity proportionate to the amount wagered.

three reframes and historically situate play practices by turning to Harun Farocki's films about games. Writing, too, is a means of reframing gaming, and chapter four focuses on *Pilgrim in the Microworld*, an autoethnographic text that documents David Sudnow's video game training regimen. Both chapters locate a line of flight from the powers that condition play in the vicissitudes of practice – in departing from the standard way to play and, by extension, cultivating alternate habits.

But what about Deleuze's provocation? How might we, despite the circuits of control that capture contemporary play, think video games through video games? When not locating a margin of aberrance in the agency of the player, game scholars tend to figure the negation of player agency as radical.³⁹⁴ Video games that make the player passive – like David O'Reilly's *Mountain* (2014), in which one largely looks at a mountain – are often interpreted as posthuman experiments that confound the very nature of interactive media.³⁹⁵ While instructive when it comes to forms of delegated idle gaming that effectively automate play, when applied to forms of video game spectatorship, arguments about "playing at a distance" could benefit from acknowledging that we already have a name for – and, indeed, a field of research dedicated to – non-interactive moving images.³⁹⁶ From the perspective of film studies, watching stuff is not, in itself, all that exciting – let alone radically posthuman. These images we don't interact with are still very much *for us*. Nevertheless, for Deleuze and his followers, cinema derives its power

³⁹⁴ Bo Ruberg, "After Agency: The Queer Posthumanism of Video Games That Cannot Be Played," *Convergence* 28, no. 2 (2022): 413-430.

³⁹⁵ Sascha Pöhlmann, "Thereness: Video Game Mountains as Limits of Interactivity," *JAAAS: Journal of the Austrian Association for American Studies* 2, no. 2 (2021): 213-245.

³⁹⁶ Fizek, *Playing at a Distance*.

from the “radical passivity” we experience as spectators.³⁹⁷ The cinematographic procession of images and ideas enters into composition with our brain, effectively automating our mental processes and forcing us to think differently. Chapter five argues that some video games are likewise subjecting us to alien operations, training us in skills with no application, and, ultimately, adapting us to worlds that don’t exist.

³⁹⁷ Steven Shaviro, *The Cinematic Body* (Minneapolis, MN: University of Minnesota Press, 1993), 49; Gregory Flaxman, “Once More, with Feeling: Cinema and Cinesthesia.” *SubStance* 45, no. 3 (2016): 174–89, 186.

CHAPTER 3: PROTECTIVE PLAY: FAROCKI'S OPERATIONAL GAMES

The rules by which we are supposed to live are increasingly uncertain, and there are more and more games where life is trained, like a sport. Instruction manuals for life: in the commodity society, the instruction manual is the only record of theory.³⁹⁸
Harun Farocki, "How to Live in the FRG," 2009

What was once transcendent morality becomes part of a circuit: the eternally unchanging group of asceticisms is replaced by a cybernetic optimization system.³⁹⁹
Peter Sloterdijk, *You Must Change Your Life*, 2013

I recommend aesthetic exercises.
Alexander Baumgarten, *Aesthetica*, 1750

Introduction: Projection/Protection

When Rainer Maria Rilke gazed upon the sculpture of a Greek god, he was compelled to capture its compulsion. "Archaic Torso of Apollo" is composed of a single, continuous stanza of fourteen lines that resemble a Petrarchan sonnet without a strict rhyme scheme. The poem's form mirrors the subject it describes: the fragmented but powerful image of a torso. "We cannot know his legendary head with eyes like ripening fruit. And yet his torso is still suffused with brilliance from inside."⁴⁰⁰ We, too, are incomplete, finite creatures whose internal brilliance, the force of will, empowers us to transcend our condition. The sculpture compels us to recognize ourselves in it, imparting a singular message: "You must change your life."

³⁹⁸ Harun Farocki, "How to Live in the FRG," in *Harun Farocki: Against What? Against Whom?*, eds. Antje Ehmann and Kodwo Eshun (Köln: Koenig Books, 2009), 163-165, 165.

³⁹⁹ Sloterdijk, *You Must*, 389.

⁴⁰⁰ Rainer Maria Rilke, "Archaic Torso of Apollo," in *New Poems*, trans. Edward Snow (New York: North Point Press, 2001), 55.

For German philosopher Peter Sloterdijk, this concluding sentence encapsulates the basic imperative of human existence. Among other things, human history is the history of training regimens – of self-disciplining, autopoietic exercises that modify the manifold patterns of being. From the philosophical schools of Ancient Greece to Pierre de Coubertin’s Olympics, and from medieval monasteries to modern biohacking programs, *askēsis* has shaped the meaning and purpose of life itself. Indeed, Sloterdijk dispatches the popular understanding of asceticism (i.e., self-renunciation) to affirm it as a positive, world-building praxis. From this perspective⁴⁰¹ our nature is not given: we make ourselves and our environments by means of individual and collective practices, practice being “any operation that provides or improves the actor's qualification for the next performance of the same operation, whether it is declared as practice or not.”⁴⁰² If these practices – what Sloterdijk calls “anthropotechnics” – once allowed us to elevate ourselves above our given, material circumstances, to introduce difference into the status quo, to truly change our lives, then the problem today is that our practices no longer enable such vertical movement. Under neoliberalism, we only move horizontally. The radical power to change one’s condition is channeled into mere optimization: we update to remain the same.⁴⁰³

“Gamify your life” is perhaps the imperative of our age. This remarkable transmogrification of Rilke is the tagline of the popular app *Habitica* (2013), which leverages the tropes of role-playing games to help us change our habits. Users can choose “positive habits” they want to reinforce, like flossing, and “negative habits” they want to break, like nail biting.

⁴⁰¹ Adam Robbert terms this perspective the “side-view.” “The Side View: Hadot and Sloterdijk on the Practice of Philosophy.” *Cosmos and History: The Journal of Natural and Social Philosophy*, 13(1), 1-14.

⁴⁰² Sloterdijk, *You Must*, 4.

⁴⁰³ Chun, *Updating*.

Each time I floss my teeth, I log the task in the app, earning gold and experience, which allow me to buy virtual items and level up. Conversely, I lose health points (HP) whenever I bite my nails, and if I lose all my health, I lose a level, an item, and all my gold. So, the motivation to make and break habits can stem from the little dopamine hits we get from ticking boxes and getting rewards (positive reinforcement) or from the desire to avoid forms of punishment (negative reinforcement). The quantification can be motivational too. My otherwise small, insignificant acts acquire significance when represented numerically, and checking your stats can be like stepping on a scale (encouraging or harrowing). It takes an average of sixty-six days to form a habit and, in theory, the game scaffold should recede as we become inclined to floss without an external cue. Think of those times you've *not* done something you usually do every day. We can tell something is missing, as if our body is prompting us to remember something we can't. At this point, we have adapted to the routine. We're in the habit of flossing, and we feel the inertia of that habit.

But gamified apps aren't the only forms of play or game that are designed to change our habits. Whether crossing the road as a child or undergoing a job interview as an adult, we pretend to do various tasks before we do them for real. When we conduct a workplace roleplay – say, a mock presentation – we're not so much applying a game to an activity as we are playing at an activity. Play is generally defined as a suspension of reality, and while this definition typically pertains to the impracticality of play, it nonetheless describes this highly practical phenomenon. Extricating the presentation from its typical context suspends its usual stakes, allowing us to try and fail without consequences: a slip of the tongue, a forgotten line, a few minutes over time. Whereas the gamified app motivates repetition, the roleplay allows repetition. We can even isolate parts of the whole performance, like remembering a few paragraphs, delivering a few

words, or minimizing a few hand gestures. Over iteration, I adapt to the presentation, internalizing it, and adapt the presentation, refining it: dropping an awkward phrase, cutting a lengthy slide, adding a much-needed pause. Sometimes, for player and role, the change is mutual.

In *Screening Fears*, Francesco Casetti argues against the notion that media technologies primarily allow us to transcend ourselves. Indeed, scholars have long considered technology to be an “extension of man” that expands our sensorium, allowing us to experience new vistas of reality. Eadweard Muybridge’s chronophotography, for example, famously answered a question the human eye couldn’t: When galloping, is there a point at which all the horse’s hooves are off the ground? And more recently, we might think of the black hole photographs captured by means of radio interferometry, which effectively presented images a singular telescope could not capture. In both instances, mediation granted access to something otherwise inaccessible. While this may well be the case, Casetti contends that far from exposing us to the world, a more fundamental tendency of modern media is to shelter us from it. Starting with phantasmagoria, he charts a history of the

projection/protection complex – where... “complex” stands for a set of interrelated processes and components here aimed at creating a “protected” confrontation with the world and at the same time at “projecting” individuals beyond the safe space in which they are located.⁴⁰⁴

This projection/protection is most apparent when we consider the changes brought about by the COVID-19 pandemic. During and after quarantine, videoconferencing platforms like Zoom allowed us to project ourselves audio visually, connecting us from afar while protecting us from infection.

⁴⁰⁴ Casetti, *Screening Fears*, 14.

In light of Sloterdijk, we can imagine a broader history of protective practices that extend beyond Casetti's work on screen-based media to encompass other means of projection/protection: I throw a projectile to protect myself from the danger of close-quarters combat; I make meteorological projections to protect myself from inclement weather; I project my voice to protect a communication channel from interference; and I project my imagination into a mock presentation scenario that, practiced, ultimately protects me from the embarrassment of a poor speech. Indeed, referring to Sigmund Freud's game of Fort/Da, Casetti suggests that "forms of play" might be considered means of projection/protection.⁴⁰⁵ As with technical media, from the imaginary worlds of child's play to the virtual worlds of video games, play has historically been conceived of as a means of expanding our horizons. But now, as education, labor, and daily life are increasingly gamified, it's clear that play also performs a protective function. Military wargames, mock presentations, and CPR training sessions are all forms of roleplay that allow us to acquire skills fit to, but without the risk of, the real deal. They are a twofold form of what I call *protective play*: When playing at an activity, instead of doing it for real, protects the player from that activity's usual implications. At the same time, the player is projected into a scenario that allows them to acquire habits that will, in theory, protect them from future threats.

Focusing on the work of German filmmaker, Harun Farocki, this chapter argues that protective play is a cultural counterpart to neoliberalism. In what follows, I first introduce Farocki's films about games by way of his more famous preoccupation: the operational image. The second section turns to one of his lesser-known films, *Leben BRD* (1990), and contextualizes its portrayal of roleplay and other means of "pre-enactment" amid the socio-economic conditions

⁴⁰⁵ Ibid, 15.

of late capitalism.⁴⁰⁶ Games structure training exercises that appease the drive for self-rationalization that characterizes neoliberalism. Then, I address the cinematic form Farocki gives this “risk society” where preparation is uncertainty’s salve:⁴⁰⁷ a continual training montage. Although *Leben BRD* appears to be a critique of preparation itself, I argue that it ultimately serves as a form of perceptual counter-training that prepares the viewer to see society differently. Documentary cinema is a largely unexplored means of exposing the powers that organize play and, in conclusion, I consider the final work Farocki completed in his lifetime: *Parallel I-IV* (2012-4). My contention is that this series about video games transforms play into a means of interrogating the limits of computational media.

Harun Farocki: From Operational Images to Operational Games

When one types “best management games” into a search engine, it relinquishes two kinds of webpage. The first ranks members of a game genre in which players occupy an administrative role that exerts authority over a set of resources, characters, and other entities such as *Civilization* (1991), *Settlers of Catan* (1995), and *The Sims* (2000). The second lists games of assorted genres one can employ in the workplace to galvanize colleague chemistry, foster productivity, and acquire skills. Whereas the former usage of “management game” describes games that have players control variables primarily for the sake of play, the latter characterizes a context-specific application of games that mediates managerial control by structuring practices that pertain to the ends of work. The former represents management, the latter supports it.

⁴⁰⁶ Francesca Laura Cavallo, *Sensing It Coming: Regarding the Aesthetics of Risk* (University of Kent: Dissertation, 2020), 249.

⁴⁰⁷ Ulrich Beck, *Risk Society: Towards a New Modernity* (London: Sage, 1992).

This distinction recalls German filmmaker Harun Farocki's "operational image," which characterizes images that have a function beyond representation. Farocki's primary examples of "pictures that are part of an operation" come from the Gulf War.⁴⁰⁸ His *War at a Distance* (2003) opens with a montage of grainy, black-and-white shots from the perspective of aircraft bombers. The cross-hair that stratifies each image declares its function. These videos do not document buildings, roads, and deserts for posterity; they serve as a relay in a system that allows soldiers to ascertain and destroy targets. Subsequent footage from the heads of projectiles in flight underscores this concomitance of imaging and killing. As the ground hurtles towards the camera, we inhabit a point of view whereby "the function of the weapon is the function of the eye."⁴⁰⁹ This tight coupling of perception and action defines the operational image.

Given Farocki's preoccupation with the operational image, we can understand his *Serious Games* (2008-10) to concern *operational games*: played not for entertainment, but to serve a particular function. Comprising four short documentaries, the installation explores the role of games in the U.S. military: The first, filmed at Twentynine Palms, California, presents *Virtual Battle Space 2* (2007), a simulation of Afghanistan; the second, filmed at a Military Operations in Urban Terrain (MOUT) facility in California, depicts a live action wargame; the third focuses on VR immersion therapy software, *Virtual Iraq*, that effectively gets soldiers ready to return to civilian life; and the fourth compares the three. In each scenario, soldiers do not observe the game rules or simulation parameters just for the sake of playing the game; they do so for an ulterior purpose: preparation.

⁴⁰⁸ Harun Farocki, "Phantom Images," *Public* 29 (2004): 13-22, 18.

⁴⁰⁹ Virilio, *War and Cinema*, 26.

For some scholars, activities that serve a practical purpose cannot be play. But consider the three types of goal philosopher of games, Bernard Suits, identifies: prelusory, lusory, and participation. When playing *Virtual Battle Space 2*, the prelusory goal might be a computer state indicating that all the enemies are dead. This only becomes the lusory goal when the players adhere to rules that determine the means of murder. Typically, one can't hack the game file, deleting opposing characters; one must adopt the affordances of the video game avatar: walking, driving, shooting, and so on. Conversely,

[t]he goal of participating... is not, strictly speaking, a part of the game at all. It is simply one of the goals that people have, such as wealth, glory, or security.... [I]t may be called a lusory goal, but a lusory goal of life rather than of games.⁴¹⁰

Let's call these "goals of life" pursued by lusory means *paralusory* goals – extrinsic goals in tandem with the intrinsic game goals.

When officers have their recruits play a wargame in *Virtual Battle Space 2*, this decision is driven by the paralusory goal of combat preparedness. The paralusory goal doesn't discount the lusory goal; the soldiers still adhere to the "no-hacking" rule. On the contrary, it's by virtue of accepting these rules for the sake of playing the game that they can achieve ulterior aims: skill acquisition, environmental familiarity, squad cohesion, and so on. Hence, the lusory goal (intrinsic motivation) and the paralusory goal (extrinsic motivation) are not only compossible but also mutually reinforce. Just as the operational image doesn't eschew representation – even the aircraft bomber depicts the environment for the soldier – the operational game maintains the properties that make a game a game.

⁴¹⁰ Bernard Suits, *The Grasshopper: Games, Life and Utopia* (Toronto: Toronto University Press, 1978), 37.

What defines an operational game is not its form but its function. Conducted during campaigns in Iraq and Afghanistan, the *Virtual Battle Space 2* wargames supported U. S. military strategy. Strategy attempts to determine the future by planning, by programming events in advance. *Serious Games* demonstrates that to “program the battlefield, you program people first.”⁴¹¹ *Virtual Battle Space 2* was supposed “to establish and inculcate a model that can subsequently be applied to... missions..., thus filtering the actual war experience through the schemas of a controlled fiction.”⁴¹² Ideally, these simulations render future combat a repetition of events that never happened. At the very least, recruits assimilate protocols for managing contingencies in the field. Thus, Farocki reveals that games furnish a means of controlling the future. They generate experiences that, over iteration and duration, inculcate habits of thought, action, and association that shape impending conduct.

The same observation animates his lesser-known film and subject of this chapter, *Leben BRD (How to Live in the Federal Republic of Germany (FRG))* (1990). Although the military often provides the grist for Farocki’s mill, *Eye/Machine III* (2003) shows that operational images traverse a set of contexts: infrared detection systems, architectural scanning, and factory-floor robots. Accordingly, scholars have developed histories of the operational image not reducible to martial ballistics that span from astronomical navigation to today’s self-driving cars. The final series Farocki completed before his death – *Parallel I-IV* (2014) – underscores that video games participate in this genealogy too. Every time we click on an object in the *Sims*, prompting action, we’re engaging an operational image.

⁴¹¹ Jussi Parikka, *Operational Images: From the Visual to the Invisual* (Minneapolis, MN: University of Minnesota Press, 2023), 13.

⁴¹² Engberg-Pedersen, “Technologies of Experience,” 168.

Similarly, *Leben BRD* shows that operational games are far from the preserve of the military. A depiction of late 80s life in the Federal Republic of Germany, the film comprises a montage of thirty-two games, tests, and therapies simulating scenarios from childbirth to policing. Particularly prevalent are the management games with which this section began: scenes stage mock job interviews, sales pitches, and customer service exercises. In each case, people don't play games for their own sake, but to practice certain activities. Therefore, while game researchers are right to position Farocki's oeuvre as an overlooked resource for video game studies,⁴¹³ *Leben BRD* pertains to gamification.

If gamification is typically considered a twenty-first-century design technique that applies "game elements" to "non-game contexts" like the workplace, then Farocki's 1990 film harbors instances of gamification *avant la lettre*.⁴¹⁴ Notably, the preparatory work games support in *Leben BRD* isn't always paid. While many of its scenes likely occurred on the clock, the film renders unremunerated exercises coextensive with remunerated ones: natal training, psychic rehabilitation, child's play – all contribute to social reproduction. Everywhere, life appears to take form by virtue of labors that repress its spontaneity.

How to Live in a Risk Society

The film opens with a rendition of how we come to live: an erotic video game. A close-up foregrounds the pixelated pornography, its red hue in contrast to the blue score counter escalating below. Moans mingle with keyboard clatter. The next shot depicts a giant rolling pin repeatedly flattening a mattress. To become a coital bed, it must first undergo physical conditioning. Cutting back to the sex game, a long lens focuses on the player's hands rapidly wiggling a controller. The

⁴¹³ Soraya Murray, "Artist's Project: Harun Farocki's Parallel," *Art Journal* 79, no. 2 (2019): 50-57.

⁴¹⁴ Fuchs, "Pre-Digital Precursors."

computer program reaches its climax; a dissatisfied gesture reveals that the joystick falls short of its namesake.

This transmogrification of life's origin gives way to its cultivation. Subsequent shots capture groups of adults practicing birthing, bathing, and nappy-changing on baby mannequins. Images of the child's education intersperse: playing with dolls, completing puzzles, crossing the road. An instructor's voice accompanies most scenes. "Look left, look right... not down," the teacher disciplines a young boy's street habits. "Nothing is coming that way, only ants." To emphasize the consequences of misconduct, a driving simulator follows. The car stops just before hitting a virtual homunculus who strays into its path. Perhaps he's busy chasing insects too.

Obviously, there are no such consequences. Each shot presents a simulation of an activity that suspends its typical implications, providing a safe environment to practice for the real thing. Over the course of an hour and twenty minutes, the scenarios proliferate: anorexics eat imaginary meals, police train to prevent domestic violence, hydraulics slam car doors to test their resilience, an exotic dancer receives tips on how best to remove her underwear. Human and machine, young and old – all must be prepared.

We can understand the ubiquity of these "pre-enactments" designed to "provoke experiences and create memories" that guide "future behavior" in light of their socio-economic conditions.⁴¹⁵ Filmed the year preceding reunification with Communist East Germany in 1990, *Leben BRD* pointedly takes the Federal Republic of Germany as its subject. Thus, the culture it presents cleaves not to socialism, but to the prerogatives of late capitalism. Scholars characterize neoliberal governmentality by its tendency to configure existence in economic terms: market

⁴¹⁵ Cavallo, *Sensing it Coming*, 249.

heuristics inflect common sense understandings of worth, subjects become competitive entrepreneurs of their human capital, and an insurance mentality directs all pursuits.⁴¹⁶ If *Serious Games* concerns the military's attempts to determine the outcome of impending battles by programming its soldiers, then the activities *Leben BRD* depicts index a more pervasive tendency to manage the future that meets the neoliberal imperative to rationalize all spheres of life.

Many have decried the social impoverishments neoliberalism engenders but few have grappled with why people feel compelled to constantly formalize, justify, and optimize. Whereas theorists of modernity such as Henri Lefebvre and Michel de Certeau foreground the restrictive organization of quotidian life, Lauren Berlant proposes that the everyday under neoliberalism is perennially disorganized. No longer ruptured by instances of crisis, the late capitalist ordinary is fundamentally "shaped by crisis."⁴¹⁷ Within the liberal, immunitary paradigm that predicates sovereignty on self-protection, intertwines freedom with property, and defines liberty negatively against exterior constraints, contingencies appear as a series of threats the individual must protect themselves against.⁴¹⁸ Therefore, despite IMDB classifying *Leben BRD* as a mock-documentary, it'd be reductive to render the practices it depicts a manifestation of false consciousness that, devoid of reality, warrants only laughter from the enlightened viewer. What we see is better considered an apt response to crisis conditions we're all too familiar with. The anxiety induced by financial, environmental, and existential precarity fosters a fantasy rationalization promises to realize: stability.

⁴¹⁶ Brown, *Undoing the Demos*, 17.

⁴¹⁷ Berlant, *Cruel Optimism*, 8.

⁴¹⁸ Roberto Esposito, *Bios: Biopolitics and Philosophy*, trans. Timothy Campbell (Minneapolis, MN: University of Minnesota Press, 2008), 55-77.

From this perspective, the games, tests, and therapies Farocki documents are technologies proper to what Ulrich Beck terms our “risk society.”⁴¹⁹ Two, seemingly antipodal, tendencies animate the risk society: developing projective techniques to marshal indeterminacies that threaten stability; and taking risks to inspire innovation.⁴²⁰ Both involve a rationalization of conduct through anticipatory methods. On the one hand, the child who crosses the depopulated road until he demonstrates the appropriate body techniques – look left and right, not down – participates in an exercise designed to mitigate the chance of harm when he encounters a busy street. On the other hand, the employees practicing their pitches on peers bid to increase their chances of clinching a sale when they attempt a cold call. Farocki’s decision to screen a mock insurance sale highlights not only the function of these exercises – themselves insurance against the future – but also the fabricated nature of risk itself. To incentivize purchase, the salesman imparts the premonition of death: “What would happen if you hadn’t come home last night?”

After all, “[t]here is no such thing as risk in reality.”⁴²¹ Unlike uncertainty and contingency – which denote future possibilities with no valid ground for accurate anticipation – risk regards possibilities known in advance. We can deal with risk rationally because we can either determine all possible outcomes a priori, as is the case with predicting the lay of a die; or, because we can statistically infer possible outcomes based on a gamut of previous instances: assessors calculate the likelihood of a new house setting on fire based on architecturally

⁴¹⁹ Beck, *Risk Society*.

⁴²⁰ Anthony Giddens, *Runaway World: How Globalization is Reshaping Our Lives* (New York, NY: Routledge, 2000), 29.

⁴²¹ Michael Dean, “Risk, Calculable and Incalculable,” in *Risk and Sociocultural Theory: New Directions and Perspectives*, ed. Deborah Lupton (Cambridge, UK: Cambridge University Press, 1999), 131.

homogenous buildings.⁴²² To think in terms of risk is to define the parameters of the future before it arrives. Hence, rather than an objective circumstance, risk is more accurately characterized as a “way of ordering reality..., of rendering it into a calculable form” that allows evaluation.⁴²³

The history of mathematical game theory exemplifies the success researchers had using simple games to compress a manifold of data into calculable form. Game theory was a progenitor of neoliberal political philosophy and the shift in game use from theory to practice is clear in light of behavioral economics. Traditionally, faith in the free market’s power to drive innovation through competition takes rational decision-making as its predicate. Unlike early game theory, behavioral economics acknowledges that not all individuals operate in a rational fashion. Thus, an aspect of this field of study is developing “choice architectures” that “nudge” people to act reasonably.⁴²⁴ We can understand gamification as coextensive with this project.⁴²⁵ Whereas game theory uses games to formalize extant behaviors, gamification purports to form new behaviors.

This operationalization of games is most apparent during one of *Leben BRD*’s longer sequences in which a female instructor guides a child called Alexander through a matching-shapes puzzle. The preceding shot of an urban development model sets the scene. An extreme close-up of hands hammering miniature trees into plastic reveals the signage “Children’s Playground” (*Kinderspielplatz*). The young boy’s play will also be thoroughly planned. Indeed, before the game begins, the partly out-of-frame instructor encourages Alexander to blow his

⁴²² Frank Knight, *Risk, Uncertainty, and Profit* (Boston, MA: Houghton Mifflin Company, 1921).

⁴²³ Dean, “Risk,” 131.

⁴²⁴ Thaler and Sustein, *Nudge*

⁴²⁵ Jagoda, *Experimental Games*, 61.

nose. To suspend reality, we must first address bodily needs. With a furtive glance at the camera, he declines.

The game is simple. The woman places a mold and two shapes in front of Alexander. He has to choose the one that fits. Initially, Alexander does well, has fun – spinning the mold on the table’s glossy surface. Next round, the instructor’s hand prevents further revolutions. To amplify this now disciplinary tenor, Farocki de-frames the child and displays the instructor taking notes between iterations. This isn’t just a game, it’s a test – one Alexander fails in the next shot. “Try the other..., Alexander!” Trouble continues. “Think first, don’t pick the shape up right away!” The game progresses and the boy’s sighs, folded arms, and now unabashed glares at the camera convey his exasperation. Finally, the exercise concludes. As if to state the game’s purpose, the instructor remarks: “We’ve managed that. We’re finished with this game.” The ambiguity as to whether “that” refers to the puzzle itself, Alexander’s cognitive abilities, or his playful fidgeting only underscores the various ways in which operational games serve to rationalize behavior.

For German philosopher Karl Groos, it’s this process of rationalization that “converts play into sport.” For the sportsperson, “the interest of a game lies in the construction of a theory for it; they busy themselves with perfection of form in play, with the rules of the game, with practice and training, with the proper outfit.... We may then define sport as play pursued reflectively, scientifically.”⁴²⁶ “Sportification,” therefore, may be more apt than “gamification.” Indeed, Farocki describes *Leben BRD* as a film about a society in which the “rules... we are supposed to live [by] are increasingly uncertain, and there are more and more games where life is trained, like a sport.”⁴²⁷ Anticipating critics who identify precarity as the affective condition of

⁴²⁶ Groos, *The Play of Man*, 120-1.

⁴²⁷ Farocki, “How to Live,” 165.

neoliberalism, he correlates the perpetual preparation games support with a constant sense of insecurity.

Scholars offer various explanations as to why games are “paradigmatic” of broader currents in contemporary society. Those of a utopian bent render gaming a means of developing skills proper to the information age.⁴²⁸ Conversely, critics construe video games as paragons of late capitalism’s tendency to colonize previously untapped vistas of social life because they extract value from play. Moreover, from gold farming in *World of Warcraft* to user-made worlds in *Minecraft* (2011), forms of “playbor” exemplify the transition from consumption to prosumption that characterizes a flexible economy in which the demarcation of work and leisure no longer holds.⁴²⁹ Finally, intellectual histories of neoliberalism demonstrate that its proponents drew on game metaphors, models, and practices to such an extent that “beyond mere simile, neoliberalism can be said to adopt game form.”⁴³⁰

For Farocki, operational games epitomize the “instruction manuals for life” that inanimate late capitalism. Training simulations are fundamentally concerned with risk mitigation. They iterate activities to refine conduct – safely drilling associations, protocols, and proficiencies the practitioner can bring to bear on future endeavors. Risk rationality demands a horizon. One cannot calculate probability without defining a set of possibilities. Games address this problem by fabricating rules for a world that seems to have none.⁴³¹ Even when their correspondence with

⁴²⁸ Zimmerman, “Manifesto.”

⁴²⁹ Kücklich, “Precarious Playbour.”

⁴³⁰ Jagoda, *Experimental Games*, 279.

⁴³¹ This element of fabrication is not reducible to games; it pervades finance too. If “contingency is *exactly* what cannot be completely accounted for ahead of time,” then the attempt to anticipate contingency with risk reduction methods is “simply mystical.” Jordan Sjol, “Contingency and Mysticism from Economics to Finance: Knight, Ayache, DeLillo,” *Theory, Culture & Society*, 39(1): 61-80, 77.

reality is fraught, applied games grant players a valuable impression of control by structuring a practice that promises future stability.

Since these “instruction manuals” provide principles that guide the realization of late capitalist life, Farocki calls them the “commodity society’s” “only record of theory.” If that’s the case, then *Leben BRD* supplements the archive.

***Leben BRD*: A “Continual Training” Montage**

In Roberto Rossellini’s *Europa ’51* (1952), Ingrid Bergman plays a wealthy socialite called Irene who dedicates her life to helping the poor after the death of her son. Irene’s exposure to hardship gradually discloses a social reality her privilege obfuscated. Regarding a factory floor, its population no longer appeared to her as workers: “I thought I was seeing convicts.”

Irene’s statement encapsulates the disciplinary power that organized post-war Italy. Michel Foucault locates this kind of power in eighteenth, nineteenth, and early twentieth-century institutions that govern society by regulating the individual’s development: first the family; then the school and the barracks; occasionally the hospital and, possibly, the prison.⁴³² Each produces an enclosure that homogenizes space, time, and bodies by means of techniques such as architecture, timetables, and drills. Thus, it’s not that the factory is “like” a prison, resembling it as a copy does a model; the factory is the thing that a prison is.

Moreover, “I thought I was seeing convicts” marks an epiphany. As close-ups of Irene’s concerned face intersperse with images of industrial labor, it’s as if her physiognomy betrays the movement of thought itself. Following Henri Bergson, Gilles Deleuze proposes that we never perceive a thing in its entirety, “we perceive only what we are interested in perceiving, or rather

⁴³² Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Vintage, 2012).

what it is in our interest to perceive, by virtue of our economic interests, ideological beliefs, and psychological demands.”⁴³³ The heuristics of high society had previously precluded Irene’s recognition of the worker’s plight. Now, she sees the machinations of disciplinary power – an insight that fittingly lands her in the asylum.

Europa ’51 has Irene’s epiphany double as our own. For Deleuze, the philosophical pertinence of cinema derives from its capacity to enter into a circuit with our mental operations and, therefore, establish new images and associations that unsettle perceptual habits. Rossellini links a series of shots that move us to draw the same conclusion as Irene: we are seeing convicts.

Leben BRD concerns various institutional settings that indicate disciplinary power. Nevertheless, the Federal Republic of Germany also demonstrates traits characteristic of what Deleuze saw as superseding the society of discipline, namely, the society of control. In this context, the individual no longer passes through a set of clearly demarcated training zones – family, school, barracks, factory – but undergoes a “continual training” (*formation permanente*) that pervades leisure.⁴³⁴ Many of the film’s scenes concern voluntary, extra-curricular, or non-remunerated exercise that nonetheless entails the work of self-transformation: psychological support groups, etiquette lessons, management games, and even amateur dramatics all take on the character of training.

The apparent freedom to self-govern is fundamental to mechanisms of control, which exert influence not by means of explicit force but by tacitly directing volition. Take an after-work seminar on job interviews. While participants chose to attend, their willingness belies the social conditions that inspire people to dedicate their downtime to cultivating their careers. Marxists

⁴³³ Deleuze, *Cinema II*, 20.

⁴³⁴ Deleuze, “Societies of Control,” 175.

have long figured leisure as a break from work that ultimately greases the wheels of capital, but an historical critique immanent to *Leben BRD* is that passive restoration has given way to active preparation. Energy once devoted to autotelic play or attending the local union has been sublimated into constantly optimizing one's ability to perform labor manual, cognitive, reproductive, and otherwise.

If *Leben BRD* depicts a society in which life is trained “like a sport,” then the film itself invites characterization as a “continual training” montage. Traditionally conceived, *Rocky IV* (1985) provides a famous example. “Hearts on Fire” booms as a series of shots contrapose American Rocky Balboa’s makeshift regimen to Soviet Ivan Drago’s high-tech facility in the lead-up to their face-off that dramatizes the Cold War. Intercutting between Rocky and Drago, the montage compresses otherwise unpalatable months of exercising – jogging, sparring, weight-lifting, and so on – into a few exciting minutes. The training montage appeals to our fascination with the individual’s work ethic without subjecting us to anything less than a titillating spectacle.⁴³⁵

Leben BRD, on the contrary, is somewhat boring. Its “observational mode” offers no voice-over, no interviews, no score, and no intervention from Farocki.⁴³⁶ Instead of rapidly cutting between shots of the gym, straining muscles, and pained faces, *Leben BRD* employs long takes that, although sometimes in close-up, ask us to linger. In Brechtian fashion, scenes recur but the limited dialogue, sheer number of settings (thirty-two), and general lack of characterization impede sympathetic viewing. Moreover, the pro-filmic events themselves

⁴³⁵ Mia Consalvo et al., “Where’s My Montage? The Performance of Hard Work and Its Reward in Film, Television, and MMOGs,” *Games and Culture* 5, no. 4 (2010): 381-402.

⁴³⁶ Bill Nichols, *Introduction to Documentary*, 2nd ed. (Bloomington, IN: Indiana University Press, 2010), 172-179.

embody the *Lehrstück* in which the education of the actor is primary, not the public. (On seeing managerial exercises for the first time, Farocki remarked: “Man, this is finally Brecht!”).⁴³⁷

Thus, whereas identification with a hero such as Rocky tends to supply the training montage’s sense of continuity, *Leben BRD* disinters practice from the individual and makes training itself the unifying theme.

Furthermore, Farocki flouts the seductions of the “process genre,” which similarly foregrounds labor, not people.⁴³⁸ From early twentieth-century ethnographies of indigenous weaving to today’s DIY craft videos on YouTube, the process genre typically presents the series of steps that go into producing a particular object. Debatably, the traditional training montage is part of the process genre – the product often a culminating performance: say, Rocky’s victory over Drago. Conversely, *Leben BRD* only occasionally depicts all the steps in an exercise, let alone its product. We never see the child crossing the real road, the amateur dramatics society put on its play, the exotic dancer carrying out her routine, or the insurance salesman doing his job. If the joy of watching making derives, in part, from demystifying an object’s realization, we gain some pleasurable insights. (I, for one, was not familiar with the trials a washing machine undergoes to become commercially viable.) *Leben BRD*, however, does not render a series of production processes so much as a perpetually productive way of life that, trapped in the purgatory of process, never enjoys fruition.

Of course, the performance a simulation entails is not reducible to its instruction manual. Recall Alexander’s shape-spinning, melancholic expressions, and camera glances. Long takes

⁴³⁷ Christopher Pavsek, “Harun Farocki’s Images of the World,” *Rouge* 12 (2008). Available at: <http://www.rouge.com.au/12/farocki.html>.

⁴³⁸ Skvirsky, *The Process Genre*, 2020.

reveal glimpses of excess. Similarly, as a group sits down to eat stew, the ambient sound makes us privy to a debate that seems to be a critique of Farocki himself: “Artists do the unusual. Not the usual thing, the citizen does that.” In a baby bathing exercise, adults giggle as they fail to turn the doll in the appropriate manner. An off-screen participant goes “glug glug glug” and the instructor announces: “Now it has drowned.” Perhaps it’s in these humorous moments that fall outside the rigors of rationalization that the people maintain “something of their dignity.”⁴³⁹

And yet, this interpretation implies an opposition of preparation and joy. Often, the former is the latter’s condition: Alexander’s playfulness only acquires its self-affirming, rebellious character in the context of its suppression; the quotidian art debate takes the group exercise as its predicate; and the bathing simulation’s distance from reality authorizes the dead baby joke. Several other pre-enactments are inherently humorous. Peculiar garb from a police exercise provides the cover for DVD versions of *Leben BRD*. To protect himself from bullet ricochets, the pseudo-assailant wears a fishbowl helmet that wouldn’t be out of place in outer space. Equally, the training facilities for household items are stranger than fiction: furniture repeatedly absorbs the impact of falling weights; washing machines endure intense vibrations; and vacuum cleaners roll on a treadmill. Aberrance does not have a monopoly on the moments of levity that make life bearable. Sometimes, it helps to recognize the absurdity of the banal – and laugh.

Game studies is replete with frameworks that push back against the field’s early formalism to “situate” play, approach it as a posthuman “assemblage,” and, above all, foreground

⁴³⁹ Dietrich Leder, “How to Live in the FRG,” *Video Data Bank*, 1990. Available at: <https://www.vdb.org/titles/how-live-frg>.

its material conditions. A goal of this chapter has been to show that documentary cinema – largely overlooked by game scholars⁴⁴⁰ – can aid in expanding the frame of analysis because it captures play in context, including deviations from the instruction manual. Certainly, this doesn't go for documentaries tout court: Farocki's style lends itself to critical distance.⁴⁴¹

Commentators laud Farocki for making the invisible visible; my contention is that *Leben BRD* renders an image of power. On the surface, the juxtaposition of factory operations and human activities implies the mechanization of the latter: *I thought I was seeing machines*. But just as Irene's "I thought I was seeing convicts" doesn't mean that the factory resembles the prison – it's that both are disciplinary institutions – *Leben BRD* exceeds mere analogy. The film reveals that the control society's cybernetic imperative to manage contingency guides humans and machines alike. This is what Sloterdijk means when he says that the anthropotechnics of our age no longer induce radical transformation: "The eternally unchanging group of asceticisms is replaced by a cybernetic optimization system."⁴⁴² Indeed, regarding religion, Blaise Pascal teaches that belief isn't primary; one must go down on their knees, move their lips, and pray. Ideology manifests in the same way – not by intentionally worshiping capital, but by habitually

⁴⁴⁰ Exceptions include Henry Lowood's writings on Machinima as documentary and Tara Fickle and Will Partin's work on esports documentaries. Henry Lowood, "Video Capture: Machinima, Documentation, and the History of Virtual Worlds," in *Recording Reality, Desiring the Real*, ed. Elizabeth Cowie (Minneapolis: University of Minnesota Press, 2011), 139-158; Fickle, "Made in China;" Will Partin, "The Loneliness of the Professional Gamer," *Kill Screen*, March 31, 2016, <https://killscreen.com/previously/articles/the-loneliness-of-the-professional-gamer/>.

⁴⁴¹ Future research might consider his other works about games (*Words and Games* (1998), *Deep Play* (2007)) or managerial role play (*Indoctrination* (1987), *Re-education* (1994)).

⁴⁴² Sloterdijk, *You Must Change Your Life*, 389.

praying at its altar.⁴⁴³ It's not a shared faith in neoliberal principles that unifies what *Leben BRD* depicts, it's a set of practices with a common implication: protection.

Epiphanies belie the processes that prompt them. As Sergei Eisenstein writes of montage, a film doesn't convey its meaning in a single striking shot; the central idea forms across the iteration and duration of its images.⁴⁴⁴ If *Leben BRD* unsettles our habitual perception of the world, it does so in a manner coextensive with what it portrays. The continual training montage doubles as an exercise in attention that trains the viewer to recognize power. Now, even having sex, giving birth, playing games, eating food – all that we think of as natural, as part of life – appears to be the product of rigorous practice. That said, while the film is often understood as a vilification of preparation in favor of playful spontaneity, it's difficult to square this message with its means of transmission. Watching Farocki's film is another form of practice, a counter-training that teaches us to see society differently. Ultimately, *Leben BRD* suggests that the social issue is not preparation itself, but the conservative aim of our current practices and, by extension, the dreary future we are preparing ourselves to live.

Aesthetic Exercise Machines

Over the past half-century, the U.S. military has increasingly adopted terms historically the preserve of humanistic inquiry like “creativity,” “design,” and “aesthetics” to understand what warfare is: not a science of physical laws but, quite literally, a martial art.⁴⁴⁵ Along these lines, Anders Engberg Pedersen proposes that we consider the virtual training environments

⁴⁴³ Louis Althusser, *Lenin and Philosophy and Other Essays*, trans. Ben Brewster (New York: Monthly Review, 2001), 114.

⁴⁴⁴ Sergei Eisenstein, “A Dialectic Approach to Film Form,” in *Film Form: Essays in Film Theory*, trans. Jay Leyda (New York: Harcourt, 1977), 45-63.

⁴⁴⁵ Anders Engberg Pedersen, *Martial Aesthetics*

Serious Games depicts to be bastardizations of what eighteenth-century German philosopher Alexander Baumgarten called the “aesthetic exercise.”

Preceding Immanuel Kant, whose aesthetic excursion in the third critique ultimately pertained to morality, Baumgarten was less concerned with morals than he was with the relationship between sensuous perception and reason. Unlike other pre-Kantians such as Christian Wolff, Baumgarten didn’t understand sensuous perception to be an impoverished substitute for rational cognition. Rather, sensuous perception ran parallel to conceptual apprehension. In the third section of the *Aesthetic*, Baumgarten elaborates that aesthetic exercises involve

the frequent repetition of similar actions, such that a correspondence is established between the mind and the character... with regard to a given theme... more precisely with regard to only one object that is to be thought, only one thing, so the ability to think beautifully is gradually acquired.... Nature... cannot remain the same... even for a short time. Therefore, if either its dispositions or its skills are not increased by constant exercise, it diminishes, however great it may be.⁴⁴⁶

For Baumgarten, sensuous perception is not a given capacity; it’s a learned skill. But the aesthetic exercise isn’t a conventional form of training. In bodybuilding vernacular, training for aesthetics is different from training for strength or size. It’s about achieving proportions: a large shoulder-to-waist-ratio, a symmetry of anterior and posterior chain, a low body fat percentage, and so on. These goals are determined in advance and, as such, pumping iron entails a fairly linear progression towards an ideal form. On the contrary, Baumgarten’s aesthetic exercise is characterized by a “formal indeterminacy” – it is not teleological but teleonomic, purposeful without purpose.⁴⁴⁷ To cultivate beautiful thinking, one must not only correlate perceptions with

⁴⁴⁶ Alexander Gottlieb Baumgarten, *Aesthetica*, trans. and ed. Karl Aschenbrenner and Arnold Isenberg (South Bend, IN: University of Notre Dame Press, 2007), 1:47–48 (my translation).

⁴⁴⁷ Trop, *Poetry as a Way of Life*, 336.

adequate ideas but also indulge complexity. The aesthetic exercise entails an “open disciplinarity,” a training regimen that proceeds without a clear sense of what you are going to become.⁴⁴⁸

Conversely, one tends towards ugly thinking through reductivism and determinism. Militarized perception, argues Engberg-Pederson, is one such brand of ugly thinking. The subject of Farocki’s *Serious Games*, *Virtual Battle Space 2*, lends itself to this martial aesthetic exercise in three primary ways. First of all, the simulation operationalizes reductive depictions of enemies to encourage an unproblematic correspondence between ethnically coded humans and the designation “enemy.” Meanwhile, the obviousness of threats in *Virtual Battle Space 2* fosters an unfounded faith in the visual legibility of IEDs and other explosives. Indeed, research shows that skill transfer from simulation to battle is dubious at best.⁴⁴⁹ Besides, officers recount that the primary, albeit tacit, aim of these simulations isn’t even skill acquisition; it’s the affective condition.⁴⁵⁰ Simply put, you don’t want your soldiers to think they’re going to die, and simulations furnish a (somewhat false but nonetheless empowering) sense of security. Finally, the simulation affords iterability. Soldiers don’t sit through hours of eventless boredom. Instructors engineer more enemies and threats in a few hours than most recruits encounter over months of deployment. Altogether, the simulation encourages soldiers to assimilate appropriate communicative, perceptual, and associational habits for combat. Elizabeth Grosz writes that

⁴⁴⁸ Ibid, 28.

⁴⁴⁹ Douglas B. Maxwell, “Application of Virtual Environments for Infantry Soldier Skills Training: We are Doing it Wrong,” in Lackey, S., Shumaker, R. (eds) *Virtual, Augmented and Mixed Reality* (New York, NY: Springer, 2016).

⁴⁵⁰ Cedrick May, Conversation with Doug Stark, March 4 2024.

habit is change contracted, compressed, contained.... It remains there as possible or potential action even when the change which brought it about ceases.... It is, in other words, a potentiality, a possibility, a virtual mode of addressing a future change.⁴⁵¹

As experiences in virtual reality become the basis of future actions, habit becomes a creative force. By adapting recruits to worlds that don't exist, wargames are the means by which the military makes its fictions practical realities.⁴⁵²

If *Virtual Battle Space 2* tendentiously shapes its users' perceptual faculties to serve military ends, then Farocki's *Serious Games* serves as a counter-exercise in attention. In particular, the juxtaposition of soldier and screen counteracts the immersive power of the "interface envelope."⁴⁵³ Critiques of what interfaces do to players often analyze technical devices to reveal how they structure particular ways of seeing and acting. But through Farocki's lens, the militarization of perception is hardly determined by the apparatus. At one point, only one of the four soldiers notices an assailant. He must assist his peer's visualizations with gesticulations. Another moment belies the importance of digital media literacy: They initially mistake a digital artifact for an IED before concluding that it was just a glitch.

To play at an activity is to engage in conscious self-deception⁴⁵⁴ and it seems the simulation's pedagogical function relies on supplication – a desire to be trained in its rigors. This situation is more apparent in the third film about VR trauma treatment. In a video game version

⁴⁵¹ Elizabeth Grosz, "Habit Today: Ravaissan, Bergson, Deleuze and Us," *Body and Society* 19(2-3), 2013: 217-239, 220-1.

⁴⁵² We can consider this a form of superstition, which is when "fictions... make themselves real." Ccru, "Lemurian Time War," in *Ccru: Writings 1997-2003* (Time Spiral Press, 2015): 274-291, 275.

⁴⁵³ Ash, *Interface Envelope*.

⁴⁵⁴ In play, writes Karl Groos, we are not hypnotized but, at some level, aware that what we are doing is not earnest or real. The sense of freedom that accompanies play derives from this awareness that we are not only free from the determinations of daily life in play but also that we are capable of freeing ourselves from reality by partaking in play. *Play of Animals*.

of Freud's Fort-Da, patients replay unhappy memories using *Virtual Iraq*. Over several renditions of this scene with different soldiers, Farocki's montage of virtual world, patient, and therapist gradually deframes the monitor to center the patient and therapist. In doing so, he underscores how little detraining is actually carried out by virtue of *Virtual Iraq* itself. Imaginative and emotional labor is required so as to be properly affected by computer simulation. And by the end of the third film, we learn that even this successful therapy session was a ruse. The patients were actually therapists role-playing as traumatized soldiers.

In this light, we might expect the final, four-part cycle Farocki completed in his lifetime – *Parallel I-IV* – to bear out a comparable critique in its examination of commercial video games. The first focuses on the history of computer graphics, tracing the evolution of trees, fire, water, and clouds from impoverished pixels – poor copies of reality – to sleek, computational renders of more perfect worlds. What Erika Balsom terms “new constructivism of the image” is most apparent in Farocki's juxtaposition of a grainy cloud photograph and a high-fidelity video game cloud.⁴⁵⁵ These computer-generated images do not strive to imitate film so much as they tend towards model types – not photo-realism but graphical idealism. Likening this primacy of form to ancient Greek philosophy, *Parallel* suggests that your laptop is a Platonist.⁴⁵⁶ The problem with this new constructivism of the image, however, is that it curtails contingency. Whereas classical photography maintained a degree of indeterminacy, the programmed nature of virtual

⁴⁵⁵ Erika Balsom, "Moving Bodies: Captured Life in the Late Works of Harun Farocki," *Journal of Visual Culture* 18, no. 3 (2019): 385-403; Erika Balsom and Harun Farocki, "The New Constructivism: Erika Balsom and Harun Farocki Discuss *Parallel I-IV*," in *Harun Farocki: Programando o Visível*, ed. José de Almeida et al. (São Paulo: CinUSP, 2017), 104-145.

⁴⁵⁶ Dan McQuillan, "Data Science as Machinic Neoplatonism," *Philosophy & Technology*, 31(2): 253-272.

worlds precludes anything of the sort. Everything issues from a pre-made model, all is planned, nothing can surprise us.

The next two films center around the boundaries of video games. We watch as avatars run into walls, get stopped by invisible borders, and generally brush up against the limits of these constructed worlds. Often, the limits feel entirely arbitrary, making the game seem somewhat ridiculous. Indeed, if you've ever played a video game, you might've experienced the frustration of being unable to surmount a knee-high fence because, despite your superpowers, it represents a boundary you can't go beyond. The fourth film focuses on the characters themselves, also foregrounding the overly planned nature of computational media. The protagonist of *Grand Theft Auto IV* holds a gun up to a shopkeeper, making her run away. But as soon as she gets out of the store, she comes back to serve. Turning to greet her customer, she sees Niko Bellic with his gun still trained, and flees again: another ancient principle, the eternal return.

Distinct from *Serious Games*, writes Henrick Gustafsson, "attention is shifted from the gestures conducted by control screen personnel to those performed by virtual bodies in computer-animated worlds." These body techniques are no less disciplined.

Game world avatars are only able to interact with their surroundings through a limited series of possible actions. Flight or physical assault—hitting, running, pushing, bumping, pulling a gun—seem to constitute the only eligible means of expression within these menacing environments.⁴⁵⁷

In other words, the grammars of action are just as calcified as the images. Soraya Murray goes so far as to say that the video game systems we witness in *Parallel* cultivate a predatory sensibility, another brand of ugly thinking: "oriented toward rewards, strategies, and missions," games

⁴⁵⁷ Henrik Gustafsson, "'A New Image of Man': Harun Farocki and Cinema as Chiro-Praxis." *Journal of Aesthetics & Culture* 13 (1) 2021: 1-16, 9.

encourage “an opportunistic and exploitative form of observation.”⁴⁵⁸ So much for aesthetic exercise.

Conclusion: A Techno-Aesthetic Education

In orthodox Marxism, alienation is the process by which the worker is made to feel foreign from the products of their labor. Under capitalism, we don’t enjoy our craft because we don’t create something to sell to a real person. Instead, we work to live, and we can only achieve this by selling our labor power for a wage. Effectively, whoever we work for owns the products we make, we are alienated from them, and the only way to resolve this alienation is revolution – one that would overturn the very capitalist structures that estrange us from our labor power.

For French philosopher Gilbert Simondon, behind Marx’s “economic-social” account of alienation is deeper “psycho-physiological” alienation.⁴⁵⁹ Whereas Marxist alienation follows from the private ownership of the means of production, Simondon contends that alienation stems from a misunderstanding of the relationship between humans and technology – one that, left uncorrected, would allow alienation to persist even after a communist revolution. In the context of industrial labor, we might say that the power loom, by automating the handloom, doesn’t disenfranchise the worker in itself – social relations do. Hence, the assumption that this machine is an affront to the human issues from an outdated, artisanal sense of production in which biological labor power is primary, in which the human derives their humanity from being man the maker. Simondon suggests that, instead of seeing factory work as an impoverished form of labor, we should develop a respect for the expertise required to repair and oversee a complex

⁴⁵⁸ Soraya Murray, “Horizons Already Here: Video Games and Landscape,” *Art Journal*, 79:2, 2020: 42-49, 43-4.

⁴⁵⁹ Jean-Hugues Barthélémy, “Glossary: Fifty Key Terms in the Works of Gilbert Simondon,” trans. Arne De Boever, in *Simondon: Being and Technology*, ed. Arne De Boever (Edinburgh: Edinburgh University Press, 2012), 204-231, 204.

machine. To overcome alienation, we need to stop projecting ideas forged regarding older technologies, and replace them with concepts that align with how new technologies actually work. Referring to the Eiffel Tower – a monument Simondon thought was “aesthetic because it’s technical, and technical because it’s aesthetic”⁴⁶⁰ – he imagines a future in which alienation is ameliorated by fostering a culture that aesthetically appreciates, skillfully uses, and generally understands technology – a “technical culture.”

As with *Leben BRD*, *Parallel* seems to complicate its own critique. In search of the seams of virtual worlds, the camera encounters numerous incongruities, errors, glitches, breakdowns, and, I’d hazard, surprises. Certainly, the quantified worlds of digital media have a normative force, but Farocki’s film suggests that a margin of errancy remains at, well, the margins. Akin to the situationist *dérive*, by wandering away from the standard way to play, by taking borders as the focus and not, say, completing game world challenges, *Parallel* draws our attention to the otherwise invisible edges of virtual worlds. Indeed, in Farocki’s hands, the video game becomes a means of thinking critically, in the Kantian sense, about their conditions.

In particular, the first film in the *Parallel* cycle draws attention to the “labor of invisibility.”⁴⁶¹ Mouse clicks and keyboard taps invoke the off-screen space of the game designer, and brief clips of the editing suite punctuate each act: trees, fire, water, and clouds. With clouds, the sounds find their visual referent. Not without irony, this long take of the designer editing a cirrus reveals the banal labor that subtends the perfect world of computer-generated images. These images of the user recede in the rest of the series, but Farocki is no

⁴⁶⁰ Gilbert Simondon, “On Techno-Aesthetics,” *Parrhesia* 14, no. 1 (2012): 1-8.

⁴⁶¹ Thomas Elsaesser, “Simulation and the Labour of Invisibility: Harun Farocki’s Life Manuals,” *Animation*, vol. 12, issue 3 (2017): 214–229.

stranger to evoking the “missing countershot – the concentration camp, say, or the workers in the factory – [that’s truly] the driving element of the film.”⁴⁶² Trained to attend to the user in the first film, their absence is present during the following three. In an interview, Farocki tells us that the scene of play consisted of instructing and watching a young man explore these virtual worlds. “Somehow,” he reflects, “we are trying to direct games and gamers.”⁴⁶³

If the desire to be trained shored up the military exercise machine, *Parallel* shows that by directing desire differently, we can transform the implications of digital play. “Increasingly,” writes Trevor Paglen, “operational images are not simply alien to humans – they are literally invisible.”⁴⁶⁴ And yet, despite not correlating with the human sensorium, they still shape our reality. An ongoing question: How do we apprehend and intervene in the invisible, an invisible that, as Farocki consistently underscores, is so often strategically produced and habitually maintained? To riff on Baumgarten, I recommend techno-aesthetic exercises. In *Discorrelated Images*, which may have more accurately been called “almost but not quite discorrelated images,”⁴⁶⁵ Shane Denson argues that artworks offer means of recorrelating ourselves with our operational images, of exploring “the transformed conditions of habit, habituation, and habitation,” of fostering a technical culture proper to our media ecology.⁴⁶⁶ Certainly, Farocki’s films have long performed this function. The notion that cinema is somehow unable to deal with

⁴⁶² Thomas Elsaesser and Alexander Alberro, “Farocki: A Frame for the No Longer Visible: Thomas Elsaesser in Conversation with Alexander Alberro,” *E-Flux*, 59, 2014. <https://www.e-flux.com/journal/59/61111/farocki-a-frame-for-the-no-longer-visible-thomas-elsaesser-in-conversation-with-alexander-alberro/>

⁴⁶³ TateShots, “Harun Farocki – Cinema, Video Games and Finding the Detail,” *YouTube* video, 8:32, December 11, 2013, <https://www.youtube.com/watch?v=tERIsCWmpSo>.

⁴⁶⁴ Paglen, “Operational Images.”

⁴⁶⁵ Shane Denson, “Aesthetics of Discorrelation,” Lecture, Duke University, February 20, 2020.

⁴⁶⁶ Denson, *Discorrelated Images*, 236.

things that elude our eyes seems to neglect the history of the offscreen.⁴⁶⁷ Farocki's missing countershots exemplify a "*conceptual Kuleshov effect*" whereby the spectator is prompted to "'see' things that are not shown."⁴⁶⁸ That, towards the end of his career, Farocki found the video game to be an appropriate aesthetic exercise machine for our image regime suggests that pursuing alternate attractors in virtual space might likewise raise computational consciousness.

⁴⁶⁷ Gregory Flaxman, "Out of Field: The Future of Film Studies." *Angelaki* 17(4), 2012: 119-137.

⁴⁶⁸ Elsaesser and Alberro, "Farocki," np.

CHAPTER 4: OPTIMAL PLAY: SUDNOW'S VIDEO GAME PILGRIMAGE

What we need is a computer that... turns us... not 'on' but into artists.⁴⁶⁹
John Cage, "Diary: Audience 1966," 1966

Little did I know you had to snap your synapses instead of your fingers. Little did I know that you can't beat the house when it controls the odds, when it controls what skills are and whether they can or can't be learned by repetition, when it designs the game so that the only order in which you can learn is the order that it'll teach you to learn, at twenty-five cents a throw. I'd completely lost sight of the most vital fact that *Breakout* was an arcade game in its original form, and all the essential features of this elegant neuroeconomic object had been preserved in the home version.
David Sudnow, *Pilgrim in the Microworld*, 1983

Interfaces themselves are effects, in that they bring about transformations in material states. But at the same time interfaces are themselves the effects of other things, and thus tell the story of the larger forces that engender them.⁴⁷⁰
Alexander Galloway, *The Interface Effect*, 2012

Introduction: Gaming as Care for the Posthuman Self

Our episteme is inclined to think ecologically. Posthumanism marks one manifestation of this tendency. It has come to denote heterogenous approaches critical of assumptions as to the human's autonomy, exceptionality, and duality in favor of a "philosophy of mediation"⁴⁷¹ that foregrounds the matrix of relations that constitute reality. Especially in media studies, understanding powers previously attributed to the human – including agency, cognition, and creativity – to, instead, be distributed across systems enfolding the "non-human" has become

⁴⁶⁹ John Cage, "Diary: Audience 1966," in *A Year from Monday* (Middletown, CT: Wesleyan University Press, 1967), 50.

⁴⁷⁰ Galloway, *The Interface Effect*, vii.

⁴⁷¹ Francesca Ferrando, *Philosophical Posthumanism* (London, UK: Bloomsbury, 2020), 22.

such a pervasive commitment over the past few decades that it ceases to connote a radical intervention.⁴⁷² It's no surprise, therefore, that video game researchers now adopt commensurate approaches.⁴⁷³

More surprising is how late to the game game studies is, particularly given play's long-acknowledged liminality. Indeed, the insufficiency of ascribing play to either player intention or game structure led an old hermeneutician to observe that "all play is a being played" – it consists in a medial "to-and-fro."⁴⁷⁴ Play's medial status – that arguably confounds subject-object frameworks – lends it to illumination by posthumanisms that bid to start in the middle. Adherents of Karen Barad's quantum critical theory, for example, divest themselves of the problem of locating play's agent by claiming that agency isn't something one has, it's the process of cause and effect in "enactment."⁴⁷⁵ From this perspective, what we recognize as video game play emerges in the mutually constitutive "intra-action" of various components typically demarcated:⁴⁷⁶ computer program, hardware, audiovisual display, conscious decision, embodied reaction, past experience, cultural signification, and so on. Along these reticulated lines, game studies increasingly considers the scene of play to be an assemblage whose ethical, political, and

⁴⁷² See Erich Hörl (ed.) "Introduction to General Ecology: The Ecologization of Thinking," Translated by Nils F. Schott, in *General Ecology: The New Ecological Paradigm* (London, UK: Bloomsbury, 2017): 1-73.

⁴⁷³ For an example and overview, see Chia and Ruffino, "Introduction: Politicizing Agency in Digital Play after Humanism."

⁴⁷⁴ Hans-Georg Gadamer, *Truth and Method*, translated by Joel Weinsheimer and Donald G. Marshall (London, UK: Bloomsbury, [1960] 2013), 112.

⁴⁷⁵ Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, NC: Duke University Press, 2007), 214. For a game studies mobilization, see Janik, "Intra-acting Bio-object."

⁴⁷⁶ Barad, *Meeting the Universe Halfway*, 141.

environmental implications demand analyses that trouble the naturalized figure around which much play theory gravitates – from *homo ludens* to posthuman play.

This chapter is less concerned with what play problems ecological thinking resolves than a question pertinent to posthumanism as “a praxis”⁴⁷⁷ that video games prove fruitful for: What would a posthuman project of self-transformation entail? To respond, the chapter expands analysis beyond the scene of play to address gaming as a uniquely disciplined way of life characterized by an intimate relationship with a technical device – an account of which David Sudnow furnishes in his 1983 autoethnography, *Pilgrim in the Microworld*. Initially, “pilgrim” seems to convey the mystique of virtual reality through religious analogy – the ethereal connotations apropos given contemporaneous cyberspace imaginaries of informatic dematerialization.⁴⁷⁸ However, *Pilgrim* obsesses over embodiment, an emphasis that counterintuitively redoubles its title’s relevance. As Rebecca Solnit explains, “[p]ilgrimage is premised on the idea that the sacred is not entirely immaterial,” it’s a literal journey whereby physical suffering, exertion, and travel cohere with cultural meaning into a process of self-transformation with spiritual implications.⁴⁷⁹ With this conceit, Sudnow eludes rendering video game play mere recuperation from work to invite its inclusion in the long history of individual and collective training regimes that entail programs of ascesis – self-disciplining, autopoietic exercises that modify one’s manifold pattern of being and, in many cases, grant a sense of meaning and purpose to life itself. Significantly, Peter Sloterdijk’s synonym for ascetic practice,

⁴⁷⁷ Ferrando, *Philosophical Posthumanism*, 22.

⁴⁷⁸ N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago, IL: University of Chicago Press, 1999).

⁴⁷⁹ Rebecca Solnit, *Wanderlust: A History of Walking* (London: Penguin Books, 2001), 79.

“anthropotechnics,” suggests a residual exceptionalism common in theories of self-fashioning.⁴⁸⁰ Gilbert Simondon’s⁴⁸¹ emphasis on the implication of technical operations with – rather than centering around – sapient individuation encourages us to understand ascesis less as the human’s spontaneous, autopoietic activity and more as a “sympoietic”⁴⁸² achievement of forces and intensities attributable to various sources; a way of life cannot be understood separately from the media that support it.

Undoubtedly, a properly posthuman ascesis would bid to “take responsibility” for one’s relational constitution⁴⁸³ – an endeavor skilled gaming demands. Even the beginner’s use of an interactive, time-critical technology such as *Breakout* (1978)⁴⁸⁴ – the Atari VCS video game around which Sudnow’s text gravitates – suggests a cyborg performance difficult to marshal. The standard game begins with six layers of bricks, each a different color worth a different amount of points. Its goal is to accumulate as many points as possible by serving a ball and maneuvering a paddle horizontally to rebound it up or off the walls into the bricks, destroying them on contact. If the ball surpasses the paddle, the five-turn-counter reduces by one. When the counter reaches zero, it’s game over.⁴⁸⁵ Throughout, the player is hardly conscious of the algorithmic procedures

⁴⁸⁰ Sloterdijk, *You Must Change Your Life*

⁴⁸¹ Examining asceticisms may well accord with Simondon’s theory of knowledge insofar as it entails regarding the practitioner in their ongoing genesis. For a summary of Simondon’s genetic epistemology, see Jean-Hughes Barthélémy, “Fifty Key Terms in the Works of Gilbert Simondon” in *Gilbert Simondon: Being and Technology*, edited by Arne De Boever, Alex Murray, Jon Roffe and Ashley Woodward (Edinburgh, UK: Edinburgh University Press, 2013): 203-231, 211.

⁴⁸² Donna J. Haraway, *Staying with the Trouble* (Durham, NC: Duke University Press, 2016), 33, 58-97.

⁴⁸³ Denson, *Discorrelated Images*, 50.

⁴⁸⁴ Nolan Bushnell, Steve Bristow, and Steve Wozniak, *Breakout*, Atari VCS/2600, Atari (1978).

⁴⁸⁵ Greg Chance, “Breakout – Atari – Atari 2600,” AtariAge, https://atariage.com/manual_html_page.php?SoftwareID=889.

that determine the ball's various bounce parabola and velocity shifts in real-time. Indeed, as Chapter Two argued, *Breakout* emerges from a series of technological and epistemological a priori indebted to the military-industrial complex that demonstrate a gradual elimination of semiotic interpretation in favor of real-time cybernetic loops that relate nonconscious, bodily activity to computational parsing. As such, it joins technologies – from “post-cinematic” media that primarily elicit sensation, not contemplation,⁴⁸⁶ to smart environments that, offering quasi-autonomous predictions, inform our prehension of futurity⁴⁸⁷ – that pose problems for traditional conceptions of human agency that hinge upon mental deliberation because they operate at speeds and scales outside human awareness. Mark Hansen characterizes this phenomenon as the “operational blindness” of consciousness regarding the “operational present” of technical media; we might learn how we are coupled with technical processes “either proleptically or after the fact” but we have no “cognitive or perceptual access” to them “*at the moment of their occurrence*.”⁴⁸⁸

That players nevertheless improve at *Breakout*, dexterously manipulating a joystick to match the ball's speed and gradually clearing more bricks, demonstrates a growing ability to respond to (if not a conscious responsibility for) the opaque computational processes that condition the perceptible audiovisuals. Hence, a player's agency as part of the assemblage of play is not only determined by constraints instantiated during – rules, goals, and environment structuring game activities – but also the degree to which they have assimilated the video game's

⁴⁸⁶ Steven Shaviro, *Post Cinematic Affect* (Ropley, UK: John Hunt, 2011), 1-7. See also Shane Denson and Julia Leyda, *Post-Cinema: Theorizing 21st-Century Film* (Sussex, UK: Reframe, 2016).

⁴⁸⁷ Hui, *On the Existence of Digital Objects*, 221-252.

⁴⁸⁸ Mark B. N. Hansen, "Engineering Pre-individual Potentiality: Technics, Transindividuation, and 21st-Century Media," *SubStance* vol. 41, no. 3 (2012): 32-59, 34.

technical operations. “In the first place, the player does not relate to the machine but rather [must become] an embodiment of a particular kind of communication between devices;”⁴⁸⁹ they must become post(al)human – an addressee. This kind of embodiment demands that we cultivate a set of capacities to affect and be affected – propensities to change and be changed – adequate to the “recurrence and communication” of heterogeneous elements the game machine consists in (*CGW* 12). Playing *Breakout* “attunes”⁴⁹⁰ players to the automated beat, an exercise both “analytic” and “somatic:” on the one hand, they develop an awareness of and, thus, capacity to anticipate the game’s rationality and rhythm by virtue of repeated trials and observing other players;⁴⁹¹ on the other, they refine sensory-motor response and perceptual acuity, transformations evidenced by so-called twitch reflexes.⁴⁹² Both cohere into a largely nonconscious power to manipulate the game state at precise intervals – a habit. Thus, to rupture the top-row and, eventually, clear two screens of blocks, the player must first undergo tacit training; to achieve the eponymous breakout, they must be broken-in.

To appraise posthuman play in this manner – as not given and, rather, necessitating a process of attunement – is to conceptualize the video game as “a practice, not a presence, an effect not an object.”⁴⁹³ On the one hand, the promise of this largely embodied or “cognitive

⁴⁸⁹ Pias, “The Game Player’s Duty,” 173.

⁴⁹⁰ James Ash, “Technologies of Captivation: Videogames and the Attunement of Affect,” *Body & Society* vol. 19, no. 1 (2013): 27-51.

⁴⁹¹ Ash, “Technologies of Captivation,” 37.

⁴⁹² Ibid, 34. See also Nicholas Taylor and Jessica Elam, “‘People are robots, too’: Expert Gaming as Autoplay,” *Journal of Gaming & Virtual Worlds*, vol. 10, no. 3 (2018): 243-260, 247.

⁴⁹³ Galloway, *The Interface Effect*, 23.

nonconscious”⁴⁹⁴ video game exercise is that, over iteration and duration, it brokers our adaptation to and, therefore, ability to participate in informatic exchange at speeds and scales otherwise “not cut to human measure”⁴⁹⁵ – it opens onto a new vista of cyborg performance. On the other, the threat of this undeclared training – habituating players unaware, circumventing their capacity to “refuse”⁴⁹⁶ – derives from the video game’s commercial status. To what extent does the gamer, despite appearing to develop their agency, become worthy only of current and future commodities? Accordingly, research examines the fraught transformations video games promote in body,⁴⁹⁷ everyday rhythm⁴⁹⁸ and, ultimately, subjectivity.⁴⁹⁹ Among these, *Pilgrim* remains unique not only for aptly dramatizing the promise and threat the video game portends but also for depicting the “forms of reflexivity”⁵⁰⁰ by which the gamer attempts to render tacit training intentional – shifting it from “undeclared” to “declared” practice.⁵⁰¹

Michel Foucault advances “problematization” to conceptualize this movement whereby thought detaches itself from a given activity to reflect upon how one does it.⁵⁰² Presaging

⁴⁹⁴ N. Katherine Hayles, *Unthought: The Power of the Cognitive Nonconscious* (Chicago, IL: Chicago University Press, 2017).

⁴⁹⁵ Denson, *Discorrelated Images*, 3.

⁴⁹⁶ Hansen, “Foucault and Media,” 499.

⁴⁹⁷ See, for instance: “kinesthetic knowledge” in Melanie Swalwell, “Movement and Kinaesthetic Responsiveness,” in M. Swalwell and J. Wilson (eds), *The Pleasures of Computer Gaming: Essays on Cultural History, Theory, and Aesthetics* (Jefferson, NC: McFarland, 2008): 72–93; “embodied literacy” in Keogh, *A Play of Bodies*, 77.

⁴⁹⁸ E.g. Tom Apperley, *Gaming Rhythms: Play and Counterplay from the Situated to the Global* (Amsterdam: Institute of Network Cultures, 2011).

⁴⁹⁹ E.g. Rob Gallagher, *Videogames, Identity and Digital Subjectivity* (London, UK: Routledge, 2017).

⁵⁰⁰ Michel Foucault, *The Hermeneutics of the Subject: Lectures at the College de France, 1981-82*, translated by Graham Burchell (London, UK: Palgrave, 2005), 462.

⁵⁰¹ Sloterdijk, *You Must*, 144.

⁵⁰² Michel Foucault and Paul Rabinow (ed.) *The Foucault Reader* (New York, NY: Pantheon Books, 1984), 388.

training techniques now endemic to professional video game play or “esports,” throughout his pilgrimage, Sudnow leverages a program of exercises including not just play sessions but spectatorship, diagramming, strategy consultation and writing to transform various facets of the video game assemblage – from player composure to computational procedures – into objects of knowledge so as to control them and optimize overall functioning. Hence, it’d be reductive to cast video games merely as “technologies of power” that ritualize a pre-set subjectivity determined by design and marketing. Rather, a given video game can host various practices with ambivalent connotations that imply a “technology of the self” – players intentionally engage in pattern of action over an extended period to transform their “bodies, souls, thoughts, conduct, and way of being” in the pursuit of a certain abilities or pleasures.⁵⁰³ Along these lines, while the ways in which twenty-first-century media – including the computational video game – no longer “directly” address the human consciousness may well be novel,⁵⁰⁴ gaming suggests a continuity between older methods of changing conduct and newer issues eventuated by opaque technical operations. After all, reflexive self-work always entails a temporal gap between consciousness and the process it bids to intervene in. Historical configurations of power and knowledge ordain these forms of reflexivity and, in our ecological episteme, gaming exemplifies a care for the self that surveys an assemblage.⁵⁰⁵

If intentional video game training marks an attempt at taking responsibility for one’s participation in an ecology of elusive processes, then its typical limitation is a narrow aim: optimizing in-game performance. This chapter argues that Sudnow’s pilgrimage expands the

⁵⁰³ Michel Foucault, “Technologies of the Self,” 17-18.

⁵⁰⁴ Hansen, *Feed-Forward*, 5-6.

⁵⁰⁵ See Zhu, “The Intelligence of Player Habits.”

pertinence of video game training, recasting it as a means of grappling with the ethical implications of our distributed powers. Comprising four sections, the chapter's body first draws on Félix Ravaillon to both elaborate the centrality of habit to play and situate the import of Sudnow's sociological perspective (ethnomethodology) on video games. Also a skilled pianist, the second section unpacks Sudnow's music-informed hope for the new medium inaugurating an egoless art – an aesthetics of grace – enabled by the automaticity of habit and section three depicts the training regime he undertakes to become capable of it. By reimagining and, moreover, actively transforming the video game into an instrument by means of repeated practice, he challenges arguments – contemporary to Sudnow but persistent today – that render the automaticity of skilled gaming an example of tenacious militarization. Despite *Pilgrim* frequently confronting such anxieties regarding what video games do to players, scholars seldom acknowledge Sudnow's social commentary that section four leverages to historicize the text amid a then nascent neoliberalism.⁵⁰⁶ Doing so grants exigency to Sudnow's growing realization that

⁵⁰⁶ Heretofore, scholars have largely either cited *Pilgrim* as a curiosity in the prehistory of game studies or, engaging concerns such as phenomenology, embodiment, and learning, extracted it from its context. See Noah Wardrip-Fruin, Michael Mateas, Steven Dow and Serdar Sali, "Agency Reconsidered," In *Proceedings of the 2009 Digital Games Research Association Conference* (2009); Stuart Reeves, Barry Brown and Eric Laurier, "Experts at play: Understanding Skilled Expertise," *Games and Culture*, vol. 4, no. 3 (2009): 205–227; Liel Leibovitz, "Thumb Wars: Body and Mind in Video Games," in Gali Einav (ed) *Transitioned Media* (New York, NY: Springer, 2010): 149–160; Emma Witkowski, "On the Digital Playing Field: How We 'Do Sport' With Networked Computer Games," *Games and Culture*, vol. 7, no. 5 (2012): 349–374; Rune Klevjer, "Enter the Avatar: The Phenomenology of Prosthetic Telepresence in Computer Games," John Richard Sageng, Hallvard J Fossheim, and Tarjei Mandt Larsen (eds) *The Philosophy of Computer Games* (Dordrecht: Springer, 2012): 17–38; Ash "Technologies of Captivation," Ian Bryce Jones, "Enough of a World: A Phenomenology of Videogame Weltlichkeit," PhD diss., The University of Chicago, 2015; Clemens Reisner, "On the Media Practice of Highscoring," *Cogent Arts & Humanities*, vol. 3, no. 1 (2016); Keogh, *A Play of Bodies*; Frans Mäyrä, "The Player as a Hybrid: Agency in Digital Game Cultures," *G|A|M|E Games as Art, Media, Entertainment*, vol. 1, no. 8 (2019). Noah Wardrip-Fruin, "Gravity in Computer Space," *ROMchip*, vol. 1, no. 2 (2019), <https://romchip.org/index.php/romchip-journal/article/view/91>; Ben Egliston, "Building Skill in Videogames: 'A Play of Bodies, Controllers and Game-Guides,'" *M/C Journal*, vol. 20, no. 2 (2017); Ben Egliston, "Seeing isn't Doing: Examining Tensions Between Bodies, Videogames and Technologies 'Beyond' the Game," *New Media & Society*, vol. 22, no. 6 (2020): 984–1003. Notable alternative mobilizations include: Katie Salen and Eric Zimmerman's Sudnow inflected discussion of *Breakout* and game design in *Rules of Play*; Rob Gallagher's invocation of *Pilgrim in the Microworld* in the context of video game life writing, "Mining Masculinities: Gamer Dads, Queer Childhoods and Father-son Gameplay in *A Boy Made of Blocks*," *Game Studies* vol. 18, no. 2 (2018); Brendan Keogh's elaboration on Sudnow's theorization of video game play as "performed, haptically augmented audiovisual" expression in "Instantaneously Punctuated Picture-Music:

his aesthetic hopes obfuscate his integration, on the one hand, into an emergent neuroeconomic regime and, on the other, an existential attachment to a commodity eliciting a desire for constant self-upgrade. Nevertheless, it is only Sudnow's program of exercises that reveals this state of affairs to him and the chapter concludes by reinforcing the ways in which his asceticism gradually develops a sensitivity to the scene of play's participation in a broader socio-economic assemblage and, thus, offers Sudnow a means of taking responsibility for his entangled existence on a larger scale. Along these lines, *Pilgrim* discharges the pejorative associations of training and habit, encouraging us to understand mundane practice as fundamental to the project of critiquing and reinventing technical media.

David Sudnow: A Habitual Scholar

Written between New York and the Bay Area in the early 1980s, *Pilgrim* emerges from a familiar period in cultural history: the rise of personal computing. It also issues from a familiar subject position that fosters an instructive, often ironic distance from its subject: the academic dad. Sudnow "first went into a video arcade to retrieve [his] teenager" (*PM* 7). On finding son Paul engrossed with his game, the sociologist tries his hand at *Missile Command*.⁵⁰⁷ A quarter asked but no quarter given, "THE END" flashes on the screen before he can comprehend how the graphical blitz corresponds to his fumbling at the control panel. He tries another – "GAME OVER" (*PM* 8). Dejected but intrigued, Sudnow watches other players. Enforced spectatorship relinquishes a truth that perhaps eludes the initiated; a "specter of rigorously uniform training" permeates the arcade (*PM* 11).

Re-evaluating Videogame Expression Through *Pilgrim in the Microworld*," *Convergence*, vol. 25, no. 5–6 (2019): 970–984.

⁵⁰⁷ Dave Theurer, *Missile Command*, Arcade, Atari (1980).

Shortly after, Sudnow's own training begins in earnest at an unlikely place: a Berkeley faculty party. There, an explosion interrupts his piano rendition of "The Man I Love." Much to the unnamed hostess's irritation, Gershwin will have to wait. Her husband Herb is ruining the party's singalong centerpiece by playing the kids' Christmas present on high volume. "I thought I spotted some female fists clenched" remarks Sudnow, giving no further thought to the clearly gendered divide between the musicians and the gamers (*PM* 18). He's quick to defect from the former to the latter. Clearly, the real party is in the next room: thirty people huddled around a video game console.

This switch in allegiance is significant. After all, *Pilgrim* isn't Sudnow's first Bildungsroman; it follows his jazz journey recorded in *Ways of the Hand* (1978). Studying as a social anthropologist throughout his twenties, Sudnow initially became known as an ethnomethodologist for his 1967 *Passing On* – a book arguing that "the categories of hospital life... are to be seen as *constituted by the practices of hospital personnel*."⁵⁰⁸ Indeed, ethnomethodology differentiates itself from other sociological methods by taking method itself as the primary subject: everyday practices, habits, interactions and conventions – "the missing what" – that uphold a given social situation.⁵⁰⁹ Remarkably compatible with contemporary preoccupations with process,⁵¹⁰ ethnomethodology inverts the notion of "structure" common in social science, regarding structures as ongoing achievements of material practices, tacit knowledge, and banal expertise.⁵¹¹ This postpositivist research typically entails the academic

⁵⁰⁸ David Sudnow, *Passing On: The Social Organization of Dying* (Hoboken, NJ: Prentice Hall, 1967).

⁵⁰⁹ Harold Garfinkel and Harvey Sacks, "On Formal Structures of Practical Actions," in Harold Garfinkel (Ed.), *Ethnomethodological Studies of Work* (London, UK: Routledge Keegan Paul, 1986): 160-193.

⁵¹⁰ Alexander R. Galloway, "Golden Age of Analog," *Critical Inquiry*, vol. 48, no. 2 (2022): 211-232.

⁵¹¹ See Harold Garfinkel, *Ethnomethodology's Program, Working Out Durkheim's Aphorism* (New York, NY: Rowman & Littlefield Publishers, 2002). Examples include how we: break the law (Harvey Sacks, "Notes on Police

take their “own activities as data and subject matter,”⁵¹² assimilating the practice to defamiliarize and expound its intricacies. Thus, when Sudnow began to learn the piano at the age of thirty, he came to it with a trained eye trained on his own training; he bade to study the pianist by undergoing the process of becoming one.

Sudnow’s approach to piano resonates with current scholarly reprisals of long-standing philosophies of habit to rethink our participation in assemblages vital and technical without reducing that participation to conscious intentionality.⁵¹³ In this discourse, Félix Ravaisson’s *Of Habit* recurs as a touchstone. The French philosopher conceptualizes habit as the means by which an organism consolidates repeated behaviors prompted by contact with its environment, leveraging past encounters to prepare a conduct appropriate for analogous future contingencies. Over iteration, responses to the environment pass “from consciousness to unconsciousness, from will to automatism”⁵¹⁴ in becoming habit but do not imply a Cartesian mechanization or a Kantian residue of nature that must be overcome. Rather, habit denotes a middle term, a “second nature,” that brokers the continuity between will and nature, between voluntary and instinctive movements (*OF* 65-6). Hence, the “succession of imperceptible degrees” whereby intention becomes inclination (*OF* 57) frustrates conventional demarcations of activity and passivity; the

Assessment of Moral Character,” In David Sudnow (Ed.), *Studies in Social Interaction* (Glencoe: Free Press, 1972): 280-293); organize speaking together (Harvey Sacks, *Lectures in Conversation* (Oxford: Blackwell, 1992)); walk together (Alan L. Ryave, Jim Schenkein, “Notes on the Art of Walking,” in Roy Turner (Ed.), *Ethnomethodology*, (Harmondsworth: Penguin, 1974): 265-274); and cry (Wayne A. Beach and Curtis D. LeBaron, “Body Disclosures: Attending to Personal Problems and Reported Sexual Abuse During a Medical Encounter,” *Journal of Communication*, vol. 52 (2002): 617-639).

⁵¹² D. Lawrence Wieder, “Ethnomethodology and Ethnosociology,” *Mid-American Review of Sociology*, vol. 2, no. 2, (1977): 1-18, 11.

⁵¹³ See Introduction.

⁵¹⁴ Henri Bergson, *The Creative Mind* (New York, NY: Philosophical Library, 1946), 275.

“unreflective intelligence”⁵¹⁵ of habit suggests a diffuse “impersonality” inheres within the unity of the person but, nevertheless, remains an expression of what we’d now refer to as agency insofar as it tends towards a goal (*OF* 65). Indeed, demonstrating the principle of reversibility, habit is not only a response to change but “gradually becomes a *cause* of change itself, as it initiates and maintains repetition.”⁵¹⁶ In the context of Sudnow’s piano training, repeated (habitual) practice inculcates unreflective propensities (habits) for harmonic play. As such, habituation allows Sudnow to proceed musically without constantly thinking about what he’s doing and, moreover, enables more complex compositions as aspects of the performance offload from consciousness to the “obscure intelligence” of habit (*OF* 55). It is in this way that habit authorizes “grace” – an ease of activity that, for Ravaissou, suggests the operation of “god within us” (*OF* 71).

Not merely a state, habit is an active “way of being” (*OF* 25) insofar as this “potentiality, a possibility, a virtual mode of addressing a future change” ultimately engenders a particular inhabitation of the world.⁵¹⁷ From an ethological stance that defines a body by what it does, habit attests to the plasticity of “being” and, thus, the necessity of thinking in terms, rather, of “becoming.” Hence, Ravaissou occasions the claim: “I’ do not contract habits. Habits contract to form me.”⁵¹⁸ This notion, advanced by Gilles Deleuze reading David Hume, that “we are

⁵¹⁵ Clare Carlisle and Mark Sinclair, “Editors’ Introduction,” in *Of Habit*, translated and edited by Clare Carlisle and Mark Sinclair (London, UK: Continuum, [1838] 2008): 1-21, 14.

⁵¹⁶ Catherine Malabou, “Addiction and Grace: Preface to Félix Ravaissou’s *Of Habit*,” in *Of Habit*, translated and edited by Clare Carlisle and Mark Sinclair (London, UK: Continuum, [1838] 2008): vii-xx, ix.

⁵¹⁷ Grosz, “Habit Today,” 221.

⁵¹⁸ Brian Massumi, *Politics of Affect* (Hoboken, NJ: John Wiley & Sons, 2015), 65.

habits”⁵¹⁹ lends itself to reformulation within our contemporary media ecology vis-à-vis Simondon. Though habit is not a central concept for the French philosopher of technology, Ravaisson’s account accords with Simondon’s premise that entities consist not in substances or ideal forms but in *metastabilities* – phases flush with tensions and potentialities that both maintain the current state and ground future transformations. Habituation thus furnishes a conceptual function for the problem of thinking the stabilization and localization of agency amid an ecology of processes⁵²⁰ and, by extension, the video game “play of bodies;”⁵²¹ habit names not only the settling of tendencies and powers but also the capacity for tendencies and powers to change. Furthermore, following Simondon for whom the human’s individuation – their ongoing genesis – cannot be thought separately from technical individuation, we can extend Deleuze’s thesis that “we are habits” settled in the vital, psychic, and psycho-social realms to enfold the stabilities and tensions propagated by quotidian technical operations that implicate humans. Technical media predetermine – that is to say, enable and facilitate – the maintenance and reinvention of the habits we consist in. It follows that, to reformulate Ravaisson’s theological regard of habit as impersonal second nature, habit confounds demarcation of internal response and external technical object to suggest an artifice that inheres within us – a technicity.

Philosopher and friend of Sudnow’s, Hubert Dreyfus, proposes we understand the sociologist’s work in a similar vein, albeit in the tradition of a phenomenologist similarly

⁵¹⁹ Deleuze, *Empiricism and Subjectivity*, x.

⁵²⁰ Andrew Lapworth, “Habit, Art, and the Plasticity of the Subject: The Ontogenetic Shock of the Bioart Encounter,” *Cultural Geographies*, vol. 22, no. 1 (2015): 85–102.

⁵²¹ Keogh, *A Play of Bodies*.

invested in what piano has to teach us.⁵²² As Dreyfus puts it, Sudnow's account of piano play is simultaneously an account of:

the ways embodied beings acquire the skills of giving order to, or, better, finding order in, our temporally unfolding experience. It is a phenomenology of how we come to find our way about in the world, whether it be the world of jazz, discourse, typing, tennis, or getting on and off the bus. [It is a] study of how our bodies gain their grasp of the world.⁵²³

Indeed, in-line with approaches to habit that amount to ontology, *Ways* not only provides an autoethnography of developing improvisational proficiency but also meta-commentary on repeated practice and how it comes to ground our modes of being in the world. Thus, Sudnow's depiction of learning to play the piano attests that exercise regimens mold our plastic existence. Furthermore, in portraying his growing participation in a jazz community, the text explores how the technicity of piano establishes a collective existence because of, not in spite of, solitary asceticism; the "savoir faire" entailed by reading scores, playing instruments, and appreciating music supports a public.⁵²⁴

The same preoccupations obtain in *Pilgrim* – a study of how our bodies gain their grasp of the video game microworld. Basically, Sudnow carries a sense of what it takes (in terms of dedication, time and effort) to learn a skill to video games; it means practice becoming a part of one's quotidian life – *Ways* documenting a several year period in which Sudnow practiced "three

⁵²² Sudnow notes Merleau-Ponty's influence: "Sitting at the piano, trying to make sense of what was happening, and studying Merleau-Ponty's discussions of embodiment, I found myself, in his own terms, 'not so much encountering a new philosophy as recognizing what [one] had been waiting for.' ... A copy of his *Phenomenology* always remains close at hand" (*WH* 131).

⁵²³ Hubert Dreyfus, "Foreword," in David Sudnow *Ways of the Hand: A Rewritten Account* (Cambridge, MA: MIT Press, 2001): ix-xiii, ix.

⁵²⁴ Channeling Simondon, Bernard Stiegler argues that proficiencies proper to industrial technologies do not support radical collectivity – transindividuation – in the way musical skill once did. Bernard Stiegler and Irit Rogoff, "Transindividuation," *e-flux*, vol. 14 (2010).

or so hours” a day (*WH* 6). He also transposes a reflexive attitude. Whether it be through the assistance of other pianists, by drawing up diagrams, or experimenting with new techniques, Sudnow overcomes plateaus in piano performance by problematizing his method. So successful was this rigorous disposition that Sudnow would go on to make money peddling the “Sudnow Method”⁵²⁵ despite the fact that he initially dismisses playing professionally in *Ways* – the same relative economic freedom enabling his intense gaming too. Finally, by establishing a continuity between the labors of piano skill and the labors of game skill, Sudnow achieves an alternate stance on video games to his contemporaries’.

Fostering Grace: Gaming as a New Way of the Hand

Coeval anxieties regarding the new medium’s deleterious repercussions pervade *Pilgrim*. Sudnow peppers the faculty party scene with rhetorical flavor that highlights two: desensitization and addiction.⁵²⁶ Specifically, he worries about the implications of gamifying *Missile Command*’s “nightmare” scenario (*PM* 17): defending six cities from a hail of missiles with three anti-aircraft batteries. Simultaneously, Sudnow mobilizes drug rhetoric to capture the allure of play. In doing so, he suggests that desensitization and addiction are concomitant – the Berkeley intellectuals so “stoned on button-pushing” that they were unable to reflect critically on the ballistic apocalypse. Thus, in a remarkable spin on Nixon’s declaration, Sudnow portrays *Missile Command* as war on drugs. “[W]as [it] a conspiracy to train our kids for the real thing [?]” (*PM* 17).

⁵²⁵ Available at: <https://www.sudnow.com> (accessed 04 February 2022).

⁵²⁶ See, for example, an article published in the same year: Barlow W. Soper and Mark J. Miller, “Junk-Time Junkies: An Emerging Addiction Among Students,” *The School Counselor*, vol. 31, no. 1 (1983): 40–43, <http://www.jstor.org/stable/23900931>. Nevertheless, by 1983, researchers were already questioning the “liberal” use of addiction to pathologize gaming. See Jarice Hanson, “Video Games: Competing With Machines,” in *Culture and Communication--Methodology, Behavior, Artifacts and Institutions*, Sari Thomas, (ed.) (Norwood, N. J.: Ablex Publications, 1986): 139-149.

Here, Sudnow's speculations join those of fellow 80s video game theorist, Ronald Reagan, for whom the medium presented a means of preparing young people for the air force.⁵²⁷ At the same time, Sudnow occasions instructive contraposition to scholarship that understands so-called automatic play or "autoplay" – the video game assemblage's tendency towards high velocity information processing – to be fundamentally martial. As game scholars Jessica Elam and Nicholas Taylor put it, "automation is developed as a solution to the militaristic pursuit of ever-greater communicative efficiency: the elimination of variance, error and noise in the capacity to predict and respond to threat."⁵²⁸ That video games similarly encourage players to become automatic responders, they claim, demonstrates the persistence of a military logic. More precisely, one might say that becoming a skilled user of *Missile Command*'s "two-handed joystick-push-button device" (PM 15) epitomizes Paul Virilio's thesis that automation results from the "miniaturization of space as a field of action."⁵²⁹ The smaller the field, the faster the movements and, subsequently, the greater the demand for the automation afforded by habit; there simply isn't time to include higher cognitive functions in the feedback loop. A danger of this techno-cultural acceleration, he argues, is that the psyche becomes ancillary to reactive bodily functionality.⁵³⁰

The histories we bring to bear on the present inform the claims we make about it and, even vis-à-vis the defense-themed *Missile Command*, Sudnow's background engenders a distinct perspective on gaming that problematizes conflation of automation with militarization. An

⁵²⁷ Reagan, "Remarks During a Visit to Walt Disney World." Orson Scott Card's 1985 *Ender's Game* would soon novelize this imaginary.

⁵²⁸ Elam and Taylor, "'People are Robots Too,'" 244.

⁵²⁹ Paul Virilio, *Speed and Politics* (Cambridge, MA: MIT Press, [1977] 2006), 159.

⁵³⁰ Ibid, 115.

ethnomethodologist, he begins from the presupposition that gaming, like all other activities, requires a banal expertise – a range of automatic habits – and, consequently, necessitates a discipline not synonymous with training for combat. A musician,⁵³¹ he regards autoplay as an extension of skilled performance with an instrument. Indeed, the progressions detailed in *Ways* – which break down into five stages of varying length (from weeks to years) – furnish Sudnow a framework for comprehending his video game skill progression:

1. Beginner's search for features: consciously identifying notes on the piano keyboard;
2. Novice's unthought gestalts: able to reach for chords or scales without consciously thinking about them;
3. Intermediate's strategy: nonconscious play but consciously forming strategies to move from one sonic situation to the next;
4. Expert's strategy without a strategist: nonconsciously following the way of the hand which now embodies strategic movement;
5. Master's "going for the jazz": the ego no longer aims ahead; the hand knows at each moment where to go.⁵³²

Importantly, therefore, the evolution of skill for Sudnow implies the trainee's passage from conscious, ego-centered identification and intention to direction by nonconscious, embodied intelligence: the eponymous ways of the hand.

Thus, the process of habituation Ravaisson describes takes on an aesthetic function that goes beyond a tacit awareness of musical "terrain"⁵³³ or enabling more complex compositions.

⁵³¹ For a pre-history of video games informed by musicology, see Moseley's *Keys to Play*.

⁵³² These stages derive from Dreyfus's schematization in "Foreword," x.

⁵³³ Reeves et al, "Experts at Play," 222.

For Sudnow, the task of training is to “cultivate ways of the hand” (*WH* 48) so as to render them “improvisatory organ[s]” not so much “under [his] instruction as [he] [is] under [theirs]” (*WH* 93). Comparable to Surrealist automatism whereby the artist suppresses conscious control over the making process and John Cage’s influential ideal of egoless, aleatory composition, Sudnow articulates jazz improvisation as the becoming autonomous of the body from the administration of consciousness. As such, the piano precipitates the inherence of techniques within the player that suggest a vector for “desubjectification” – a practice that entails “straying afield” [*égarement*] or wandering from one’s former self and, by extension, the common-sense rationalities that govern daily life.⁵³⁴ By *Ways*’ denouement, it’s clear that the value and, indeed, joy of piano mastery for Sudnow lies in this state of not “think[ing] at all about where [he’s] going,” bearing witness to his “hands make it up as they go along” (*WH* 125). This enjoyment is the one Ravaillon accords to grace: an experience of our participation in nature – a potentiality that precedes and exceeds us – by virtue of a second nature operative within us.

Sudnow develops his congruent regard of gaming during the Berkeley faculty party. From extended watching and intermittent playing, he’s able to discern *Missile Command*’s various features – graphical entities, rules and goals – and how they correspond to his inputs. Indeed, for Sudnow, watching is training, but it’s not until the crowd disperses that our pilgrim gets his first one-on-one session: Herb as tutor, console as instrument, and the TV as audio-visual “atonal melod[y]” (*PM* 19). Here, if identifying features comprise stage one of skilled play, then Sudnow soon advances to stage two. He begins reaching for the gestalts, performing the requisite

⁵³⁴ Michel Foucault, *The Use of Pleasure: Volume 2 of the History of Sexuality* (New York, NY: Vintage Books, 1985), 8.

movements to effect the desired change in-game without having to think about what his hands are doing – what game scholars refer to as “embodied literacy.”⁵³⁵

Not long after, he encounters his first plateau. Sudnow’s current habit of shooting down missiles one-by-one, stopping between each shot, is insufficient when they come more frequently. Just as advancing through the stages of piano proficiency requires new strategies, he needs a “new technology for moving” (*PM* 18). Here, psychic reflexivity introduces an interval into the determination of habit and opens-up a space for proceeding differently.⁵³⁶ “Stay[ing] on [his] thumbs,” Sudnow starts “firing *en passant*” at the incoming missiles, picking-off each as he pans his cursor across the screen (*PM* 19). With this strategy, it seems Sudnow already arrives at a level of proficiency analogous to stage three of his piano training – an ability that took months to develop – within his first evening of play. In addition to Virilio’s claims as to the miniaturization of space, video games seem to compress the temporality of skill acquisition too.

Significantly, such smooth “improvising round the sky” (*PM* 20) lends itself not to critique of speed or automation but to Sudnow’s aesthetic appreciation of the video game as “instantaneously punctuated picture music” (*PM* 135), “improvised painting” (*PM* 21), and, pointedly overturning piano in his mind, “[t]ouch Gershwin” (*PM* 20). Redolent of the “computer as pencil” metaphor trafficking in early personal computing research,⁵³⁷ these comparisons to other media take on specific import for Sudnow. By way of a brief genealogy of the digital (as in fingers) arts – piano, typewriter and computer – he casts the video game as the

⁵³⁵ Keogh, *A Play of Bodies*, 77.

⁵³⁶ Bennett, “Habit: Time, Freedom, Governance.”

⁵³⁷ Seymour Papert, *Mindstorms: Children, Computers, and Powerful Ideas*. New York, NY: Basic Books, 1980), 210.

culminating achievement: a new way of the hand. Like the hand's autonomy in piano, the video game frees the eyes from "hand guidance work" – leaving them "to witness and participate in the spectacle" "of lights, colors, and sounds" (*PM* 22).

It'd be easy to chalk the attraction of this experience up to flow, the purportedly inherent pleasure induced by a harmony of player skill and game challenge.⁵³⁸ But this theory, derived from positive psychology, presupposes a unified individual that enjoys the sense of self-determination,⁵³⁹ one averse to the sense of fragmentation Sudnow's apprehension of an externality within entails. His emphasis on the player's double role as agent and spectator⁵⁴⁰ comes closer to recent theories of game aesthetics wherein second-order appreciations of activities one performs harbor their own aesthetic quality.⁵⁴¹ Auspiciously, game philosopher C. Thi Nguyen suggests "grace" is one of these qualities the player relishes when deftly executing a reach for the next climbing hold⁵⁴² or, in *Missile Command*, when smoothly "improvising around the sky" (*PM* 20). Habit, to reiterate, is constitutive of grace insofar as it "facilitates action in a way that escapes and relieves the will," diminishing effort to such an extent that one forgets its origin.⁵⁴³ Thus, we experience grace as a gift from outside ourselves nevertheless working within us.

⁵³⁸ For the original theory, see Csikszentmihalyi, *Flow*. For an interpretation of Sudnow's endeavor as the pursuit of flow, see Jane McGonigal, *Reality is Broken: Why Games Make Us Better and How They Can Change the World* (London, UK: Penguin, 2011), 39-43.

⁵³⁹ Soderman, *Against Flow*, 32.

⁵⁴⁰ Keogh, "Instantaneously Punctuated."

⁵⁴¹ Nguyen, *Games*, 142.

⁵⁴² *Ibid*, 102-112.

⁵⁴³ Clare Carlisle and Mark Sinclair, "Editors' Commentary," in *Of Habit*, translated and edited by Clare Carlisle and Mark Sinclair (London, UK: Continuum, [1838] 2008): 78-114, 101.

For Sudnow, what differentiates the grace of gaming from enjoying the quasi-autonomy of the piano hands is that the body enters into complicity with another automatism: the proceduralism of the video game. It is as if, Sudnow muses, “somebody [is] doodling against you to make sure you keep doing it” (*PM* 21). Therefore, rather than opposing the allegedly essential creativity of play to the stultifying operation of the computer program,⁵⁴⁴ Sudnow accords a value to the video game simultaneously serving as an instrument and making an instrument out of the player – “all playing is being played.”⁵⁴⁵ Echoing claims that video games train players to “think like a computer,”⁵⁴⁶ Sudnow suggests gaming entails being inhabited by an alterity. As with the way of the hand, the video game not only offers a vector for desubjectification because one is hijacked by an impersonality but also offers the peculiar joy of bearing witness to one’s complicity by way of a CRT TV.

Importantly, this cybernetic automatism is distinct, on the one hand, to the piano’s mechanical operation whereby the musician must motor play *sui generis* and, on the other, to the “radical passivity” of cinema whereby the viewer can undergo “a forced, ecstatic abjection, a form of captivation;”⁵⁴⁷ to a greater degree, the video game player’s capacities must be adequate to a given video game in order to be properly affected by it. Henceforth, what motivates Sudnow’s training, what has him “hooked” by the end of the first session, is the potential for, after enough practice, this “keyboard for painters,” this “canvas for pianists” serving as a grace machine – a vector for egoless art (*PM* 24). In Sloterdijk’s parlance, this is the “attractor” that

⁵⁴⁴ Miguel Sicart, “Against Proceduralism,” *Game Studies* vol. 11, no. 3 (2011).

⁵⁴⁵ Gadamer, *Truth and Method*, 112.

⁵⁴⁶ Ted Friedman, *Electric Dreams: Computers in American Culture* (New York, NY: New York University Press, 2005), 137-9.

⁵⁴⁷ Steven Shaviro, *The Cinematic Body*, 49. See also Flaxman, “Once More, with Feeling,” 186.

guides the ascetic practice, the lure away from normativity to become otherwise.⁵⁴⁸ Military conspiracy? No. Rigorously uniform training? Yes.

Becoming Automatic: The Non-Linear Work of Play

Events conspire to stall the quick translation of skilled digits to digital skills. When Sudnow heads to the store to pick up a TV and an Atari VCS the next day, they're all out of *Missile Command*. Instead, he settles for the "nineteen-inch microworld" of *Breakout* within which to "live out the next three months of [his] life" (PM 25). Over this period, he reflexively employs a range of exercises in a bid to cultivate a "gamer habitus"⁵⁴⁹ capable of graceful performance. This portion of his pilgrimage complicates simplistic accounts of: the ways in which media device use can be said change users, the reducibility of a video game's pleasure to "fun,"⁵⁵⁰ and the solitary nature of single-player gaming. As becomes clear, skill progression is often non-linear, painful, and socially mediated in such a way as to suggest that it is only by examining habits of use that one really ascertains the impact a technology has on individual and collective life. In turn, the habits ordained by formations of individual and collective life imply a means of reinventing what a technology is and does. Indeed, it is by virtue of his idiosyncratic regimen that Sudnow ultimately transforms the video game into an instrument.

Returning to his apartment, Sudnow acquires a new trainer: the young San Francisco lawyer who lives next door. Watching him play, Sudnow first identifies *Breakout*'s various features – paddle, bricks, and ball – and the goal: to breakout of the wall looming at the top of

⁵⁴⁸ Sloterdijk, *You Must*, 13.

⁵⁴⁹ Graeme Kirkpatrick, "Constitutive Tensions of Gaming's Field: UK Gaming Magazines and the Formation of Gaming Culture 1981–1995," *Game Studies*, vol. 12, no. 1 (2012), <http://gamestudies.org/1201/articles/kirkpatrick>.

⁵⁵⁰ See Bo Ruberg, "No Fun: The Queer Potential of Video Games that Annoy, Anger, Disappoint, Sadden, and Hurt," *QED*, vol. 2, no. 2 (2015): 108-124.

the screen and, eventually, clear all the bricks. Second comes the passage to gestalts. Sudnow remembers *Breakout* from the faculty party and that one (frankly terrible) player had been instructive in this regard. “[T]hrowing himself back and forth while swinging his entire upper torso and arms and almost falling off the chair to hit the *Breakout* ball,” he was “unable to effect that transformation of sense needed to engage himself with big looking movements through little feeling ones” (*PM* 28). Reminiscent of the cinematic rubes who erroneously treated the moving image as reality,⁵⁵¹ this man provided a lesson in what not to do. Clearly, to achieve the appropriate “balanced body,”⁵⁵² one must render the living-room furniture that supports it an object of knowledge.⁵⁵³ Sudnow smugly notes that he experienced no such “quaint confusion;” it’s just like centering oneself at the keyboard after all (*PM* 28).

On the contrary, watching his lawyer neighbor places him into a cold sweat. While it takes Sudnow practicing the rest of the night to achieve his first breakout, the young buck does it in less than twenty minutes. This can’t possibly be his first time like he says. Otherwise, Sudnow consoles himself, perhaps this dude had “some basic nervous system capacities... rhythmic acuities different from what you need for jazz[?]” Perhaps he’d been trained on TV, whereas the older Sudnow had had no such “extensive tube time” (*PM* 28)?

⁵⁵¹ Wanda Strauven, “The Observer’s Dilemma: To Touch or Not to Touch,” in Erkki Huhtamo and Jussi Parikka, eds. *Media Archaeology: Approaches, Applications and Implications* (Minneapolis MN: University of Minnesota Press, 2011): 148-163.

⁵⁵² Witkowski, “On the Digital Playing Field,” 360.

⁵⁵³ Esports scholar Emma Witkowski describes how a player brought along his undergraduate physics textbook to a tournament, leveraging it as base for his monitor “in order to gain a better body to screen position for executing play.” Ibid, 366. For more on the importance of architectural set-up for professional play, see T. L Taylor, *Raising the Stakes* (Cambridge, MA: MIT Press, 2012); Nicholas Taylor, “Power Play: Digital Gaming Goes Pro,” (PhD Dissertation, York University, Toronto).

His conjecture recalls Walter Benjamin's theorization of cinema as a technology that delivers pre-verbal "shocks" to the nervous system at a level below the neocortex, somewhere between the conscious and the unconscious.⁵⁵⁴ Mark Hansen updates Benjamin in light of recent neuroscientific accounts of nonconscious cognition, casting this material contact between body and technology as a means of inventing "mimetic corporeal agency." Innervations – the shocks given to the nervous system by technologies such as cinema and TV – serve to "train our corporeal, mimetic faculty to register the subrepresentational, molecular rhythms of the lifeworld."⁵⁵⁵ From this perspective, the exercise in spectatorship is not reducible to the identification of features. Sudnow's speculation concerning the lawyer's superior "micro-muscles for neuroathletic competition" (*PM* 28) signals an awareness akin to Benjamin's that even supposedly passive consumption entails a tacit training of nonconscious cognition; acclimatization to TV conditions video game skill.

Nevertheless, Sudnow's anxieties about ineptitude are short lived. He soon passes to a state wherein he's "no longer conscious" (*PM* 30). En route, he introduces experiments that serve revelation more than optimization – an example of his training pertaining beyond the narrow aim of achieving a high score. First, Sudnow covers the entire bottom portion of the screen with tape. Unable to return many shots like this, he tries a shorter strip. With this constraint, he returns about sixty percent of slow balls. Finally, he removes the tape and fixes his gaze on the top-right of the screen. To Sudnow's surprise, he's able to play just as well. Contrary to his assumption that one had to concentrate hard on the ball, the paddle, and their points of contact, "[p]eripheral

⁵⁵⁴ Walter Benjamin, "On the Mimetic Faculty," in *Reflections* translated by E. Jephcott, edited by P. Demetz (New York, NY: Schocken Books, 1986).

⁵⁵⁵ See the conclusion of Chapter Two. Hansen, *Embodying Technesis*, 245.

vision sufficed” (*PM* 37). Indeed, Sudnow presupposed distinctions between organs and their respective capacities – hence his fixation on the hands. However, the vision experiments prove that *Breakout* skill is embodied in a manner far “more systemic[]” (*PM* 39). Significantly, absolving the eyes of an intense gaze abets Sudnow’s aesthetic aspiration. The look’s quasi-autonomy mediates a second-order aesthetic enjoyment proportional to the increasingly automated first-order “circuit” that perpetuates the game itself.⁵⁵⁶ Shortly after, Sudnow achieves his first breakout.

Breaking out doesn’t win the game. The weeks drone on. The magic dissipates. The obsession slackens. Sudnow had plateaued. Despite daily practice, he was yet to clear the entire screen: “Maybe you can’t win” (*PM* 60). He’d nevertheless dealt with piano plateaus before; it was time for a new approach. In hindsight, perhaps he’d jumped to improvisation too quickly. Contra cognitivist theories of skill acquisition – assuming the passage from specific cases to abstract principles – piano taught him that skilled play moves in the opposite direction: “from principles followed until they are interiorized” and subsequently applied to “concrete cases.”⁵⁵⁷ Did he even know what the principles of *Breakout* were?

Today, players regularly consult what’s known as the “meta” – an evolving archive of tried and tested gameplay strategies.⁵⁵⁸ Without recourse to online how-to guides, Sudnow derives diagrams from empirical observation. This cognitive exteriorization aids internalization:

⁵⁵⁶ See Seth Giddings and Helen W. Kennedy, “Little Jesuses and Fuck-off Robots: On Aesthetics, Cybernetics, and Not Being Very Good at *Lego Star Wars*,” in M. Swalwell and J. Wilson (eds), *The Pleasures of Computer Gaming: Essays on Cultural History, Theory, and Aesthetics* (Jefferson, NC: McFarland, 2008): 13-32.

⁵⁵⁷ Dreyfus, “Foreword,” xi.

⁵⁵⁸ Christopher Paul, “Optimizing Play: How Theorcraft Changes Gameplay and Design,” *Game Studies*, 11 (2), 2011.

on the one hand, the representations serve as instructive tertiary retentions;⁵⁵⁹ on the other, the concrete manipulation entailed by drawing enhances familiarity with the game's abstract principles.⁵⁶⁰ However, because he has no access to the game's code from which to deduce its rationality, Sudnow's diagrams regularly "misplace[] concreteness."⁵⁶¹ Subsequently, in developing habits based on these sketchy sketches, he remains prone to error. This kind of discontinuous, occasionally regressive, progression of video game skill attests to the contingency and non-linearity of training. It also suggests the importance of acquiring an "algorithmic imaginary" adequate to actual technical operations.⁵⁶² To do so, Sudnow requires several clarifications. In the piano world, he'd just head to the local jazz joint and ask for some tips. If only there were some kind of "Video Athletes Hotline" (PM 41)...

Fortunately, it just so happens that Sudnow lives within driving distance of Atari headquarters. Before the internet meta, there was word of mouth; his next three pedagogues are former and current employees. The first, programmer of *Breakout* riff *Superbreakout*, teaches him that: the ball always deflects at a steep angle in the eighth hit; the paddle is divided up into five discrete portions each angling the ball in a certain way and; there's no randomness. As such, he benefits from an early example of the "socially and temporally distributed" diagrammatic reasoning⁵⁶³ now common in gaming communities whereby multiple actors discontinuously participate in producing and updating not only strategies but also images and formulae mediating

⁵⁵⁹ Stiegler, *Technics and Time*, 246-270.

⁵⁶⁰ Kristian Tylén et al. "Diagrammatic Reasoning: Abstraction, Interaction, and Insight," *Pragmatics & Cognition*, vol. 22, no. 2 (2014): 264-283.

⁵⁶¹ Whitehead, *Science and the Modern World*, 39-56.

⁵⁶² Taina Bucher, *If... Then: Algorithmic Power and Politics* (Oxford, UK: Oxford University Press, 2018), 114.

⁵⁶³ Tylén et al. "Diagrammatic Reasoning," 272.

the software code.⁵⁶⁴ He spends the evening attempting to internalize these newfound principles, “diagrams and tables spread all around the carpet, calculating angles, trying to identify the distinctive segments of the paddle[,] [...] hitting the reset switch after nearly every second hit” in a bid to get to the top band before that eighth-hit deflection (*PM* 66). The next day, he meets with the original programmer of *Breakout*, learning that there was still one random element in the game: the angle from which the serve comes.

Nevertheless, this “grid... with known fixed properties” (*PM* 72) seems less and less like a game to Sudnow: the computer “didn’t play against you” so much as you, the player, learned how to correctly “use the facilities” (*PM* 72-3). Interestingly, however, this non-game status doesn’t seem to diminish the medium’s aesthetic potential; the video game was now all the more clearly “[l]ike a piano, whose strings are tuned in accordance with strict mathematical rules, [rather than] a tennis court, say, where action occurs in relatively indeterminate open space” (*PM* 66). As with an instrument, overcoming some built-in constraint cannot motivate the training; there has to be a social dimension. The word-of-mouth meta, in addition to updating strategy, can furnish new permutations on games themselves.⁵⁶⁵ The final meeting with a known *Breakout* extraordinaire confirms just what signified *Breakout* expertise and, moreover, another “attractor”⁵⁶⁶ to propel Sudnow’s self-discipline: clearing the whole screen with the first ball.

Can we forgive Sudnow for taking us on this journey required only because he neglected to consult *Breakout*’s instruction manual (*PM* 75)? Regardless, with the unnecessarily hard-won

⁵⁶⁴ Boluk and LeMieux, *Metagaming*, 77-120.

⁵⁶⁵ Arguably, these socially negotiated and upheld metagames are the only games we play. Boluk and LeMieux, *Metagaming*, 8.

⁵⁶⁶ Sloterdijk, *You Must*, 13.

knowledge in hand, “what else to do but practice” (*PM* 76)? *Breakout* now occupies an even greater portion of his life: “Fifty hours, a good five hours a day for ten days, in the afternoon, the evening, at three o'clock in the morning, more time on these five shots than I'd so far spent altogether” (*PM* 79). When he wasn't at the TV, he visualized the sequence like an athlete. Indeed, it appears Sudnow has achieved the fabled gamer sight,⁵⁶⁷ not only looking past the epiphenomenal paddle and understanding it “for what it is[,] a set of discrete luminous numbers,” but also patterning reality in game terms; “looking up during dinner in a Japanese restaurant,” he fixates on the “*Breakout*-like rectangles on the ceiling” (*PM* 79). However, the sense of *Breakout* as a fixed grid gradually develops an irrational addiction to rational perfection. Sudnow mashes the reset button every time he deviates from the first-five-shot plan:

I tried to keep track of the number of times I hit it... [S]omething like five or six times a minute. That's about three hundred times an hour, or roughly fifteen thousand attempts to play the five-shot opening, not counting almost as many times I didn't take the serve because it came from the middle. (*PM* 76)

In the attempt to foster good habits, he's inculcated a bad one that entails not grace but dull repetition.⁵⁶⁸ The question – “what else to do but practice” – takes on a hint of desperation.

Fortunately, although Sudnow portrays his Atari trip as a total “mistake” (*PM* 75), another round of experiments demonstrates otherwise. He puts the tape back over the middle of the TV screen and “could make shots without following the action” (*PM* 87). The gaze now “had no particular need to be put anywhere in particular at all” (*PM* 88). He pushes it further, playing

⁵⁶⁷ Notably lacking tact in asserting the “irrelevan[ce]” of “Lara Croft's body,” game scholar Espen Aarseth nonetheless conveys this state wherein the gamer sees past iconographic implications in “Genre Trouble: Narrativism and the Art of Simulation,” in P. Harrigan and N. Wardrip-Fruin (eds), *First Person: New Media as Story, Performance, and Game* (Cambridge, MA: MIT Press, 2004), 48. While we should be skeptical of this argument for its elision of identity so often depicted visually, it does critique no favors to ditch the non-representational dimensions of video games that work in concert with the representational. See Anable, *Playing with Feelings*, 37-69.

⁵⁶⁸ Malabou, “Addiction and Grace,” viii.

with his left hand: “[M]y accuracy seemed as high as with the right hand.” He sticks the controller in his mouth: “[E]ven this way I could hit shots.” He uses his toes and hits two shots straight. Why even bother loosening the hands, cracking the knuckles, if one can play with their feet? Affirming what earlier experiments suggested, wherever gaming skill is, it’s not purely in “the musculature and tonal sensitivity of the [hand] itself” (*PM* 90). “I couldn’t find a locus for the skill,” concludes Sudnow, “[m]astery seemed to lie somewhere deep inside instead of some sort of a surface I know how to intentionally employ” (*PM* 90). Again, the attempt at optimization yields unexpected self-knowledge regarding the distributed nature of Sudnow’s powers.

If this epiphany strikes the reader as repetitive, that’s because it is. Sudnow’s elliptical narrative mirrors the non-linear recursion whereby he undergoes the transformations necessary to convene with the game machine. His travails attest to the contingency and idiosyncrasy of this ascetic endeavor; no unproblematic mimesis, the particulars of Sudnow’s transformation hinge on his desire to be trained. Indeed, ethnomethodology suggests, beyond the clearly skill-based video game, other media devices such as smart phones, TV, and personal computers demand their own banal expertise. Put another way, undoubtedly, humans and technology co-evolve but, as Benjamin writes of cinema, disjunctions in processing speed between human capacity and technical operation occasion phases of acclimatization.

These phases harbor potential for differentiation. Sudnow’s aesthetic speculations and socially ordained goals seem to take him away from the “standard” game the designer intended and, thus, the kind of training it promotes.⁵⁶⁹ Regarding Sudnow not as a rare genius but a peculiar nexus of practical and discursive histories – musical, sociological, technical and

⁵⁶⁹ Boluk and LeMieux, *Metagaming*, 35-41.

otherwise – he is the marker of an event:⁵⁷⁰ a style of play. To riff on French philosopher Anne Sauvagnargues, against the cliché laden ways people play in general, Sudnow’s eccentric engagement should be “understood as creativity, an intensive placing-into-variation of the stratified forms of [play].”⁵⁷¹ What he brings to *Breakout* changes what playing it entails. Thus, Sudnow suggests that consumption – not just design or code-level modification – warrants consideration as a viable vista for technical invention, particularly when otherwise distinct regimes of knowledge, practice and taste collide. The historical processes that produce Sudnow as subject potentiate a transformation of the video game from entertainment medium into performance instrument – a potential actualized by virtue of the regimen he undertakes.

Of course, aberrant use does not preclude normative adaptation. If anything, in Sudnow’s case, it intensifies it; his aspiration manifests as a desire to be trained in *Breakout*’s strictures. In doing so, he demonstrates how a certain standardization – as something to build on or work against – conditions invention. Often cast as creativity’s enemy, the laborious repetition that inculcates habit ultimately enables the new. Simultaneously, we gain a glimpse of the common this technicity supports; Sudnow’s solitary pursuit relates him to a whole community of knowledge and practice sustained by mutual investment in block-breaking. Pilgrimage has, after all, long entailed a sense of togetherness by virtue of iterating another’s journey. The suffering Sudnow endures on the way redounds the sense that gaming can be motivated by purposes perceived to be higher than instant or even delayed gratification. Nonetheless, that Sudnow can’t help but obsess over *Breakout*, replaying it in his imagination, suggests that orienting a way of

⁵⁷⁰ Michel Foucault, “What is an Author?” in *The Foucault Reader* ed. by Paul Rabinow (New York, NY: Pantheon Books, ([1979] 1984): 101-120.

⁵⁷¹ Anne Sauvagnargues, *Artmachines: Deleuze, Guattari, Simondon* (Edinburgh, UK: Edinburgh University Press, 2013), 19.

life around a commodity originally designed to elicit quarters may not be in our best interests – or, more accurately, that our interests may not always be best.

Contextualizing the Microworld: “Lucratively Programed Care” for the Self?

On a trip to New York – hooking up the Atari VCS in his hotel room across the street from the MoMA – Sudnow comes to understand *Breakout*’s economic purpose. During a training break, he wanders around Times Square. Where else but the video arcades could you find “white guys in three-piece suits alongside kids from Harlem?” (*PM* 117). Sudnow isn’t taken-in by this multiculturalist illusion. The apparently democratized space is simply good business; they’re all “losing quarters at the same rate” (*PM* 117). With this observation, it dawns on him that he’d been asking the wrong questions. He shouldn’t have been harassing programmers for their rationalizations. He should’ve been conducting research into market testing.

Little did I know you had to snap your synapses instead of your fingers. Little did I know that you can’t beat the house when it controls the odds, when it controls what skills are and whether they can or can’t be learned by repetition, when it designs the game so that the only order in which you can learn is the order that it’ll teach you to learn, at twenty-five cents a throw. I’d completely lost sight of the most vital fact that *Breakout* was an arcade game in its original form, and all the essential features of this *elegant neuroeconomic object* had been preserved in the home version. (*PM* 106-7, emphasis own).

Despite being ported to a console, *Breakout* maintained its arcade format and, thus, a logic proper to its initial conditions. The way Sudnow had been using the reset button added in the console version was simply anathema to the market demands immanent to this “elegant neuroeconomic object.” All this time, he should have been playing “front to back as was intended[,]. . . behav[ing] no differently than if it cost a quarter to start up again each time.” (*PM* 113). Finally, he had cause to unsettle his perfectionism: re-cognizing the reset button as the “functional equivalent to the arcade quarter cycle” (*PM* 110).

This disjunction between arcade and console precipitates another revelation: that he's being integrated into a financial system that treats consumer mental engagement as a scarce resource – what scholars would later conceptualize as the attention economy. Without this language, Sudnow eclectically appeals to psychology. At one point, he understands his investment of libidinal energy into *Breakout* in psychoanalytic terms as a form of “object cathexis” (PM 44). At another, he understands the scheduled thrills as behaviorist conditioning: a “Skinnerian pay-off from a box they call a ‘game’ for promotional purposes” (PM 44). Whereas, elsewhere, the video game's “non-game” status elevates it to instrument, here it signals exploitative routinization. In these moments, Sudnow echoes Roger Caillois' fear regarding the “corruption of play”⁵⁷² when subordinated to ulterior motives, casting gaming as closer to dull repetition than capacitation, stultifying addiction instead of prevenient grace. He thus anticipates critiques that figure video games as loci for the operation of normalizing, disciplinary power that serves, instead of the state, new, corporate configurations of capitalist empire.⁵⁷³ In Bernard Stiegler's parlance, video games demonstrate “psychopower” insofar as they not only capture and hold attention but also inform the player's capacity to attend.⁵⁷⁴ Akin to what the Frankfurt school theorized as the culture industry, from this perspective, it appears the video game industry suppresses complexity in favor of homogenization – psychosomatically disciplined subjects are easier to predict and, thus, market to. In this vein, Sudnow no longer feels his training is his own; he's been tricked, the apparent artistry of play belies being molded into a docile body.

⁵⁷² Caillois, *Man, Play, and Games*, 44.

⁵⁷³ For a summary, see Feng Zhu, “Computer Games and the Aesthetic Practices of the Self: Wandering, Transformation, and Transfiguration” (PhD dissertation, The University of Manchester, 2017), 67-75.

⁵⁷⁴ Bernard Stiegler, *For a New Critique of Political Economy* (Cambridge, UK: Polity, 2010), 125-6.

But Sudnow's written essay fails to grasp the complexity of the lived essay. To suggest that he's been disciplined by some nefarious external force neglects both his decidedly active participation in this process and the fact that he seems to have increased, not reduced, his power to act. Digital media scholar James Ash challenges Stiegler on these grounds, arguing that interfaces do not so much subdue or homogenize users as they do selectively empower them. Whereas Stiegler implies interactive media exercise psychopower as *stultification* machines, Ash proposes video games exercise "envelope power" as *capacitation* machines that nonetheless buoy corporate accumulation.⁵⁷⁵ Sudnow backs this argument by providing a lived account of the process by which the user undergoes this capacitation: improving his reaction speed, honing his anticipations, refining his perceptual acuity and, overall, attuning the "obscure intelligence" of habit to the video game's technical operations (*OF* 55). To Ash's focus on the transformations of sense effectuated during the scene of play, Sudnow adds the way of life that supports and accelerates their inculcation.

Along these lines, the late 1970s and early 1980s proliferation of video game consoles into homes across the US must be understood as participating in broader social and epistemological transformations concomitant with new, surreptitious techniques of control not reducible to the disciplinary society's clearly demarcated training zones. Published in 1983, *Pilgrim* comes after MIT mathematician Seymour Papert's pioneering arguments for computer education recorded in his 1980 book, *Mindstorms*, and precedes Sherry Turkle's classic 1984 study of personal computing's psychological impact, *The Second Self*. Papert's largely speculative approach to personal computers – influenced by the play theory of child psychologist Jean Piaget – went against the contemporaneous cultural anxiety that computers only serve to

⁵⁷⁵ Ash, *The Interface Envelope*, 6-7.

program and mechanize their users, making a case for their cognitive benefits and creative potential. Turkle's more empirical study explores the varied, subjective ways people understood and integrated computers into their lives, ultimately claiming that they furnish humans with not only a new expressive medium but also new, computational metaphors with which to understand themselves. Sudnow's title signals both these texts as interlocutors: Papert advanced⁵⁷⁶ "microworld" in the former to denote computer simulated environments where students can "learn to transfer habits of exploration [...] to the formal domain of scientific construction" through experimental, hands-on play;⁵⁷⁷ Turkle further popularized "microworld" in the latter, applying it to video games in theorizing their enchanting "holding power" and widespread use as media for self-fashioning.⁵⁷⁸ Together, they epitomize a broader revision of the Western "rhetoric of play as progress" – the notion, exemplified by Piaget's research, "that animals and children, but not adults, adapt and develop through their play"⁵⁷⁹ – to enfold computer users of all ages. This belief that computer exercises can foster cognitive benefits for adults turns on concurrent developments in neuroscience; the nascent image of a malleable, reprogrammable brain supports the conceptualization of play as a vector for adaptation.⁵⁸⁰

⁵⁷⁶ Papert presented on the concept in 1972 at the second International Congress on Mathematics Education (ICME 2). For more on the history of "microworld" in mathematics education, see Lulu Healy and Chronis Kynigos, "Charting the Microworld Territory Over Time: Design and Construction in Mathematics Education," *ZDM* vol. 42, no. 1 (2010): 63-76. For more on the microworld, see Evan Donahue, "All the Microworld's a Stage: Realism in Interactive Fiction and Artificial Intelligence," *American Literature*, 95 (2) 2023: 229-254.

⁵⁷⁷ Papert, *Mindstorms*, 177.

⁵⁷⁸ Sherry Turkle, *The Second Self: Computers and the Human Spirit* (Cambridge, MA: MIT Press, [1984] 2005), 65-90.

⁵⁷⁹ Sutton-Smith, *The Ambiguity of Play*, 9.

⁵⁸⁰ Pasi Väliäho, *Biopolitical Screens: Image, Power and the Neoliberal Brain* (Cambridge, MA: MIT Press, 2014), 59-60.

This epistemological development corresponds to the gradual dissolution of once apparent differences between work and play characteristic of so-called ludic capitalism. Indeed, whereas Sudnow speaks of disciplinary techniques such as behavioral conditioning proper to Fordist labor, critics typically theorize video games themselves as paradigmatic media of a post-Fordist, informatic economy wherein “flexibility, play, creativity, and immaterial labor...have taken over from the old concepts of discipline, hierarchy, bureaucracy, and muscle.”⁵⁸¹ No mere emblems, early arcade and home console video games actively introduced people “to computer technologies and... [made] the use of digital devices habitual and intuitive” more generally.⁵⁸² For those that could afford it – mostly young white men – gaming functioned as an “early training course in... emergent [economic] values and in the technical skills prized in the new service-based economy.”⁵⁸³ Thus, both refractions and reproductions of broader socio-economic logics, early video games express what Deleuze conceptualizes as a “diagram” – the topology of forces that shapes and relates the seeable, the thinkable and the doable at a given historical moment.⁵⁸⁴ They index the transition from the clearly demarcated training zones of the disciplinary society – schools, barracks, factories – to the “continual training” of the neoliberal control society. In a conjuncture characterized by a tendency to configure existence in economic terms, ostensible downtime provides another chance to indulge the pleasure of self-improvement – an opportunity supplied by beating levels in the video arcades long before more recent

⁵⁸¹ Galloway, *The Interface Effect*, 27.

⁵⁸² Graeme Kirkpatrick, *Computer Games and the Social Imaginary* (Manchester, UK: Polity, 2013), 10.

⁵⁸³ Kocurek, *Coin-Operated*, 201.

⁵⁸⁴ Gilles Deleuze, *Foucault* (Minneapolis, MN: University of Minnesota Press, 1988), 36-44.

innovations in workifying leisure.⁵⁸⁵ Indeed, within two years of *Pilgrim*'s publication, John Fiske and Jon Watts claimed that the labors of the video arcade connoted an inversion: paying to work.⁵⁸⁶

Simultaneously, the aforementioned developments in neuro-epistemology expand the purview of biopolitics to brain activity and plasticity.⁵⁸⁷ The image of a brain open to perpetual modification is entirely congruent with neoliberalism's "normative order of reason" that involves market heuristics inflecting common sense understandings of value,⁵⁸⁸ people becoming competitive entrepreneurs of their "human capital,"⁵⁸⁹ and a "risk rationality" directing all pursuits;⁵⁹⁰ subjects, Turkle suggests, simply enfold a newly computational (rather than psychoanalytic)⁵⁹¹ awareness of optimizable "brainhood" into their sense of self-worth:⁵⁹² "start dreaming about *Breakout* angles instead of your mother" (*PM* 92). At the same time, corporations develop new methods for modulating the "neoliberal brain."⁵⁹³ That the

⁵⁸⁵ Shirley Li, "How Leisure Time Became Work," *The Atlantic*, December 1, 2021.

⁵⁸⁶ Fiske and Watts, "Video Games: Inverted Pleasures," 1985

⁵⁸⁷ Catherine Malabou, *What Should We Do With Our Brain?* Translated by Sebastian Rand (New York, NY: Fordham, [2004] 2008).

⁵⁸⁸ Brown, *Undoing*, 9.

⁵⁸⁹ Gary Becker, *Human capital: A Theoretical and Empirical Analysis, With Special Reference to Education* (Chicago, IL: University of Chicago Press, [1964] 2009).

⁵⁹⁰ Elena Esposito, *The Future of Futures: The Time of Money in Financing and Society* (Cheltenham, UK: Edward Elgar, 2011), 62.

⁵⁹¹ A comparison between Turkle's first book, *Psychoanalytic Politics: Jacques Lacan and Freud's French Revolution* (New York, NY: Basic Books, 1978), concerning the diffusion of psychoanalytic lingo into the vernacular and *Second Self* ([1984] 2005) – which, to reiterate, studies the rising popular traction of computational understandings of self – places the novelty of this situation in relief.

⁵⁹² Fernando Vidal, "Brainhood, Anthropological Figure of Modernity," *History of the Human Sciences* vol. 22, no. 1 (2009): 5–36.

⁵⁹³ Väliäho, *Biopolitical Screens*.

computational imaginary Papert pioneered ultimately justified One Laptop Per Child⁵⁹⁴ exemplifies how microworld theory expresses a benign liberal paternalism nonetheless conducive to neoliberal power that modulates becoming at a remove so as to maintain the illusion of voluntarism; *Homo economicus* is “eminently governable” because she responds “systematically to systematic modifications artificially introduced into the environment”⁵⁹⁵ – to regulate the subject, edit their milieu.⁵⁹⁶ No virtual prison, the microworld’s efficacy derives, on the one hand, from a concrescence of training environment and desire to train. On the other, no “corruption” of games as Caillois suggests, that video games render play financially productive follows logically when one recognizes that both neoliberalism and play indulge the same fantasy – enjoying an apparent freedom from constraints as the freedom to self-determine.

Another form of reflexivity Sudnow employs foregrounds this then nascent, surreptitious governance that maintains subjugation by means of voluntary self-cultivation. Once he realizes that successful play demands a whole-body connection with the gaming apparatus, he concludes that the modicum of agency consciousness exercises to best “wire[] into the setup” lies in the administration of mood (*PM* 89) – an observation redolent of contemporaneous discourse on sport psychology that used the metaphor of “inner game” to construct attitude as an object of knowledge.⁵⁹⁷ He additionally relates the access *Breakout* grants to otherwise “inaccessible” aspects of the psyche – “[t]here’s the undershot of caution, the overshot of nonchalance” (*PM* 96)

⁵⁹⁴ Morgan G. Ames, *The Charisma Machine: The Life, Death, and Legacy of One Laptop Per Child* (Cambridge, MA: MIT Press, 2019).

⁵⁹⁵ Foucault, *The Birth of Biopolitics*, 270.

⁵⁹⁶ Alexander Galloway, *Protocol: How Control Exists After Decentralization* (Cambridge, MA: MIT Press, 2004), 7.

⁵⁹⁷ See W. Timothy Gallwey’s *Inner Game of Tennis: The Ultimate Guide to the Mental Side of Peak Performance*, (London: Pan Books, 1974).

– to what Foucault characterizes as the Californian cult of the self, embodied for Sudnow by the pseudoscientific therapeutics of NeuroLinguistic Programming (NLP). Ironically akin to the NLP advocate, having determined that a “caring” disposition has a positive influence on *Breakout* success he repeats: “care, care, care” as he plays (*PM* 150). Thus, Sudnow not only renders gaming’s participation in the history of “care of the self” explicit but also invites a healthy skepticism towards the narrow orientation of the forms of reflexivity it encourages.

Indeed, if, as Ash puts it, video games are little capacitation machines then the training they elicit proves metonymic for “[b]iopolitics deployed through its neoliberal guises [that] is [itself] a capacitation machine.”⁵⁹⁸ Though cultural theorist Jasbir Puar is primarily concerned theorizing novel configurations of disability here, her argument that strategic debilitation motivates particular trajectories for capacitation that tacitly intensify power relations resonates with how games engender training programs ultimately conducive to value production. To be clear, games take strategic debilitation as their premise: to compete in the high jump, one must accept the less efficient means of jumping the bar over erecting a ladder; to compete in a 400m race, one must follow the track around, not cut across the middle.⁵⁹⁹ Along these lines, one can understand games as staging particular debilitations – constraints precluding some activities and valorizing others – to prime a particular trajectory for capacitation: jumping high, sprinting fast.

With video games, these capacitation trajectories explicitly entangle with a proliferating commodity form. It is in this sense that theories of “gamer capital” that derive from Pierre

⁵⁹⁸ Jasbir K. Puar, *The Right to Maim: Debility, Capacity, Disability* (Durham, NC: Duke University Press, 2017), xviii.

⁵⁹⁹ “Playing a game is the voluntary attempt to overcome unnecessary obstacles.” Suits, *The Grasshopper*, 41.

Bourdieu miss the mark.⁶⁰⁰ Gamer capital isn't just about social standing, it's a form of "human capital" whereby the player's development of gaming skill and knowledge not only pays off as elevated "cultural capital" but also ultimately contributes to the video game industry's value accumulation.⁶⁰¹ The video game's technical evolution of increasingly granular depictions, faster processing speeds, new genres, and so on is sustained by the concomitant update of user faculties. From this perspective, contrary to Nguyen's claim that assimilating the agencies inscribed in a gamut of different game structures enhances our autonomy,⁶⁰² the pedagogy of video game play implies psycho-somatic expropriation. Gaming produces a common "soma $\grave{t}$ hèque" – a library of bodily capacities – that renders practitioners worthy of current and future commodities.⁶⁰³ Hence, confounding the distinction Malabou makes by virtue of Ravaisson between grace and addiction – between an implication that increases and decreases our power to act – neoliberal biopolitics encourages the subject to understand that which abets the circulation of capital as self-empowerment. Part of science fiction capital's "futures industry,"⁶⁰⁴ the game industry hinges on process of "precorporation" that not only prepares bodies for future consumption but also pre-emptively formats and shapes "desires, aspirations

⁶⁰⁰ E.g. Christopher Walsh and Thomas Apperley, "Gaming capital: Rethinking Literacy," in *Changing Climates: Education for Sustainable Futures, Proceedings of the AARE 2008 International Education Research Conference*, 30 Nov - 4 Dec 2008, Queensland University of Technology.

⁶⁰¹ Doug Stark, "Ludic Literature: *Ready Player One* as Didactic Fiction for the Neoliberal Subject," *Playing the Field: Video Games and American Studies* (Berlin: De Gruyter, 2019): 151-72.

⁶⁰² Nguyen, *Games*, 76.

⁶⁰³ Paul B. Preciado, *Testo Junkie: Sex, Drugs, and Biopolitics in the Pharmacopornographic Era* (New York, NY: The Feminist Press, [2008] 2013), 389.

⁶⁰⁴ Kodwo Eshun, "Further Considerations on Afrofuturism," *The New Centennial Review*, vol. 3, no. 2, (2003): 287-302, 290.

and hopes.”⁶⁰⁵ Relevant to a range of consumption practices from smartphone scrolling to TV binging, Sudnow’s account of the video game’s exercise quality foregrounds the ways in which media devices effectively invest in their own future by training users in the literacies they demand.

Interestingly, for Sudnow, it was the analogy to a more traditional leisure pursuit – piano – that initially legitimized the thorough integration of video game training into his way of life. He admits he made a now well-known misstep. He was too quick to consider Atari a “Black Mountain of the eighties,” overlooking “that it was a business enterprise first and foremost” (*PM* 106). The imaginaries percolating through such countercultural boys’ clubs helped inaugurate cyberculture, figuring computational media as tools for liberation in such a way as to obfuscate the more nefarious machinations of industry⁶⁰⁶ and patriarchy.⁶⁰⁷ Not incidentally, Papert’s microworld theory was central to this early 80s techno-utopianism and likely contributed to the conspiracy of histories leisure, art, and technology that shaped Sudnow’s desire to pursue his pilgrimage that now appears to conclude at the altar of capital. In attempting to wander away from himself, he’s stumbled into a new configuration of power. Indeed, it seems all earlier aspirations now require qualification. The video game isn’t an instrument, it’s an “elegant neuroeconomic object” (*PM* 107). Playing it isn’t jazz, it’s “[s]upercerebral crystal clear Silicon Valley eye jazz” (*PM* 135). Gaming isn’t care for the self, it’s “lucratively programmed caring” (*PM* 114). The video game way of the hand belies the invisible hand of the market.

⁶⁰⁵ Mark Fisher, *Capitalist Realism: Is There No Alternative?* (Ropley, UK: Zer0 Books, 2009), 9.

⁶⁰⁶ Turner, *From Counterculture to Cyberculture*.

⁶⁰⁷ Kocurek, *Coin-Operated*.

Conclusion: Exercising Critical Complicity

Redolent of contemporaneous metaphors to describe the internet, Sudnow ascertains a kinship between video game play and driving on the L. A. freeway. One navigates pre-circumscribed tracks replete with danger, finding a safe path only by virtue of traversing “the territory again and again and again” a quarter a time: “if you could only slow things down, you could see what’s going on, if you could only get on top or inside the thing or get a map to perceive the whole all at once” (*PM* 127-8). Sudnow’s lamentation recalls *The Image of the City* wherein Kevin Lynch addresses the ways in which people attempt to comprehend their positionality within the gridded space of the L. A. metropolis.⁶⁰⁸ For Frederic Jameson, Lynch’s description of the perplexing cityscape captures a state of affairs pertinent to political projects; like Lynch’s city dweller, the subject struggles to locate themselves within the socio-economic assemblage that conditions the present moment.⁶⁰⁹ Without this awareness, political interventions are destined to be absorbed by the system they bid to dismantle. To remedy our inability to perceive “the whole all at once” (*PM* 128), Jameson proposes that we are in need of “cognitive maps” – in the form of art, literature, or film – that express the real conditions of the present. Insofar as *Pilgrim* offers a glimpse of how a then-novel way of life – that of the gamer – entangles with a nascent regime of corporate power, it is one such form of expression. If the function of the cognitive map is primarily pedagogical,⁶¹⁰ then what does *Pilgrim* teach us?

⁶⁰⁸ Kevin Lynch, *The Image of the City* (Cambridge, MA: MIT Press, 1960).

⁶⁰⁹ Jameson, *Postmodernism*, 49.

⁶¹⁰ Frederic Jameson, “Cognitive Mapping,” in Cary Nelson and Lawrence Grossberg (eds.) *Marxism and the Interpretation of Culture* (Champaign, IL: University of Illinois Press, 1988): 347-60, 347.

Through an ecological lens, it's difficult to see endurance and change – everything appears in flux. Amid posthuman approaches that render agency an emergent phenomenon, *Pilgrim* suggests the importance of maintaining attention to how these “agentic modalities”⁶¹¹ result, in part, from habits stabilized within “mind-body-environmental assemblages.”⁶¹² Indeed, although Sudnow begins from the premise that the “essence” of skill can be located somewhere specific, aspects of his training – particularly the experiments with vision and alternate limbs – ultimately serve as revelatory exercises that, pertaining beyond the narrow aim of in-game optimization, sensitize him to the distributed nature of gaming ability. His subsequent concern with how best to “wire into the set-up” reflects what habit scholars describe as the theoretical shift from “changing the subject” to “modifying the arrangement of [an] assemblage” when it comes to “questions of dis- and re-habitation.”⁶¹³ In starting from the premise that habituation is beyond good and evil – and certainly not isomorphic with militarization or addiction – Sudnow nevertheless arrives at a critique because this ecological vision of habit acquisition demands reckoning with the ways in which the game industry “controls what skills are and whether they can or can’t be learned by repetition” (*PM* 97). When it comes to video game play, one must ask whether that which appears as agency is simply a route on the capitalist freeway.

Another lesson follows. By taking not the scene of play but the gamer’s way of life as the unit of analysis, Sudnow demonstrates that the game industry not only exercises biopower by selectively cultivating knowledge and embodied capacities that correspond to its products but

⁶¹¹ Stephanie Jennings, “A Meta-Synthesis of Agency in Game Studies: Trends, Troubles, Trajectories,” *GAME*, vol. 1, no.8: 85–106, <https://www.gamejournal.it/a-meta-synthesis-of-agency-in-game-studies-trends-troubles-trajectories-s-c-jennings/>.

⁶¹² Bennett et al, “Habit and habituation,” 12.

⁶¹³ Ibid, 12.

also by encouraging forms of individual and collective life to cohere around them. Although Sudnow pursues grace, *Pilgrim* complements critiques of the flow state video games purportedly induce by recounting the quotidian practice that engenders the expertise required to enact unthinking play.⁶¹⁴ Furthermore, he encourages skepticism regarding the oppositional strategy of transgressing designer intent. Throughout, Sudnow trained either for a socially negotiated goal – clearing the screen in one ball – or his own aesthetic aspirations, not the homogenous goal set for the implied player: accumulating the most points. A life directed by aberrant gaming practices nonetheless adheres to a primary condition for the industry’s perpetuation – “creat[ing] lifelong gamers.”⁶¹⁵ Why adopt gaming as a life practice? Beyond constantly chasing the next dopamine fix⁶¹⁶ or, simply, desiring oblivion,⁶¹⁷ Sudnow muses that his video game obsession is “a pathetic symptom of some modern malaise in a world lacking things really worth striving for”; video games assuage this existential angst by “mak[ing] sure there’s enough... to do” (*PM* 150). His conclusions seem to accord with Sloterdijk’s regard of much contemporary self-fashioning. Gaming captures the practicing impulse – the imperative to elevate one’s life – and directs it towards a life time of levelling-up: “updating to remain the same.”⁶¹⁸

Granted, under neoliberalism, change has itself become habitual⁶¹⁹ but *Pilgrim* nevertheless prompts reconsideration of the political efficacy of habitually examining one’s

⁶¹⁴ Soderman, *Against Flow*, 32

⁶¹⁵ McGonigal, *Reality is Broken*, 43.

⁶¹⁶ McGonigal, *Reality is Broken*, 39-42.

⁶¹⁷ Natasha Dow Schüll, *Addiction by Design: Machine Gambling in Las Vegas* (Princeton, NJ: Princeton University Press, 2012).

⁶¹⁸ Chun, *Updating to Remain the Same*.

⁶¹⁹ *Ibid*, 85.

habits. Certainly, the historical nexus of power and knowledge that ordains the forms of reflexivity Sudnow adopts presages today's more thorough co-option of self-work. However, looking back from this moment wherein all the "political tools on hand appear co-opted in advance" and "control and resistance have become nearly indistinguishable," it'd be reductive to merely condemn Sudnow's complicity with the video game industry when it is precisely that complicity that supplies a critical perspective.⁶²⁰ *Pilgrim* suggests that when the exercise of critique entails undergoing an exercise in that which one intends to be critical of, it is not necessarily by detaching oneself from conditions but by embodying them that one can furnish insights for the reader to come. Not just a cognitive map, Sudnow's quarter-cycle revelation exemplifies that *Pilgrim* is the artifactual result of a practice of cognitive mapping – the autoethnographer's diagramming, experimenting, observing, interviewing, meditating, and, assuredly, writing serve as forms of reflexivity that gradually grant him a sense of himself as subject to a new regime of power. Alexander Galloway writes that

Interfaces themselves are effects, in that they bring about transformations in material states. But at the same time interfaces are themselves the effects of other things, and thus tell the story of the larger forces that engender them.⁶²¹

By extension, habits bear reflecting upon insofar as they refract something of the broader socio-economic situation that engenders them. Amid present anxieties about extended media device use, we might learn from Sudnow's archaeology of the gaming body whereby introspection regarding a local device ultimately becomes extrospection. Throughout *Pilgrim*, media theory meets ethnomethodology in the injunction to examine the banal expertise that subtends our

⁶²⁰ Anna Watkins Fisher, *The Play in the System: The Art of Parasitical Resistance* (Durham, NC: Duke University Press, 2020), 4.

⁶²¹ Galloway, *The Interface Effect*, vii.

digital existence – the study of computational culture demands the study of the *culturing* one undergoes.

Today, there's no escape from digital mediated practices – only different ways of practicing with digital media. If normative habits are a constitutive dimension of the prevailing capitalist techno-culture then the question remains as to whether collectively cultivating alternate habits of use – what Carolyn Pedwell characterizes as social change in a “minor key”⁶²² – can inspire distinct trajectories in the co-evolution of humans and technology. Suggestively, the habits Sudnow brings to bear on gaming by virtue of his peculiar background as an ethnomethodologist and pianist transform the video game into a means of critical inquiry and, moreover, a medium for artistic expression. The expanded field of twenty-first-century gaming only exacerbates the relevance of understanding consumption, not just design, as a viable vista for reinventing what a technology is and does. Along these lines, while digital media certainly perpetuate racial biases, Kishonna Gray's ethnographic study of black gamers demonstrates that the ways in which communities narrativize, perform, and relate through gaming should be understood as socio-technical processes that really change the video game's implications.⁶²³ Although any substantive reckoning with identity is absent from *Pilgrim*, Sudnow's treatment of gaming as a way of life may prove fruitful for such attempts at reclaiming gaming from its historical association with white, geek masculinity insofar as it treats “gamer” not as a fixed category with stable connotations but as a lived elaboration contingent on a mutable set of

⁶²² Pedwell, *Revolutionary Routines*, 14-15.

⁶²³ Gray, *Intersectional Tech*, 184-6.

practices and relations.⁶²⁴ At the very least, the slippage in *Pilgrim* between exercises that auger *Breakout* success and exercises that auger a critical attitude indicates the importance of overcoming that oft-made opposition between cultivation and critique.⁶²⁵ Particularly when dealing with scales and temporalities that elude comprehension, it is by means of reflexive but nonetheless mundane asceticism that we broker awareness of and, thus, responsibility for our participation in an ecology of processes.

Habit enables life insofar as it delivers us from overthinking and the final lesson of *Pilgrim* may well be the unsustainability of constant ecological awareness. Conscious of his complicity, Sudnow persists. Now attuned to *Breakout*'s rhythm, he forgoes the reset button to "play like [he] used to" (*PM* 89). It's not even about clearing the screen in one ball anymore: "It was that panning shot at missiles that got me started off... I cared more about the formal elegance of that one ball sweep than its power to make me a winner" (*PM* 136). Often, when we let go of our goals, we accomplish them. One unremarkable night alone in Manhattan, Sudnow finds himself, once again, in a seemingly intractable lock-up. "I felt my hand feel that it knew where to go, and then, *pop*, it was over" (*PM* 152). By way of the hand, Sudnow concludes his pilgrimage. The forty-three-year-old "subsequently stayed far away from video games for quite some time."⁶²⁶ Son Paul comes to visit and Sudnow looks to the future. He hopes that the coming technologies will stay "flexible:" "Put it [all] on the computer, but just make sure... participation in the culture's knowledge doesn't all reduce to discovering the optimum solution" (*PM* 160).

⁶²⁴ See the forthcoming collection, *The Post-Gamer Turn*, edited by Mahli-Ann Butt, Amanda Cote, Emil Lundedal Hammar, and Cody Mejeur.

⁶²⁵ See Toscano, "The Culture of Abstraction," 71-3.

⁶²⁶ McGonigal, *Reality is Broken*, 43.

This dim regard of the video game belies the fact that, for a period, it granted Sudnow's life consistency and purpose. Alongside the exigency of playing with habit – transforming it – it's possible to maintain this palliative value of habitually playing.

CHAPTER 5: DISADAPTIVE PLAY: BATESON, FODDY, FUMBLECORE

The unit of survival is the organism plus environment. We are learning by bitter experience that the organism which destroys its environment destroys itself.... I believe that this massive aggregation of threats to man and his ecological systems arises out of errors in our habits of thought at deep and partly unconscious levels.

Gregory Bateson, *Steps to an Ecology of Mind*, 1972

Uncertainty and incomputability are intrinsic to computation.⁶²⁷

Eleni Ikoniadou, "Algorithmic Thought," 2014

We must learn to make machines think, to inspire them to inspire us.

Peter Wolfendale, "Machinic Inspiration," 2016

Introduction: In Control

Scholars have long argued that indeterminacy is fundamental to games and their pleasures. "[G]ame[s] of skill," writes Roger Caillois, necessarily

involve[] the risk for the player of missing his stroke and the threat of defeat, without which the game would no longer be pleasing. In fact, the game is no longer pleasing to one who, because he is too well trained or skillful, wins effortlessly and infallibly.⁶²⁸

A one-sided match of tennis seldom inspires joy for either party. Tic-tac-toe becomes tiresome when it inevitably results in a stalemate. A video game, now too easy, no longer entices. Caillois doesn't address games without finite or variable outcomes, like *Dungeons and Dragons*, which can run forever, or *Space Invaders*, which only ends in loss. But even these harbor uncertainty

⁶²⁷ Eleni Ikoniadou, "Algorithmic Thought: A Review of Contagious Architecture by Luciana Parisi," *Computational Culture* 4 (November 9, 2014).

⁶²⁸ Caillois, *Man, Play and Games*, 7.

“in the path the game follows, in how players manage problems, in the surprises they hold.”⁶²⁹

Unique about games, argues designer Greg Costikyan, is that where other interactive media strive to minimize uncertainty, games thrive on it.⁶³⁰ We may go so far as to claim, following anthropologist Thomas Malaby, that games are by definition “semibounded” “domains of contrived contingency.”⁶³¹

When we speak of uncertainty, indeterminacy, and contingency, we attempt to characterize an iteration or duration receptive to events that, as opposed to proceeding with predictable, rational necessity, “take place but *need not take place*: events that could be, or could have been, otherwise.”⁶³² Robin Mackay contends that there are two primary ways systems of thought articulate contingency: on the one hand, an unpredictable occurrence reduced to “already written” parameters; on the other, an event exceeding and, moreover, transforming pre-circumscribed bounds – “that which thinking can grasp only *as event*.”⁶³³ The first paradigm positions the human as the masterful forecaster. In the second, contingency “humiliates” the human, prompting us to revise our habits of thought.⁶³⁴

With which paradigm do games align? Like Mackay, Quentin Meillassoux contrasts the impoverished “aleatory” to the radical “contingency.” Significantly, he appeals to games in

⁶²⁹ Greg Costikyan, *Uncertainty in Games* (Boston, MA: MIT Press, 2013), 13.

⁶³⁰ Ibid, 15.

⁶³¹ Thomas Malaby, “Beyond Play,” 96.

⁶³² Mackay, “Introduction,” 1.

⁶³³ Ibid, 1-2.

⁶³⁴ Ibid, 3.

demarcating the two. Whereas the Latin etymon of the former (*alea*) invokes the calculable dice game, the etymon of the latter (*contingere*) means “to touch, to befall.” Contingency is always

something other, something which, in its irreducibility to all pre-registered possibilities, puts an end to the vanity of a game wherein everything, even the improbable, is predictable. When something happens to us, when novelty grabs us by the throat, then no more calculation and no more play – it is time to be serious.⁶³⁵

Beyond etymology, the intertwined history of gambling and probability calculus adds credence to Meillassoux’s assessment; the faces of the die and the squares on the board have long supplied models for mathematically formalizing uncertainty.⁶³⁶ Mathematical game theory, as I will return to shortly, is a case and point. Far from contriving radical contingency, therefore, it seems games fundamentally reduce complexity.

Alongside theoretical models, Chapter Three concerned games that serve as practical means of risk management. Scholars often write about how algorithmic technologies end up creating the “future from structure.”⁶³⁷ Yuk Hui observes that alongside tertiary retention – externalized memory, like a photograph – we are now inundated with forms of tertiary protention: externalized anticipations, like Google’s restaurant recommendations.⁶³⁸ In addition to delegating our memory, we are outsourcing our imagination, commodifying the past and closing off the future. Protentions are always based on retentions, and various game scholars

⁶³⁵ Quentin Meillassoux, *After Finitude: An Essay on the Necessity of Contingency*, (London: Bloomsburg, 2010), 108.

⁶³⁶ Robin Mackay, “Editorial Introduction,” in *Collapse: Philosophical Research and Development: Vol. VIII: Casino Real* (London: Urbanomic, 2014): 3-45.

⁶³⁷ Natasha Lushetich, "How Many Angels Can Dance on the Head of a Pin? Understanding ‘Alien’ Thought," *AI & Society* 37 (2022): 1411–1425, 1114.

⁶³⁸ Hui, *Existence*, 222.

have explored how virtual worlds are increasingly supplying our sense of history.⁶³⁹ The model of Notre Dame in *Assassin's Creed Unity* (2014), for example, famously informed the real rebuild.⁶⁴⁰ In addition to shaping collective memory, I've argued that adaptive play is the means by which various kinds of tertiary retention become the basis of future actions, shaping collective conduct, and, more often than not, channeling our potential in the service of power.

One must have a set of parameters to calculate risk, and while protective play is certainly grounded in actual circumstance, its correspondence with reality is often fraught – as are all kinds of risk calculation that pretend to know an unknowable. Games provide a solution to the problem of preparing for the unpredictable by fabricating rules for scenarios that truly have few.⁶⁴¹ *Virtual Battle Space II* is effectively a martial memory of events that never happened, a simulated world the soldiers are supposed to live in until it lives in them. The inertia of habit helps make military fiction a reality. Today, individuals carry out a similar war on contingency in their daily lives. To riff on Carl von Clausewitz, play is politics is by other means, a micropolitics whereby the affects, habits, and desires fostered in play contribute to the social reproduction of a rationalized world. Nevertheless, the fabricated nature of our simulations suggests that there is an element of mysticism at the heart of neoliberalism – the fantasy of order. Could this power of the false be directed differently, play opening up instead of closing off the future?

⁶³⁹ Adam Chapman, Anna Foka, and Jonathan Westin, "Introduction: What Is Historical Game Studies?" *Rethinking History* 21, no. 3 (2017): 358-371.

⁶⁴⁰ Annabel Jane Wharton, *Models and World Making: Bodies, Buildings, Black Boxes* (Charlottesville: University of Virginia Press, 2022).

⁶⁴¹ As Jesper Juul writes, we may well experience games as fictional worlds with real rules, but especially when it comes to video games (one does not need to make gravity a rule in tennis), these rules are still fabricated. Juul, *Half-Real*.

Joining the theoretical use of games to marshal complexity, and the practical use of games to prepare for the future, Chapters Two and Four argued that video games turn the war on contingency into a leisure activity. Indeed, scholars have long figured computational media as fundamentally reductive. Brian Massumi, for example, understands the digital as a

numerically based form of *codification* (zeroes and ones). As such, it is a close cousin to quantification. Digitization is a numeric way of arraying alternative states so that they can be sequenced into a set of alternative routines. Step after ploddingly programmed step. Machinic habit.⁶⁴²

And although recent work has since argued that contingency is inherent to the formal operation of computation,⁶⁴³ when it comes to interactive media, one must also consider the user's receptivity to surprise. Compared to literature and cinema, writes Patrick Crogan, the issue is not that video games can't "contrive contingency,"⁶⁴⁴ but that, in their ergodicity, they train and, thus, predispose players to meet the contingent event as a manageable variable on the path to victory, "even when it is encountered for the first time" (*GM* 85). This is obvious in a shoot-em-up, but as Braxton Soderman points out, games touted for their intellectual rigors like *The Stanley Parable* (Galactic Café, 2013) still ritualize "mastery through calculation,"⁶⁴⁵ whereby any kind of critical reflection is sublimated into strategizing for success.⁶⁴⁶

⁶⁴² Massumi, *Parables of the Virtual*, 137.

⁶⁴³ Fazi, *Contingent Computation*; Luciana Parisi, *Contagious Architecture: Computation, Aesthetics, and Space* (Cambridge, MA: MIT Press, 2013); Alan Díaz Alva, "Technics and Contingency: Ontological Productivity in Computation," *Media Theory* 7, no. 2 (2023): 37-76.

⁶⁴⁴ Malaby, "Beyond Play," 96.

⁶⁴⁵ Bernard Stiegler, *Taking Care of Youth and the Generations* (Redwood City, CA: Stanford University Press, 2010), 46.

⁶⁴⁶ Soderman, *Against Flow*, 150-58.

Hence, the problem with video games is not, as critics have long feared of other mass media, that we are rendered passive subjects, but that we are too often in control: the society of spectacle becomes the age of gamification.⁶⁴⁷ If contingency is what happens to us, something that, out of our control, changes us, then video games largely preclude what we seek when we step into a fictional world for a transformative, aesthetic exercise. By extension we, unable to step out of ourselves, remain in control – against the wheel of our cybernetic regime. Patrick Jagoda argues that it is, however, precisely because the central concepts of video game design are also the central concepts of neoliberalism – choice, control, difficulty, failure, improvisation – that they offer means of experimenting with and, perhaps, subverting contemporary configurations of power.⁶⁴⁸ The foregoing chapters have largely located this line of flight in the vicissitudes of practice: esoteric appropriations by critics, artists, and players introduced errancy into the standard way to play. But what about the video games themselves? Can they complicate instead of reduce? Can they go beyond adapting us to digital culture, expanding our room for play into the unknown? Can they, if you will, make us go out of control?

This chapter draws on Gregory Bateson who, in his various writings on play, problematizes the notion that games fundamentally reduce complexity. Certainly, in many games, “the randomness of the moves... [are] restricted to a finite set of known alternatives... in any given play of the game” (*SEM* 450). For Bateson, canasta, chess, game theory, and matching pennies exemplify Mackay’s first kind of indeterminacy wherein transgressing the set requires the stoppage of play to edit the rules. In contrast, Bateson offers games and other interactive, rule-bound frames that cybernetically integrate contingency in a manner commensurate with

⁶⁴⁷ Jagoda, *Experimental Games*, 3-40.

⁶⁴⁸ Jagoda, *Experimental Games*, 153-190

Mackay's second paradigm. Psychotherapy; the play of animals; building blocks; conversations with young Catherine Bateson; and the croquet match in Lewis Carroll's *Alice's Adventures in Wonderland* (1865) all share a quality: far from dividing or restricting the chance occurrence to a pre-determined set, each activity reinvents its rules and parameters to affirm the contingent event as part of the series that comprises it.

In what follows, I first unpack Bateson's second paradigm. Carroll's croquet models an open-ended game that, quite literally, flips control on its head. Instead of an experience of mastery, closing off the future, it stages an exercise in humility, subjecting Alice to novelty. I then focus on two minor forms of video game that, erring from the conventions of popular genres, likewise encourage open-ended play: "walking simulators" and "fumblecore" games. Applied to titles including *The Path* (Tale of Tales, 2009), *Journey* (That Game, 2012), *Dear Esther* (The Chinese Room, 2012), *Gone Home* (The Fullbright Company, 2013), *The Stanley Parable*, *Firewatch* (Campo Santo, 2016) and *What Remains of Edith Finch* (Giant Sparrow, 2017), "walking simulator" characterizes a range of so-called "anti-games" that generally eschew meritocratic development, complex mechanics, or multi-player competition in favor of "wandering around a surreal landscape, exploring and collecting items, and having an aesthetic experience."⁶⁴⁹ It's clear, however, that the model for walking has changed little since early first-person shooter *Doom* (id Software, 1993). While these walking simulators certainly depart from gaming norms, therefore, I argue that they recapitulate a highly normative model for navigating virtual worlds in their walking simulation.

⁶⁴⁹ Melissa Kagen, "Walking Simulators, #GamerGate, and the Gender of Wandering," in *The Year's Work in Nerds, Wonks, and Neocons*, ed. Jonathan P. Eburne and Benjamin Schreier (Bloomington: Indiana University Press, 2017), 277.

Conversely, the essence of “fumblecore” games like *Envirobear 2000* (Smith 2009), *GIRP* (Foddy 2011), *Surgeon Simulator* (Bossa Studios 2013), *Ampu-Tea* (SparklingGames, 2013), *Octodad: Dadliest Catch* (Young Horses 2014), and *Probably Archery* (South East Games, 2014) is to flout the conventions of human-computer interaction. Typically, the completion of complex in-game challenges relies on an intuitive control scheme that, for the player, effectively disappears. Fumblecore games make using the interface the primary challenge. Interpreting Bennett Foddy’s 2008 browser game, *QWOP*, as an alien walking simulator, my contention is that fumblecore games foster contingencies that unsettle the dominant habits of computational media use.

Turning to another fumblecore title, *Sumatori Dreams* (GravitySensation, 2007), I conclude that instead of adapting us to digital culture, playing fumblecore games can prompt what Gilbert Simondon calls “disadaptation.” As opposed to creating the future from a predetermined structure, disadaptation is a liminal “moment in the search for a new structure, when the already constituted regimen of adaptation no longer corresponds” with its environment, generating indeterminate transformation.⁶⁵⁰ Disadaptation is, nevertheless, but a phase on the road to a new adaptation. Plenty of players, including artificial intelligences, have gotten quite good at *QWOP*. The chapter ends with a brief coda that reflects on the nature of the skills required to play such peculiar games, skills that, after play became useful, suggest a return of the useless.

⁶⁵⁰ Gilbert Simondon, *Individuation in Light of Notions of Form and Information*, trans. Taylor Adkins (Minneapolis: University of Minnesota Press, 2020), 691

Gregory Bateson: The Play that Makes a Difference

Although Oskar Morgenstern recounts that his work with John von Neumann received little funding, the authors' fellowships with the Rockefeller Foundation connect their *Theory of Games and Economic Behavior* (1944) to broader epistemological developments in the early twentieth-century. Such philanthropies supported figures whose research cohered with their technocratic agenda to “transform social strife into matters for technical problem-solving.”⁶⁵¹ Undoubtedly, the games of game theory performed this function, reducing otherwise complex economic scenarios into a calculable form with a clear solution. One might protest that “solution” and “strategy” are merely “arbitrary names for mathematical concepts,” but the weight this language bears in vernacular tethers it to practical reality.⁶⁵² From military decision-making to political philosophy, history proves that game theory seduced many to explore its applications.⁶⁵³

As Chapter Three explored, the game-based definitions of rational activity provided a “blueprint for the neoliberal world order” that cleaves to the logic of maximized utility.⁶⁵⁴ Simply put, if you're asked to cut a slice of cake in two and a friend will pick the first slice, game theory helps you acquire the most cake: cut down the middle. It'd struggle to tell you how to be subtly generous because it assumes the end is maximum consumption. The game-

⁶⁵¹ Bernard Dionysus Geoghegan, *Code: From Information Theory to French Theory* (Durham, NC: Duke University Press, 2023), 3.

⁶⁵² Ariel Rubinstein, “Afterward,” in Oskar Morgenstern and John von Neumann, *Theory of Games and Economic Behavior* (Princeton, NJ: Princeton University Press, 2006), 635.

⁶⁵³ See Lorraine Daston et al., *How Reason Almost Lost its Mind: The Strange Career of Cold War Rationality* (Chicago, IL: University of Chicago Press, 2013); Nicola Giocoli, *Modeling Rational Agents. From Interwar Economics to Early Modern Game Theory* (Cheltenham: Edward Elgar, 2003); Paul Erickson, *The World the Game Theorists Made* (Chicago, IL: University of Chicago Press, 2015).

⁶⁵⁴ Amadae, *Prisoners*, 146.

theoretical origins of contemporary political economy are a primary reason why researchers have questioned the extent to which games, video games, and gamified media, in general, promote the self-interested ethic of neoliberalism.⁶⁵⁵

Also supported by the Rockefeller Foundation, Gregory Bateson participated in the same mid-century efforts to develop theories that united disciplines including anthropology, psychology, and semiology by translating their problems into the terms of information science.⁶⁵⁶ Famously, his 1966 “From Versailles to Cybernetics” depicts geopolitics as an issue of communication patterns (*SEM* 475-483). Bateson understands the Treaty of Versailles with reference to a classic cybernetic system, the thermostat. Thermostats adjust temperature in response to atmospheric measurements. This feedback loop is designed to maintain homeostasis at a particular point, say seventy degrees Fahrenheit. Seventy degrees determines the “bias” of the system. The weather may change, but the temperature will still tend towards that point on account of the thermostatic mechanism. Only when one alters the setting of the thermostat does the “attitude” and, therefore, bias of the system change. Likewise, the Treaty of Versailles prompted an attitudinal change; its strictures and false promises amounted to setting a new, demoralized point on the German thermostat. World War II should’ve come as no surprise given the nation’s subsequent bias.

The same lecture articulates Bateson’s standpoint in contradistinction to game theory. The science of control, cybernetics more often pertains to the first-order loop demonstrated by the thermostatic mechanism. Bateson’s second-order cybernetics bids to enfold the human who changes its setting. This concern transfers to politics insofar as many political issues stem not

⁶⁵⁵ Jagoda, *Experimental Games*, 41-72.

⁶⁵⁶ Geoghegan, *Code*, 53-84.

from specific policies but from the sedimented attitudes that guide them. Bateson proposes that when state departments make decisions by plugging variables into a computer designed to minimax, they affirm the rules of a political game that “need[s] changing.”⁶⁵⁷ To transform the state of play, one must first identify the rules of the game. The problem with game theory is that it stops there, merely optimizing activity within a broken system.

In *A Sacred Unity* (1991), Bateson expounds this critique. He cites four “principles of simplification” that subtend Morgenstern and von Neumann’s framework: 1) “the rules of the given game shall be stable within the limits of any given theorem about that game;” 2) “the problem-solving equipment of the players shall be similarly stable;” 3) “the players act as if motivated by constant, monotone, and transitive preferences,” namely, for maximum utility; 4) the environment “shall be considered as another player” in non-zero-sum games.⁶⁵⁸ Assuming stability, the first three premises cannot account for evolution. They exclude “meta” factors that’d exceed and transform the tautological frame the game model establishes: 1) rule change; 2) skill development; 3) motivations other than maximum utility. Whereas these three principles amount to a depersonalization of the player, the issue with premise 4) is its personification of the environment: “What variable does Nature seek to maximize?”⁶⁵⁹

Given that Morgenstern and von Neumann chose games as models precisely because they perform reductions Bateson finds unpalatable, it’d be a fair assumption that he thinks games are poor models for systems in general. And yet, he critiques game theory by way of games, stating

⁶⁵⁷ Ibid, 482.

⁶⁵⁸ Gregory Bateson, *A Sacred Unity: Further Steps to an Ecology of Mind* (New York, NY: Harper Collins, 1991), 94-7.

⁶⁵⁹ Ibid, 97.

that its “first assumption prevents us from any loose use of the models which would regard them as analogous to any of those ‘games’ whose character depends upon the emergence of new rules in the process of play.”⁶⁶⁰ The croquet match in *Alice’s Adventures in Wonderland* is one of his primary examples.

Following her naïve affirmation in response to the Queen’s question – “Can you play croquet?” – Alice quickly realizes that participating in the game will not concern winning or losing as much as it will grappling (sometimes literally) with the entities that comprise it. At first blush, “Alice thought she had never seen such a curious croquet-ground in her life:” the arena “all ridges and furrows,” the balls hedgehogs, the mallets flamingoes, and the soldiers doubled up as arches.⁶⁶¹ As the match unfolds, Alice laments that it does not “seem to have any rules in particular [or] at least, if there are, nobody attends to them.”⁶⁶² Furthermore, the implements have a life of their own. The *Disney* adaption aptly portrays the soldiers-cum-arches desperately vying to appease the Queen in order to keep their heads, constantly moving to facilitate her hedgehog-cum-ball rolling beneath them. That is, if the hedgehogs haven’t wandered off in-between plays. At the same time, Alice’s “chief difficulty” lies in “managing her flamingo.”⁶⁶³ The cartoon renders an instance where the stubborn implement enacts a role reversal: Alice becoming mallet, flamingo becoming player.

Bateson emphasizes that the croquet contingencies primarily arise from the opacity of live, self-correcting systems to one another. Indeed, though the croquet arena’s “ridges and furrows”

⁶⁶⁰ Ibid, 94.

⁶⁶¹ Lewis Carroll, *Alice’s Adventures in Wonderland* (Princeton, NJ: Princeton Univ. Press, 2015), 67.

⁶⁶² Ibid, 68.

⁶⁶³ Ibid, 67.

contribute to the chaos, this geography strikes Bateson as commensurate with other pre-determined parameters including the rules – move the ball only by hitting it with the mallet, pass through the hoops in the requisite order, etc. – and outcomes: win or lose. All these variables are knowable beforehand. On the contrary, while Alice might identify tendencies in the flamingo’s activity, for example, Alice cannot *know* all the possible states of the flamingo system, let alone anticipate them in real-time. Vice-versa, the flamingo possesses imperfect information concerning the Alice system and, moreover, seems to act upon investments askance to winning or losing. The opacity and conflict inherent to their coupling frustrates a coordinated consensus and, thus, renders each move unpredictable.

Bateson proposes that the events precipitated by these opaque couplings not only exceed the parameters of the initial croquet match as a formal system – transgressions typically disqualified as “not part of the game” – but also transform those parameters. *In medias res*, interactions between entities largely at odds with one another establish new vistas of the game, make games within the game, or engender play without any clear rules at all: keeping one’s head, hedgehog *dérive*, flamingo jiu-jitsu. If randomness occurs *within* a closed, knowable, finite set of possible actualizations, then Carroll’s croquet demonstrates a “meta-random[ness]” game theory precludes that intervenes in the constitution of the set itself (*SEM* 450) – the moves, rules, goals and, therefore, singularity of the game itself determined in the last instance, variable in the next.

In his earlier writings, Bateson invokes Carroll’s croquet to describe “evolving system[s] of interaction,” likening the relationship between phenotype and organism to the coupling of Alice and flamingo (*SEM* 198). They “generate an unpredictability” because neither subsystem contains information about the other and both exercise a degree of determination.⁶⁶⁴ Later, he

⁶⁶⁴ Gregory Bateson, *Mind and Nature: A Necessary Unity* (Cresskill, NJ: Hampton Press, 2002), 168.

conceptualizes this as recursion. Broadly, recursion denotes the process by which systems encounter and integrate difference through self-modification.⁶⁶⁵ For Bateson, these recursive patterns of communication are the basis for order in all domains, from the play of otters to geopolitics. Thus, whereas the faces of the die furnish an image with which to probabilistically regiment indeterminacy as a variable within static constraints, Carroll's croquet furnishes a properly Batesonian image in which the contingent difference makes the system itself different (*SEM* 321) – a system that consists in “the play of recursivity and contingency.”⁶⁶⁶

Beyond overturning the common sense that game-based indeterminacy is paradigmatically reducible to a set, Carroll's croquet suggests that such evolving game systems can intervene in the “habits of thought” games typically reinforce: to calculate, predict, and control events. Bateson conceptualizes the habit of thought as a dormant epistemological premise incorporated into our nonconscious perceptual and cognitive patterning of reality. If the “massive aggregation of threats to man and his ecological systems arises” not so much from missteps in reflective consciousness than “out of errors in our habits of thought at deep and partly unconscious levels,” then the uptake of Morgenstern and Von Neumann's theory exemplifies how these habits get reified in technical media, transmogrifying politics into a zero-sum game (*SEM* 493).

They... ask the computers to compute what should be our next move to minimize the chances of our losing the game. The computer then cranks and heaves and gives an answer, and there is some temptation to obey the computer. After all, if you follow the computer you are a little less responsible than if you made up your own mind. But if you do what the computer advises, you assert by that move that you support the rules of the game which

⁶⁶⁵ See Peter Harries-Jones, *A Recursive Vision: Ecological Understanding and Gregory Bateson* (Toronto: University of Toronto Press, 1995).

⁶⁶⁶ Yuk Hui, *Recursivity and Contingency* (London: Rowman & Littlefield, 2019), 6-7.

you fed into the computer. You have affirmed the rules of that game.... The problem is to change the rules, and insofar as we let our cybernetic inventions – the computers – lead us into more and more rigid situations, we shall in fact be maltreating and abusing the first hopeful advance since 1918. (*SEM* 482-3)

The “first hopeful advance” was cybernetics, which, in Bateson’s estimation, was not so much the science of control as the science of change. Unlike the games of game theory, which ground the assumption that the goal is always maximal gain or minimal loss, Carroll’s croquet embodies an open version of cybernetics whereby the ends of play undergo constant revision at the behest of contingency, rendering the game not a progression towards a clear goal but an indeterminate elaboration, a becoming. Each event is grist for the mill of “auto-finality,” the game system’s spontaneous revision of its own end.⁶⁶⁷ It’s a lot “like life – whose purpose is to discover the rules, which... are always changing and always undiscoverable” (*SEM* 30).

Although Bateson’s concern was not, primarily, to reimagine how games work, the croquet match nonetheless presents quite a different play paradigm to the one Crogan identifies in video games, where the impulse to master events renders contingency impotent. Conversely, Carroll’s evolving game keeps the player on her toes or, more specifically, sweeps Alice off her feet. After Mackay, the croquet contingencies are truly contingent not only because they are incalculable and, therefore, unknowable beforehand, but also because they *befall* Alice. Far from being in control, the flamingo reversal effectively transforms Alice from subject into object, inverting the hierarchy of human and animal the game seemed to impose from the outset. Instead of an exercise in mastery, therefore, the croquet match stages an exercise in humility. To riff on Meillassoux’s claim that contingency is what stops us playing around, seizes us by the throat, and forces us to think, for

⁶⁶⁷ Hui, *Recursivity*, 142.

Alice, on the contrary, it is precisely the contingencies play contrives that flips the human's habitual orientation on its head – albeit by a grabbing of the ankles.

Why So Simple? Playable Models, Correlation, and Walking Simulators

When it comes to flipping gaming on its head, the “walking simulator” is exemplary. Over the past two decades, game scholars have increasingly turned their attention to the politics of representation in and around play. Much of this work critiques the cis, straight, white male orientation of Western gamer culture: on the one hand, “toxic” gaming communities have long been hostile to players who don't fit this image;⁶⁶⁸ on the other hand, gaming studios have historically pandered to traditionally masculine interests, like killing.⁶⁶⁹ And if other identities are factored into marketing endeavors, it's often in the form of another commercial abstraction, a “designed identity,” that relies heavily on gendered stereotypes (think “games for girls”).⁶⁷⁰ In this context, the diversification of game designers diversified game design. Open-source platforms like Twine allowed those without a computer science education to make and distribute games that,⁶⁷¹ beyond the novelty of representing previously marginalized stories, identities, and relationships in games, constituted something of a “queer games avant-garde.”⁶⁷² Edmond

⁶⁶⁸ Lisa Nakamura, "Queer Female of Color: The Highest Difficulty Setting There Is? Gaming Rhetoric as Gender Capital," *Ada: A Journal of Gender, New Media, and Technology* no. 1 (2012).

⁶⁶⁹ Kocurek, *Coin-Operated*, 2015.

⁶⁷⁰ Chess, *Ready Player Two*.

⁶⁷¹ Anthropy, *Rise of the Videogame Zinesters*..

⁶⁷² Bo Ruberg, *The Queer Games Avant-Garde: How LGBTQ Game Makers Are Reimagining the Medium of Video Games* (Durham, NC: Duke University Press, 2020).

Chang's notion of "queergaming" captures this confluence of aesthetics and politics: when the very form of a game, including its mechanics, rules, and, ultimately, play, are queer.⁶⁷³

During #GamerGate in 2014, it became evident that the politics of form swings the other way too. Debates about what is and isn't a game often function as a "smoke-screen... to mask a conservative cultural impulse to police the boundaries of gamer culture and defend it from encroachment by perceived outsiders."⁶⁷⁴ Originally a pejorative, "walking simulator" was supposed to deride experimental video games that weren't worthy of the name. Ironically, it was precisely because the "walking simulator" connotes a departure from video game norms that designers, critics, and scholars have reclaimed the term to characterize a range of interactive, virtual experiences that eschew competition, violence, and, sometimes, challenge altogether to gravitate around first-person, on-foot exploration.⁶⁷⁵ Just as Twine democratized game design by facilitating the programming process, the basis of the walking simulator is typically a first-

⁶⁷³ Chang is drawing on Galloway's notion of "countergaming," which I will return to shortly. Edmond Y. Chang, "Queergaming," in *Queer Game Studies*, ed. Bonnie Ruberg and Adrienne Shaw (Minneapolis: University of Minnesota Press, 2017), 15–24.

⁶⁷⁴ Patrick Jagoda, "Videogame Criticism and Games in the Twenty-First Century," *American Literary History* 29, no. 1 (2017): 210. See Mia Consalvo and Christopher A. Paul, *Real Games: What's Legitimate and What's Not in Contemporary Videogames* (Cambridge, MA: MIT Press, 2019).

⁶⁷⁵ Rosa Carbo-Mascarell, "Walking Simulators: The Digitisation of an Aesthetic Practice," Proceedings of 1st International Joint Conference of DiGRA and FDG, Dundee, Scotland, DiGRA Digital Library, 2016; Kagen, "Walking Simulators"; Melissa Kagen, "Walking, Talking and Playing with Masculinities in Firewatch," *Game Studies* 18, no. 2 (2018); Gaspard Pelurson, "Flânerie in the Dark Woods: Shattering Innocence and Queering Time in The Path," *Convergence* (2018): 1–19; Shane Snyder, "The Impossible Relationship: Deconstructing the Private Space in Gone Home," *Journal of Gaming and Virtual Worlds* 10, no. 1 (2018): 7–20; Bo Ruberg, "Straight Paths through Queer Walking Simulators: Wandering on Rails and Speedrunning in Gone Home," *Games and Culture* (2019).

person-controller script that can be downloaded for free-to-use engines like Unity.⁶⁷⁶ In turn, the games themselves are often lauded for their “accessibility.”⁶⁷⁷

Consider the opening of *What Remains of Edith Finch* on PC. The game loads and the title appears, bobbing up and down against a black background. Slowly, the darkness dissipates. I see choppy water, a forested island, and the deck of a boat. It’s not the title that’s moving, it’s whoever I am, buffeted by the waves. No instructions, no heads-up display... the image lingers for a moment too long. I’m supposed to do something. Punching familiar keys, I can’t move. But I can look: wiggling the mouse adjusts my gaze. Looking down, I see a pair of hands, my hands, holding lilies and a journal that reads “Edith Finch.” The first prompt flashes up. Pressing “space” turns the page, and a voice starts reading the words, my voice. A cutscene, a change of locale: a grassy path yawns ahead, drawing me on. Naturally, I push “W.” The journey begins with unhurried ease.

Relative to the majority of video games, writes Melissa Kagen, the walking simulator simplifies mechanical demands in order to present

a version of embodiment that highlights the mind as part of the body. Pressing W over and over can bring a player to a Zen-like state of simplicity and awareness, making her more attuned to the physical act of walking by watching an avatar perform it, precisely because she lacks another distracting focus.... Walking is so simple... that pressing the button realistically mirrors the simplicity of walking.⁶⁷⁸

Here, Kagan builds on the likes of Rebecca Solnit who, in her history of walking, *Wanderlust*, claims that walking and writing about walking has always been a way of “grounding one’s

⁶⁷⁶ Benjamin Nicoll and Brendan Keogh., *The Unity Game Engine and the Circuits of Cultural Software* (Cham: Springer International Publishing, 2019), 101-116.

⁶⁷⁷ Nicole Clark, "A Brief History of the 'Walking Simulator,' Gaming's Most Detested Genre," *Salon*, November 11, 2017.

⁶⁷⁸ Kagan, “Walking Simulators,” 283-4.

thoughts in a personal and embodied experience of the world,” underscoring “that the specifics of one’s bodily experience and location shape one’s intellectual perspective.”⁶⁷⁹ Much of the literature on walking simulators emphasizes that, as Sara Ahmed puts it, “social differences” always affect what it means to “inhabit” those spaces and, therefore, how we acquire knowledge about them.⁶⁸⁰

This work on the relationship between embodiment and knowledge is indebted to the Kantian, “correlationist” thesis that the human subject is the ground of our worldly knowledge, our phenomenal experience correlated with noumenal reality. Instead of treating this ground as a transcendental given, however, various scholars have explored how humans had to evolve in a particular way in order to have the relationship with the world they do and, following work on the co-evolution of humans and technology, Shane Denson proposes that media have always been involved in this correlation process.⁶⁸¹ What we (don’t) experience as inaccessible operations “disrelated” from our sensorium, as the end of Chapter Three discussed, are effectively technical developments that proceeded out-of-step with our own development, errant developments I suggested the practice of play can help us come to terms with.⁶⁸² The “simplicity” or “accessibility” of the walking simulator is, on the contrary, very much in-step with our sensorium. As Chapter Two argued, this invisible, intuitive, self-descriptive interface did not emerge *sui generis* – it resulted from a coevolution of humans and technology. If “we

⁶⁷⁹ Solnit, *Wanderlust*, 26, 27.

⁶⁸⁰ Sara Ahmed, "Orientations: Toward a Queer Phenomenology," *GLQ: A Journal of Lesbian and Gay Studies* 12, no. 4 (2006): 544.

⁶⁸¹ Shane Denson, *Postnaturalism: Frankenstein, Film, and the Anthropotechnical Interface* (Bielefeld: transcript Verlag, 2014).

⁶⁸² Shane Denson, *Post-Cinematic Bodies* (Lüneburg: meson press, 2023), 27-35.

have never been natural,” then the walking simulator’s so-called “natural user interface” is truly accomplished artifice.⁶⁸³

In game design, the concept of “playable model” attempts to account for similarities in the procedural representation of actions – like walking – across different video game contexts.⁶⁸⁴ Focusing on combat games, Joseph C. Osborn et al. define the playable model as a combination of elements that not only lead a player to “recognize a game as presenting combat” but also come to participate in its “learnable” and “actionable” features that players to alter the video game’s state.⁶⁸⁵ A set of elements common to a number of combat games indicate a shared paradigm for “presenting combat,” like graphical representations of antagonists and “operational logics” that communicate the physical collision of limbs.⁶⁸⁶ The playable model is, therefore, both particular and general. Each walking simulator game provides a particular instantiation of walking – in terms of the specific console, keyboard, controller, game, player, and so on – that, nonetheless, recapitulates a paradigm that guides the design and interpretation of walking in general.

As Joseph Garvin explains, there are typically two types of video game control scheme: “arcade” and “simulation.”⁶⁸⁷ Arcade controls enable the player to perform complex virtual actions with minimal player input: In *Call of Duty: Black Ops 3* (Treyarch, 2015), the complex action of reloading a weapon results when the player just presses “square” on the PlayStation

⁶⁸³ Denson, *Post-Naturalism*, 24.

⁶⁸⁴ Noah Wardrip-Fruin, *How Pac-Man Eats* (Cambridge, MA: MIT Press, 2020).

⁶⁸⁵ Joseph Osborn et al., “Combat in Games,” in *Proceedings of the 10th International Conference on the Foundations of Digital Games*, Asilomar, CA, 2015, 3-10, 3.

⁶⁸⁶ Michael Mateas et al., “Advanced Game Technologies,” in *The Future of Research in Computer Games and Virtual World Environments: Workshop Report*, edited by W. Scacchi (Irvine, CA: 2012), 30-46, 33.

⁶⁸⁷ Joseph Garvin, “One Simulated Hand, Two Real Hands: Antisimulation and Phenomenological Correspondence in Videogame Control Schemes,” *Press Start* 2, no. 1 (2015): 33-42, 34.

gamepad and, in the *Assassins Creed* series (Ubisoft, 2007-), a simple button combination makes the avatar scale the side of a building. “Simulation controls, on the other hand” are indebted to training models that, because they’re designed to prepare users for the real deal, aim for a functional equivalence of action complexity. In lieu of reproducing a mock-cockpit, games like *Flight Simulator X* (X Box Game Studios, 2006) and *Bus Simulator 18* (Stillalive Studios, 2018), “aim at a direct correspondence between simulated action and player input” by seeking

to have as complex and varied a set of motions and actions involved in controlling the game as there would be in controlling the real thing’ via the ‘micro-mobilities’ afforded by the control unit such as a console controller, a computer keyboard, or a smartphone touchscreen.⁶⁸⁸

If the arcade game has a reduced correspondence – say, one to ten – then the simulation game aims for a one-to-one correspondence of input-to-output complexity. And although the walking simulator’s “micro-mobilities” are remarkably simple, suggesting it cleaves to “arcade,” this simplicity is arguably realistic because when one merely depresses a key or nudges an analog stick to walk, it mirrors what is, for many, a simple act. This intuitive control scheme results from the naturalization of a particular kind “kinaesthetic knowledge,”⁶⁸⁹ an “*embodied literacy*” “where the player [has] learn[ed] *how* to perceive and embody the videogame through particular gestures trained by particular input devices.”⁶⁹⁰

The simple, first-person navigation of *What Remains* grounds a complex exploration of memory that scholars interpret as a form of queergaming.⁶⁹¹ As Edith Finch, the last Finch, I

⁶⁸⁸ Ibid, 35-6.

⁶⁸⁹ Swalwell, "Movement and Kinaesthetic Responsiveness."

⁶⁹⁰ Keogh, *Play of Bodies*, 77.

⁶⁹¹ Mona Bozdog and Dayna Galloway, "Worlds at Our Fingertips: Reading (in) *What Remains of Edith Finch*," *Games and Culture* 15, no. 7 (2020): 789-808.

return home in search of lost time, seeking what remains of my family tree. Each room in the Finch house contains an object that, like so many madeleines, serves as a portal to the past. Play is, once again, the means by which another's memory becomes my own. Opening the diary of young Molly Finch, for example, transports me back to the 1940s, where I act out what Molly wrote. Sent to bed without supper, Molly was hungry and restless; I'm hungry and restless. Molly found an escape in the imagination, picturing herself as different creatures, a series of metamorphoses I now embody: first a cat, deftly leaping from branch to branch in pursuit of a bird, then an owl, soaring through the sky, swooping down to catch rabbits. Two far less graceful performances follow: a shark tumbling down a hill, and a tentacular being crawling on a boat.

Eschewing "chrononormativity,"⁶⁹² the player inhabits a non-linear narrative where time is out of joint, the computer's random-access memory dramatizing our own, scattered recollections. Such themes are certainly present in other, AAA video games, but the pace of the mainstream tends to catch us up in its flow, eroding any intervals of reflection.⁶⁹³ Conversely, akin to "slow cinema,"⁶⁹⁴ the tempo of walking simulators like *What Remains* prime contemplation. The symbolic realm of the diary does not discriminate between fact and fiction, and neither does play. In re-enactment, fantasy and reality collapse: digging up historical records is, at once, an archaeology of the imagination. In each metamorphosis, the controls remain simple, but the "game feel" changes⁶⁹⁵ – time between input and output shorter when inhabiting the cat, capturing its agility and precision, and longer when inhabiting the Lovecraftian creature

⁶⁹² Ruberg, "Speed Runs."

⁶⁹³ Soderman, *Against Flow*.

⁶⁹⁴ Kagan, "Walking Simulators," 283.

⁶⁹⁵ Steve Swink, *Game Feel: A Game Designer's Introduction to Virtual Sensation* (New York: Morgan Kaufmann, 2009).

of the deep, conveying the weighty, deliberate movement of a cephalopod out of water. We, too, feel out of water. Unlike the intuitive embodiment of the game's opening, assimilating the proper tentacle technique takes a beat.

This moment of defamiliarization – where, briefly out of control, I must adapt to the new scheme – begs the question: Do walking simulators truly “highlight the mind as part of the body?”⁶⁹⁶ We can understand its playable model for walking as a highly normative “grammar of action,” which, to reiterate, refers to how “human activities are coded for machinic parsing using linguistic and structural metaphors” and, in turn, how these grammars come to structure the possible human activity.⁶⁹⁷ Akin to linguistic grammar, the grammar of action both enables and constrains what we do in virtual worlds. “Never purely technical but always *sociotechnical* in nature,” the video game walk is certainly not an unproblematic “mechanization of a given form of activity;” it involved “elements of interpretation, strategy, and institutional dynamics.”⁶⁹⁸ In other words, “no simulation can escape some ideological context,”⁶⁹⁹ and computer processes often end up expressing something their initial conditions.⁷⁰⁰

Which habits of thought do walking simulators express? Baked into the simple representation of walking is the assumption that walking itself is simple. First of all, this is arguably a uniquely able-bodied perspective. For walking to be simple, for it to recede into the state of unthought ground, we have to occupy the perspective of a bodymind for whom walking

⁶⁹⁶ Kagan, “Walking,” 283.

⁶⁹⁷ Galloway, *Gaming*, 4.

⁶⁹⁸ Agre, “Surveillance,” 748.

⁶⁹⁹ Ian Bogost, *Unit Operations: An Approach to Videogame Criticism* (Cambridge, MA: MIT Press, 2006), 99.

⁷⁰⁰ Noah Wardrip-Fruin, *Expressive Processing: Digital Fictions, Computer Games, and Software Studies* (Cambridge, MA: MIT Press, 2009), 99-101.

is an uncomplicated expression of intention. Moreover, this playable model effectively reifies a common point of view, one that seldom experiences movement at anything other than a high degree of abstraction. I never say that “I am going to contract my right hip flexor in order to raise my right thigh.” I say, “I am walking.” Indeed, while I “may intentionally (turn the light on by flipping the switch),” Susan Hurley observes, at some point, “your intentions run out: you do not intentionally (move your finger by firing a neuron).”⁷⁰¹ We experience the gaming body at an even greater degree of abstraction.

The activities we are used to controlling in games..., such as running, shooting, or jumping, “are activities we normally associate with conscious intention... [and are] assigned directly and distinctly to individual buttons on players’ keyboard and mouse.”⁷⁰²

Far from delving into the complexities of embodiment, therefore, gaming largely reduces action to our executive functions. By extension, for all our attempts to describe them in posthuman terms, the experience of video game play generally elides the complexities of mediation.

My contention is that the walking simulator’s transgressive reputation belies its perpetuation of a ubiquitous norm for walking simulation. To claim that the walking simulator’s radical import derives from its commentary on embodiment is, I think, to forget the role of forgetting in fostering the aesthetic it does. As the means of control quickly pass from the “area of attention” to the “area of inattention,” the anthropotechnics of walking becomes the ground against which the player experiences virtual figures.⁷⁰³ This is not to say that simplifying the walk is somehow conservative – simplification, like David Sudnow’s improvisational

⁷⁰¹ Susan L. Hurley, *Consciousness in Action* (Cambridge, MA: Harvard University Press, 2002), 357.

⁷⁰² Ian Bryce Jones, “Do the Locomotion: Obstinate Avatars, Dehiscent Performances, and the Rise of the Comedic Video Game,” *The Velvet Light Trap* 77 (2016): 86-99, 91.

⁷⁰³ Marshall McLuhan and Eric McLuhan, *The Laws of Media: The New Science* (Toronto: University of Toronto Press, 1988), 5.

automation, is the condition for higher complexity. But in the search for video games that interrupt the circuits of control to prompt questions about the conditions of digital culture, we could look elsewhere.

For Marshall McLuhan, the “whole business of the artist” is to “report on the current status of ground” and, ultimately, help us in “the retraining and updating of [the] sensibility.”⁷⁰⁴ When it comes to interactive media, the ground is both technical and habitual. “Dominant modes of input,” writes Brendan Keogh, “produce a dominant habitus and imbue a competency that is seemingly ‘natural’ to that dominant habitus while further marginalizing and atrophying alternative modes of input and the habits they require.”⁷⁰⁵ If Molly’s vignette in *What Remains* briefly unsettled these hegemonic habits, drawing attention to the ground, then the fumblecore game goes one, very uncertain step further.

Going Out of Control: *QWOP* the Alien Walking Simulator

The defining feature of the fumblecore game is its “abrasively granular control scheme.”⁷⁰⁶ This means that, rather than being difficult because of game-world terrain or competition with other players, the challenge of these games lies in “the control of bodily movement itself.”⁷⁰⁷ Often, that movement is walking. In her genre defining chapter, Kagen differentiates between walking simulators – those exploratory, “wandering text” I’ve discussed thus far – and “walking simulators:” fumblecore “games in which the mechanics of walking are taken apart and then reconfigured to be humorously difficult, simulating walking [as] if you were

⁷⁰⁴ Ibid.

⁷⁰⁵ Keogh, *Play of Bodies*, 87.

⁷⁰⁶ Bryce Jones, “Do the Locomotion,” 87.

⁷⁰⁷ Ibid, 86.

an alien who had no idea how to walk.”⁷⁰⁸ Whereas the former makes walking simpler than it is in our everyday lives, the latter makes it far more complicated. Bennett Foddy’s *QWOP* is one of Kagan’s primary examples.

The 2008 viral hit begins in the format of a typical 2D track and field game, but it quickly becomes apparent that we’re not exactly chasing the world record. Qwop (the protagonist), we are informed, has little experience with the event due to his country’s “training program” being “under-funded.” The game imparts this lack of skill to the player by convoluting the controls. The Q and W keys initiate movement that hinges at the hips: Q contracts the right hip flexor, driving the right thigh forward, and simultaneously contracts the left gluteus, driving the left leg back. W does the opposite. Contrary to the designation “calves,” O and P actually initiate movements that hinge at the knee: O contracts the left hamstring, bringing the heel towards the bum, and simultaneously contracts the right quadricep, swinging the shin forward. P does the opposite.

Confusing enough to explain, it will come as no surprise that real-time coordination is even more complicated. Not unlike Alice and her flamingo, the player quickly finds herself upside-down, failing to progress more than a meter forward – that is, if one hasn’t fallen several feet back from the start line. When anything other than Qwop’s feet hit the ground, it’s game over, and a text box in the style of an award certificate pops up, reminding us that “everyone is a winner.” Encouraged or, perhaps, condescended, the player is prompted to “Press space to restart.” Video games famously teach us to play them quite quickly, but even after hundreds of attempts, few manage to jerk, stumble, and flop past the halfway line, let alone complete the whole 100m in record time.

⁷⁰⁸ Kagan, “Walking,” 283-4.

Framed by creator, Bennett Foddy, as purposefully “anti-ergonomic,”⁷⁰⁹ *QWOP* eschews the usual simplicity of bipedal locomotion in virtual worlds, opting for a control scheme that critics have characterized as “masochistically difficult” and, even, downright “evil.”⁷¹⁰ Predictably, the game has become prime “YouTube bait,” with video creators recording their failures and frustrations for others to laugh at.⁷¹¹ Brian Sutton-Smith reminds us that we often defang otherwise radical forms of play by trivializing them. Instead of trivializing *QWOP* on account of its silliness, we might take its slapstick seriously. Because video games “*are actions*,” Galloway argues that only forms of “radical action” – what he calls “countergaming” – can offer a “critique of gameplay itself.”⁷¹² By presenting an alternate grammar of action for walking, Foddy’s game implicitly comments on the typical walking simulator, but what kind of relationship between body, mind, and machine does *QWOP* render in contrast?

If we tend to control video games at a degree of abstraction akin to a normative phenomenology of bodily movement, then *QWOP* asks us to step outside our experience to imagine what it’d be like to have a more granular relationship with the walk. Ironically, it is by giving the player quantitatively more control – asking them to operate a greater number of bodily

⁷⁰⁹ Brandon Sheffield, “The Benefits of Making Your Players Suffer (and Maybe Throw Up),” *Gamasutra*, October 5, 2012.

⁷¹⁰ Mike Rose, “How *QWOP*’s Creator Grieves Players with a Unicorn,” *Gamasutra*, August 3, 2012; Mark Brown, “Games Work ‘Neurological Magic,’ Says *QWOP* Creator,” *Wired*, March 29, 2011.

⁷¹¹ Gallagher, *Videogames*; Wesley Yin-Poole, “Shaking off Accusations of YouTube Bait,” *Eurogamer*, May 1, 2015.

⁷¹² Galloway, *Gaming*, 2, 125. This has more recently been considered a “games on games” critique. Giovanni Caruso, Riccardo Fassone, Gabriele Ferri, Stefano Gualeni, and Mauro Salvador, “Games on Games: Game Design as Critical Reflexive Practice,” *G|A|M|E: The Italian Journal of Game Studies* 5 (2016): 5-10. <https://www.gamejournal.it/games-on-games-game-design-as-critical-reflexive-practice/>.

movements – that she is subsequently less able to act.⁷¹³ Rather than the avatar, Qwop, smoothly expressing the player’s intentions, what Qwop does is contingent on a “dehiscent performance,” “an uneasy collaboration between human and machine” operations.⁷¹⁴ Indeed, Mark Hansen’s interpretation of Jordan Crandall’s distributed performance piece *Gatherings* (2011) may as well be an interpretation of *QWOP*.

By performatively enacting the human bodymind’s implication into mediated circuits of sensibility, [Foddy’s] work discovers – indeed, inaugurates – new modes of “acting” in which the propensity of the situation as a whole holds sway over any delimited agency that may operate, already fully constituted, within it, including the agency of a human subject understood as a minimally transcendent or otherwise separable constituting force.⁷¹⁵

Of course, humans have always “share[d] their sovereignty with nonhuman agents,”⁷¹⁶ and this description could be applied to all forms of acting. What is significant about *QWOP*, then, is not that it comprises a coming together of machine and operator action – as video games generally do – but that it places this state of affairs in relief.

Channeling Donald Rumsfeld, Katherine Hayles writes that “the purpose of literature is... to reveal what we know but don’t know that we know, and to transform what we know we know into what we don’t yet know.”⁷¹⁷ Defamiliarizing both in-game and meat-space movement, *QWOP* transforms what we think we know about walking and its simulation into a far more complex act, allowing us a speculative and, moreover, embodied experience of what mobility

⁷¹³ We might say that *QWOP* forces the player to get “bogged down in the technical,” sporting slang for when a fixation on the minutiae of performance ultimately prevents the athlete from performing well.

⁷¹⁴ Bryce Jones, “Do the Locomotion,” 89.

⁷¹⁵ Hansen, *Feed-Forward*, 252.

⁷¹⁶ Gallagher, *Videogames*, 4.

⁷¹⁷ Katherine N. Hayles, *Electronic Literature: New Horizons for the Literary* (Notre Dame, IN: University of Notre Dame Press, 2008), 132.

might be like if our biological habitus and technical peripherals were not so user friendly. As both Joseph Garvin and Ian Bryce Jones note, in raising our awareness of the unthought bodily processes that underpins our conscious intentions, fumblecore games can develop a profound respect for the power of “this body that knows more than we do”⁷¹⁸ – or, indeed, that “obscure intelligence” of habit (*OF* 55). Furthermore, I’d hazard that *QWOP* fosters a respect for those intuitive technical systems we readily offload our intelligence to.

A danger of action or platform oriented approaches that focus on the a-representational is that they can end up producing a surface/depth distinction that, akin to Marxists who maintain that the base determines the superstructure, figures depth as the only important factor. This slippery slope can lead to bizarre claims regarding the “irrelevan[ce]” of “Lara Croft’s body,” eliding the significance of race and gender that are largely conveyed audio-visually,⁷¹⁹ but even on a basic level, how a game looks is pivotal for any experience of play. *Tetris*, writes Ralph Koster, would be terrifying if instead of blocks, players dropped human bodies into a mass grave.⁷²⁰

Similarly, none of what I have figured as *QWOP*’s critique of simulated walking would be operable without the visual dimension we begin with: an identifiably human body on the screen. Without *Qwop* the avatar having an affinity with the human body, the model’s aberrant movement could not induce reflection on our own embodied movements, nor could it prompt reflection on the prototypical simulation of walking in video games. The player must first recognize *Qwop* as the bipedal creature that walks, and, indeed, one that is expected to run a

⁷¹⁸ Merleau-Ponty, *Phenomenology*, 248.

⁷¹⁹ Anable, *Playing with Feelings*, 37-69.

⁷²⁰ Ralph Koster, *Theory of Fun for Game Design* (Scottsdale, AZ: Paraglyph Press, 2005), 167–169.

100m race. If, instead, we were given an abstract shape where you press Q, W, O or P to enact movement, any claims about alternate grammars of action or defamiliarization would be hard to make given the prominent role of visibility in identifying the tropes of walking in the first place.

What of *QWOP*'s content? The opening menu reads: "you are Qwop, our small nation's sole representative at the Olympic Games.... Ideally you will run 100 meters... but our training program was under-funded." While clearly humorous in intent, poking fun at the woefully untrained athlete cannot be disaggregated from the context of sporting spectacle. Real athletes from small nations – most famously Equatorial Guinea swimmer Eric Moussambani (100m Freestyle, Sydney Olympics 2000) and American Samoan shot putter Trevor Misapeka (100m sprint due to an administration error, 2001 IAAF World Championships) – set the precedent for Foddy's joke: Both became objects of mockery by western media on account of their performances. The inability for an athlete from an underfunded nation to perform at a competitive level with other nations is, of course, more indicative of global inequality than anything else. Jokes at Qwop's expense, therefore, potentially smack of classism and racism and, at the very least, obfuscate the complexities at play in athletic development. Admittedly, *QWOP* takes the joke *ad absurdum*, but it's undeniable that the game's humor derives from finding non-normative or "bad" bodily comportment funny.⁷²¹ As Henri Bergson reminds us, we must be careful to temper our valuation of the comedic by acknowledging the uncomfortable reality that laughing at something often works as a form of social regulation.⁷²² Whatever retraining of the

⁷²¹ Presenting an experience in which "appendages refuse to aid in our intentions... situations in which we typically begin to become aware of our limbs *as* material rather than unproblematic extensions of will" invites comparison between fumblecore games and the lived realities of illness, injury and disability. But despite similarities between *QWOP*'s mechanics and neurological conditions such as cerebellar ataxia and neuronal deafferentation, one would be hard pushed to claim that a game largely predicated on laughing at aberrant movement is the best way to establish meaningful conversations about ableism. Bryce Jones, "Do the Locomotion," 95-7.

⁷²² Henri Bergson, *Laughter* (Copenhagen: Lindhardt og Ringhof, 2022).

sensibility experiments in game control yield, the amusements they produce are not absolved from perpetuating other systemic injustices.

Nevertheless, my intention has been to move beyond an approach to video games that too stringently measures their worth based on their correspondence with reality. Thus, I follow Noah Wardrip-Fruin who argues that the aspiring to verisimilitude has hampered the medium's potential.

We aren't finding greater authorial power in closer approximations of everyday reality. Rather, we're finding it in models that are deliberately artificial... Similarly, we aren't finding greater potential in obviously "natural," "immersive," or "invisible" interfaces. It is instead those that expose the evolving state of the underlying system and the opportunities for audience action in connection with their fictions that are creating exciting new roles for us.⁷²³

Instead, he suggests that finding ways to foreground the complex computer processes that undergird our interfaces can change the way we think about the world and our place in it. If, as I have argued, we understand the dominant form of first-person walking simulation as an attempt at creating an "immersive" and intuitive experience, one that panders to the developed sensibilities of most video game players, then *QWOP* embodies the critical potential of pointedly departing from that paradigm.

For C. Thi Nguyen, "games are the art of agency." Using rules, goals, and environments as their materials, designers sculpt a "practical experience" that we can understand as the exteriorization of a particular form of "struggle."⁷²⁴ When we play games, therefore, "we take on an alternate form of agency," one that "we might not have experienced on our own."⁷²⁵ My

⁷²³ Wardrip-Fruin, *Expressive Processing*, 18-19.

⁷²⁴ Nguyen, *Games*, 18.

⁷²⁵ *Ibid*, 1-2.

contention is that Foddy's game is a philosophical toy proper to that posthuman vision of the world whereby humans are not the transcendental subjects of a given situation, but participants in an ecology of processes. It is in this sense that video games go beyond adapting us to our reality. Instead of cultivating digital skills that ultimately feed back into the circuits of control, virtual environments can expose us to alien worlds that require their own alien skills.

Conclusion: Disadaptive Play

Whereas *QWOP* perverts the run, Gravitysensation's *Sumotori Dreams* transmogrifies what initially strikes us as a standard fighting game. Single-player mode begins by occupying a vantage to the side of two conspicuously quadrilateral avatars facing one another in a wrestling ring. With surprising mobility for anthropomorphic figures built from blocks, the two start by performing a sumo crouch. Pressing "down" incites the player's blue golem to touch the ground and the match ensues. But what unfolds isn't the Tachiai (opening charge) we expect. Erecting themselves awkwardly, the opposing grey golem begins staggering towards the player-character as if, suddenly, the capacity to genuflect escaped them. A few seconds later, before one has even figured out which buttons move blue forwards and which buttons cause it to perform a pushing motion, grey crashes into blue, and both hurtle to the ground: "Grey Wins 1:0".

As the interface prompts a rematch, the difficulty of expressing one's intentions in this virtual world becomes apparent. *Sumotori Dreams* neither renders a post-match screen-saver nor cuts straight to another round as most fighting games do. We are left to witness the chaotic aftermath as the golems careen into and destroy the surrounding low walls. Throughout, the camera pans and tracks to keep the action in frame and the player maintains influence over blue when the golem is on its feet. As soon as it hits the ground, however, an automatic self-righting ritual redolent of Japanese robot fighting ensues. Even when upright, most attempts to move or

push ultimately fail. Thus, before the second match even begins, one learns that the game's joys do not derive from dominating in block-to-block combat. Rather, they derive from orchestrating the performance of multiple scripts entering in and out of accord with one another: the player's inputs, the avatar's self-correcting mechanism, its obstinate, blocky limbs and, of course, gravity.

As with Carroll's croquet, multiple, dissonant scripts with conflicting tendencies precipitate a series of unforeseeable events. But instead of flamingo jiu-jitsu, *Sumotori Dreams* quickly propagates its own forms of play that exceed the initial sumo wrestling frame. Indeed, if we understand video games not as games in themselves but as technologies that prime the invention of games,⁷²⁶ then two features stand out. First, the player can choose to fire blocks at the stubborn golems for seemingly no other purpose than to introduce another perturbation into their erratic stumbling. Second, in lieu of hitting reset, post-match tumbling concludes only when both avatars achieve an upright posture and, thus, can bow to one another. Pointedly, if grey manages to stabilize, they become a spectator too – watching and intermittently chuckling as the player's avatar attempts to regain footing. Experimentation with these technical affordances inspires the recursive development of play towards new goals that diverge from victory in combat.

Being laughed at by a golem recalls Mackay's claim that real contingency entails a humiliation – a reminder of the human's finitude. While this silly wrestling game hardly prompts a revision of dogmatic epistemological categories, it nonetheless stages a machinic practice that intervenes in the player's habitual disposition towards game-based contingency. Whereas most video games are predicated on producing the illusion of control, of training to dominate, what's compelling about *Sumotori Dreams* is that encourages the player to embark upon a form of play

⁷²⁶ Boluk and LeMieux, *Metagaming*, 8-9.

that exacerbates – not manages – chaos in a bid to witness the sheer ridiculousness of what these blocky bodies can do. Instead of indulging the desire for mastery over events, therefore, it encourages us to embrace agential finitude, celebrating contingency as the arrival of variation, that difference that makes a difference.

After Simondon, we can understand contingency as a cause of disadaptation – as an event that, throwing our current habits into crisis, prompts the “search for a new structure,” the genesis of a new behavior.⁷²⁷ Simondon provides two human examples: babies walking and post-colonial revolution. With babies, there’s a point at which the prone position no longer suffices. The search for a new movement structure begins with wiggling forward on the ground, then crawling on all fours, then on extended fours, and, finally, walking upright. A “pre-revolutionary” state was, moreover, required: the sapient potential to actualize bipedal locomotion. With the colonial situation, there is a period of cohabitation “between colonists and colonized, and then, all of a sudden, this is no longer possible because potentials are born, and a new structure must suddenly appear.” “Just as the infant can no longer remain in a state of adaptation, these groups disadapt” and would remain in that dissonant state if not for the invention of a new society.⁷²⁸ While these two wildly distinct cases are somewhat peculiarly compared in the context of Simondon’s 1960 lecture, “Form, Information, Potentials,” they acquire a coherence in the context of this dissertation. Both infants and subalterns have first explored the potential of a new structure in play.

In addition to a singular, contingent event that, alien to us, prompts the search for a new structure, I’ve argued that *QWOP* presents an alien world for us to inhabit – one that we are

⁷²⁷ Simondon, *Individuation*, 691.

⁷²⁸ Simondon, 696

clearly disadapted to. We can interpret this as grist for the mill of critique. Fumblecore games ask us, in Aubrey Anable's terms, "not to celebrate failure but to flail with it for a while and learn its contours."⁷²⁹ In unsettling the literacies we typically exercise at the interface, *QWOP* "jerk[s] our bodies out of the smooth rhythms" we expect to experience and "shift[s] our attention from perceived personal failings and back to the failings of larger ideological formation[s]... [like] a user interface [or] a digital platform."⁷³⁰ While, initially, our failure to move forward in *QWOP* indicates a personal inability to play the game, it ultimately reveals the limitations of recapitulating tired playable models and, furthermore, the failure of mainstream game design to imagine new kinds of movement.

Beyond critique, *QWOP* serves as a vector for precisely this kind of creativity. Whereas the walking simulator encourages us to explore virtual spaces, *QWOP* invites the player to explore the mechanisms of movement itself. Indeed, countless YouTube videos evidence a multitude of approaches to controlling *Qwop*'s bodily comportment – thousands of players experimenting with different input combinations and timings, all with varying results from the impressive to the hilarious. *QWOP*, then, does not merely have a singular, alternate grammar of action because, in practice, the game functions as a platform that enables the actualization of many grammars of action. In forcing us to relearn the very means by which we operate a game character – a contraction of the muscle, a push of the key, the development of new rhythmic synchrony – *QWOP* engenders a form of trial-and-error research into what this virtual body can do. No longer a vehicle for travel, therefore, *QWOP* reframes walking as a means of creative expression.

⁷²⁹ Anable, *Playing with Feelings*, 129.

⁷³⁰ Ibid.

Coda: Conquistadors of the Useless

Fitzcarraldo: To your dogs' chef! To Verdi! To Rossini! To Caruso!

Don Araujo: To Fitzcarraldo, the conquistador of the useless!

Fitzcarraldo: As truly as I stand here before you, someday I shall bring Grand Opera to
the jungle!

Werner Herzog, *Conquest of the Useless*, 2009⁷³¹

One can, of course, master *QWOP*. With a timer and a finish-line, the game contains both identifiable win conditions and a means of measuring success. I have completed the 100m race myself, albeit with a somewhat inelegant movement method, and various speed runners have competed for the best *QWOP* time, which currently stands at 45.53 seconds,⁷³² a record wrested from an artificial intelligence. But if the *QWOP* environment is so alien to our own, then what is the status of this skill?

To reiterate, the notion that play is without practical purpose owes much to German philosopher Friedrich Schiller. In 1794, he defined play as the purposeless expenditure of excess energy: when hungry, lions hunt; when sated, they roar aimlessly. This, he suggests, is the animal basis of aesthetics. A century later, Karl Groos took issue with this "Surplus Energy Theory of Play," offering a counter-example: young, emaciated polar bears – despite struggling to survive – still play. If not to expend excess energy – to let off steam – then what's the evolutionary point of play? For Groos, play is the means by which young animals acquire the skills, routines, and capacities – the habits – of their species. Animals don't play because they're young, they're young so that they can play.

⁷³¹ Werner Herzog, *Conquest of the Useless: Reflections from the Making of Fitzcarraldo* (New York, NY: Harper Collins, 2009), vii.

⁷³² "QWOP," *Speedrun*, accessed June 25, 2024, <https://www.speedrun.com/qwop>.

As Brian Sutton-Smith and Thomas Henricks have shown, Groos's instrumental theory of play set the tone for the twentieth century. Now, in the twenty-first century, this paradigm seems pervasive. From "serious games" for education to streamers who earn a living playing, and from "toy worlds" that train artificial intelligence to apps on our phones that promise to gamify work, play has become thoroughly useful. If we accept the thesis that there's no play without consequence, that we always end-up learning something, adapting, could we still locate a margin for excess, for the unproductive, for the radically useless?

One of the founding fathers of artificial intelligence research, John McCarthy, infamously popularized the notion that chess is the "drosophila" of AI.⁷³³ Just as fruit flies aid genetic science, chess is simple enough to formalize and experiment with mathematically, but complex enough to model problems that pertain to AI development more generally. Since the 1960s, however, various scholars have reflected on how this compatibility between chess and AI might have done more harm than good, overemphasizing deep searches through decision trees using minimax algorithms at the expense of other methods, and trammeling research into symbolic manipulation instead of, say, interactions with physical environments.⁷³⁴ As McCarthy himself put it many years later, the focus on making computers better at chess was as if the geneticists had concentrated on breeding racing drosophila: "We would have some science, but mainly we would have very fast fruit flies."⁷³⁵ Today, video games may well be the new drosophila for

⁷³³ McCarthy explains that the notion is not his own invention, speculating that he likely owes it to Alexander Kronrod, "who may have used it as a defense against physicists when they complained that he used so much of their precious computer time in a *mere* chess match." John McCarthy, "Chess as the Drosophila of AI," in *Computers, Chess, and Cognition*, ed. T. A. Marsland and J. Schaeffer (New York: Springer, 1990).

⁷³⁴ Nathan Ensmenger, "Is Chess the Drosophila of Artificial Intelligence? A Social History of an Algorithm," *Social Studies of Science* 42, no. 1 (2012): 5-30.

⁷³⁵ John McCarthy, "AI as Sport," *Science* 276, no. 5318 (1997): 1518–1519, 1518.

AI,⁷³⁶ and Wesley Liao's successful attempt to teach a program to break the former *QWOP* world record is exemplary.⁷³⁷ It's unclear what future advances this training will allow. For now, we simply have a very fast fruit fly – and, maybe, truly aesthetic AI.

In our age of gamification, all forms of play seem to have an ulterior aim. The proficiencies demanded by games like *QWOP*, however, have limited use. They foster abilities so distinct from practical reality, so alien to our prevailing regimes of valuation, so singular in application that, outside the games themselves, they are effectively useless. Perhaps play can be said to reprise its excessive status when the skills it produces are ultimately unproductive. At the very least, there is something untimely, perhaps even radical, about dedicating one's energy, one's labor power, and, indeed, one's life to the conquest of the useless.

⁷³⁶ Chloe Prince, "Why Video Games Are the 'Fruit Fly' of AI Research," *TheGamer*, accessed June 25, 2024, <https://www.thegamer.com/video-games-fruit-fly-ai-research/>.

⁷³⁷ Wesley Liao, "Achieving Human-Level Performance in *QWOP* Using Reinforcement Learning and Imitation Learning," *Towards Data Science*, accessed June 25, 2024, <https://towardsdatascience.com/achieving-human-level-performance-in-qwop-using-reinforcement-learning-and-imitation-learning-81b0a9bbac96>.

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