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For those who pretended a world into being, and those who made belief.

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ABSTRACT

The history of video games has been dominated by technological determinism, with scholars tracing a neat line from William Higginbotham's first game on an oscilloscope screen through more and more complex hardware to 2017's Nintendo Switch. In this dissertation, I tell the story of video games differently, from the premise that play itself had to be invented as a medium before designers, artists, writers, and engineers could explore its possibilities. While game pieces, accompanying text, and illustrated boards had previously been objects of artistic and commercial manipulation, it was only after the Second World War that the experience of play itself was intentionally shaped through the design of rules, goals, and game mechanics. Games became "graphs of a self-graphing world," as Mark Seltzer describes them, places where complex systems model and simulate their own workings. This dissertation uses playfulness to track the lineage that extends from the development of avant-garde games in the 1950s and 60s to the establishment of video games as the hegemonic form of play in the 1990s. Playfulness, I argue, involves an interpretive relation to play that can reveal the social commitments, aesthetics concerns, and historical contexts that gave rise to a new culture of games. In particular, I focus on four different kinds of playfulness: replayability, secrecy, trickiness, and fairness. Each of these categories is an interpretive response to an important series of questions that links the pleasures of specific games, to theoretical problems involved in conceptualizing play, and to a wider social world. In playfulness, a formal quality of games—its boundaries, rules, tension, or goals—itself becomes the topic to self-reflexively play with.

In each of my four chapters, I trace one strand of an aesthetic genealogy that runs from the mid-twentieth century to the present. In each chapter I begin with an experimental game that seems nearly unplayable because it lacks rules, goals, or mechanics. These works are all by artists

associated with Fluxus, which serves as a microcosm of postmodern aesthetics and as an exemplary engagement with game design. These works make explicit the implicit tensions within pervasive discourses of play. Each of my chapters explores a web of intellectual histories where the subtle metaphors of play start to matter and become literal. Fluxus works heighten the contradictions around play as a source of pleasure, and point forward to a new synthesis that I argue is achieved by the video games of the 1990s. These video games successfully internalize the tensions of the earlier avant-garde as a topic of playful uncertainty. Rather than a narrative of technical progress, my dissertation argues that the history of video games to the present has been an ongoing negotiation of play's aesthetic limits.

In Chapter One, "Replayability: Play without Truth," I stage the intellectual genealogy that brought games into the forefront of postwar thought. In the early twentieth century, games—especially chess—became crucial metaphors for understanding complex interacting systems. Chess showed how linguistic reference could be arbitrary and differential, in much the same way that a pawn's value depends on its position relative to other pieces. More broadly, games exemplified the inner working of complex systems in disciplines as diverse as anthropology, cybernetics, and psychology. These metaphors set the stage for a dialectical reversal in postwar thought. From postmodern theory to pop-psychology, playfulness was celebrated as an aesthetic of disruption, subversion, agency, self-reflection, change, and irony. Play's postmodern valences made new media, games, and hypertext fiction a promising subject of study in the 1980s and early 1990s, and the theoretical framework of contemporary game studies owes a direct and unacknowledged debt to this history whose repercussions I explore.

Having established a frame for my inquiry, Chapter Two, "Secrecy: Play without Reason" develops a full theory of playfulness. I examine its common definition in psychology and game

studies, and argue that they are too narrow to account for the multiple ways that playfulness manifests itself in ordinary life. One classic definition, for instance, holds that playfulness is a compound of spontaneity, manifest joy, and humor. As a counter example, I use this chapter to explore the ways that secrecy can be playful, while simultaneously being ritualized, hidden, and serious. My argument turns on a close reading of Yoko Ono's use of concealment to create absurd game instructions. Ono's strategy is to give clear but outlandish rules, while implying that the goal must remain a secret until the game is played. As a result, her work can often obscure the difference between violence, trauma, and play by turning the formal element of game goals into a self-reflexive topic for play. Ono fuses playful and sacred effects, which gives me an opportunity to examine how the two might be separated and specified. I develop a new definition of playfulness as genres of response to the uncertainty that animates games. Using this definition allows me to re-read the forces that motivate a player through the classic platforming game *Super Mario World* (1990), and display several kinds of unconscious and playful pleasures at work in the game.

Chapter Three, "Trickiness: Play without Rules" takes up the theme of uncertainty and explores what happens when uncertainty itself becomes an explicit, self-referential, theme of play. I begin with the rise of chance-based procedures in the art, writing, and music of the 1950s and 1960s, especially in the work of John Cage and his student George Brecht. In an essay titled "Chance-Imagery," Brecht argues that our ability to think about indeterminacy depends on the equipment of games, such as dice, cards, or roulette wheels that we use to embody chance. In *Water Yam* (1963), *Games & Puzzles* (1965), and *Deck* (1965) Brecht experiments with the limits of conceptualizing uncertainty, and what happens when games refuse to explain their ground rules. Brecht's aesthetic of trust and wit, where a seemingly impossible situation is salvaged at the last minute, became the guiding pleasure of adventure games. I look closely at a finely crafted example

of this genre, *King's Quest VI* (1992), to show how video games construct the bounds of their own uncertainty and model the forms of playfulness they expect.

I close in Chapter Four, on "Fairness: Play without End," because it shows how each type of playfulness that I have tracked arises from a social need. Play became a medium, I argue, because game logic is crucial to neoliberalism and postmodernity. Games are the concepts, metaphors, and ideologies without which the present would be unthinkable—whether that means game theory with its rational and strategic models of choice, or the naturalization of risk and precarity. In particular, this chapter examines a discourse of fairness during the civil rights era through the work of Benjamin Patterson. Patterson's games are miniature acts of civil disobedience that ramp up some small human action until it overwhelms a fragile bureaucratic system. His treatment of social action as a structured game, rather than inalienable rights, leads him to think about the differing capacities and constraints of certain bodies. He studies fairness rather than equality. This same balance comes up repeatedly in modern simulation games, such as *SimCity 2000* (1993), but with an emphasis on smooth operation rather than potential disruption. In both cases, fairness shows how a social contradiction or impasse can be worked out through playful strategies of response.

This dissertation advances and expands upon the growing rapport between video game studies and literary criticism. For nearly two decades, the two fields have been addressing the cultural importance of play in near isolation from one another. Literary critics have explored and teased apart a huge range of stylistic qualities that can make texts feel playful, but without a solid framework of what play and games look like as activities in their own right. Game scholars have developed a rich formal tradition for the elements of play and games, which in turn blinds them to the subtler shades of playfulness. While there are clear historical reasons for this divide, there is

also a deep continuity between the two traditions. By synthesizing literary methods with game studies, my project identifies an aesthetic and cultural commitment to playfulness that begins after the Second World War and continues into the present. It is part of my broad interest in the aesthetics of play and games in the 20th century, as they get taken up as disciplinary topics, objects of technical development, and models of thought.

INTRODUCTION
Interpreting Play

If I were to write a playful opening sentence to this dissertation, how would you know? Now that you have read the sentence, can you tell if it was playful or not? What would make you suspect, and what would make you sure? Playfulness is a flighty thing, difficult to spot and hard to control. A playful thing is not like a hard thing: you cannot rap your knuckles on it to check. Nor is being playful like being angry: I can be playful without feeling it. Playfulness is more like a spirit that can pervade anything whatsoever. We can be playful people, behave playfully, speak playfully, think playfully, and so can other animals. Cultural objects can also be playful, as when a novel berates its reader, or a camera moves whimsically through space. An organization can be playful, if it is put together in the right way, and so can a ritual or institution. Even natural phenomena like the movement of light in dust or the swirling of eddies can be playful. Playfulness is neither a subjective part of us, nor something objective out in the world—it is an aesthetic experience that crosses these domains and confuses them. It is a particularly ambiguous and mercurial aesthetic experience, one that delights in obfuscation and slippery wordplay. It can repeat the most serious pronouncement word for word to mock and caricature it, or simply neutralize the meaning of a banana it in order to make-believe that it is a telephone. All of this makes playfulness difficult to understand, and still more difficult to interpret. Understanding and interpreting it are the tasks of this dissertation.

My approach is informed by two research programs that tried to come to grips with playfulness and failed. The first is postmodern literary criticism's treatment of aesthetics. Beginning in the 1970s, scholars began to talk about various stylistic qualities of postmodern fiction as forms of play. They connected metafictionality, the fantastic, exaggerated speech, pastiche, intertextuality, arbitrary compositional rules, and bawdy humor into a single aesthetic

program united by playfulness.[1] In a second step, playfulness was often linked to poststructuralist theories of meaning, where play was a key term for indeterminacy and freedom. In a quick and slippery equation, the formal qualities of novels and poetry that critics identified as playful became signs of subversive political potential, an emancipatory freedom for the reader, and an escape from the closure of ideology.[2] Not only is this a disappointingly vague and procrustean argument, but it also siphons out the qualities that make playfulness unique. While literary critics pointed to a real experience of playfulness, often through beautifully detailed close readings, the slipperiness of the concept got the better of them. Now that postmodern theory has fallen out of academic fashion, these books and articles have become obscure and unread. One of the goals of my project has been to return to this criticism with fresh eyes and a new framework, to see what can be rescued from its struggle with playfulness.

Video game scholarship has tried to deal with playfulness through formal definition. Game studies developed in the early 2000s as a field interested in defining the medium-specific qualities

[1] For methodological reasons that will become clear in Chapter One, the literary tradition that explores the playfulness of tropes, style, and narrative in writing does not get explicit attention in this dissertation. Nonetheless it forms an important background to my work. The most important works for my approach are Mihai Spariosu, *Literature, Mimesis, and Play: Essays in Literary Theory* (Tübingen: G. Narr, 1982); R. Rawdon Wilson, *In Palamedes' Shadow: Explorations in Play, Game and Narrative Theory* (Boston: Northeastern University Press, 1990); Warren F. Motte, *Playtexts: Ludics in Contemporary Literature*, Stages (Lincoln: University of Nebraska Press, 1995); Steven D. Scott, *The Gamefulness of American Postmodernism: John Barth & Louise Erdrich* (New York: Peter Lang, 2000); Kimberly Bohman-Kalaja, *Reading Games: An Aesthetics of Play in Flann O'Brien, Samuel Beckett and Georges Perec* (Champaign, IL: Dalkey Archive Press, 2007).

[2] These are common moves in even the best work, but in particular see James S. Hans, *The Play of the World* (Amherst: University of Massachusetts Press, 1981); Allen Thiher, *Words in Reflection: Modern Language Theory and Postmodern Fiction* (Chicago: University of Chicago Press, 1987); Louis Marin, *Utopics: The Semiological Play of Textual Spaces* (Amherst, NY: Humanity Books, 1990); Ruth E. Burke, *The Games of Poetics: Ludic Criticism and Postmodern Fiction* (New York: Peter Lang, 1994); Brian Edwards, *Theories of Play and Postmodern Fiction* (New York: Garland Publishing, 1998).

of games and formalizing the complex systems that compose them. In the last few years a counter-trend has developed within game studies that emphasizes the importance of play and playfulness as a part of how players construct meaning.[3] I admire these attempts, however, they remain in the shadow of the formalist history of the field. Typically game scholars conceive playfulness in a privative sense—as whatever is left over once the formal qualities of games and the agential qualities of play have been subtracted. While this approach solves some of the theoretical problems of the postmodern literary account by centering and defining play, it leaves playfulness as an anemic remainder and none of the thick descriptions of playful experience remain.

The version of playfulness that I will develop over the next four chapters differs from the formulations of postmodernists and game studies scholars in two key ways.[4] First, I understand playfulness to have a well-articulated structure all its own. By this I mean that playfulness is organized at a higher level than the grab bag of stylistic tricks attributed to postmodern authors, and that this organization is not the undifferentiated remainder of games or play. We are missing important mid-level categories for playfulness that would provide interpretive tools to both literary criticism and game studies. I argue that there are major genres of playfulness that correspond to, but differ from, major genres of games. These genres can be described through aesthetic categories like fairness, festivity, or wit. Second, I differ from the two earlier accounts in understanding the genres of playfulness to be historical, and to have emerged in recent history. I am interested in the ways that the sense of playfulness arises from particular contexts, and may or may not line up

[3] Patrick Jagoda and Peter McDonald, "Game Mechanics, Experience Design, and Affective Play," in *The Routledge Companion to Media Studies and Digital Humanities*, ed. Jentery Sayers (New York: Routledge, 2018), 174–82.

[4] There is growing support for this kind of work in game studies. For an example of a similar approach to my own, but one that looks at the contexts surrounding game usage, see Stephanie Boluk and Patrick LeMieux, *Metagaming: Playing, Competing, Spectating, Cheating, Trading, Making, and Breaking Videogames* (Minneapolis: University of Minnesota Press, 2017).

between people. These commitments lead to some complex considerations and ramifications for a theory of playfulness, so let me sketch each one out in a little more detail.

An Era of Designed Play

I wrote a moment ago that playfulness is structured and differentiated like genres of games. However, this is a rough approximation, and only becomes more precise through a certain understanding of genre. One of the central formal traits of games is that they are organized around an uncertainty that keeps play interesting and exciting. That uncertainty can be generated by putting well matched opponents into competition, by introducing randomness into a deck of cards, or through a hundred other mechanisms that games constantly invent. One way of thinking about game genres, then, is to group them by the kind of uncertainty that organizes play.[5] At its simplest, the version of playfulness that I am presenting is the flip side of thinking about game genres this way: playfulness is a particular way of dealing with and responding to uncertainty, and there are multiple genres of response just as there are genres of production. From this perspective, the three terms of my subtitle, "Hermeneutics, Aesthetics, Games," are not separate topics, but three ways of treating uncertainty. Games are the formal structures that provoke uncertainty, aesthetics asks whether that uncertainty is organized to make the game exciting, and hermeneutics deals with a player's strategies and responses to that uncertainty.

Matters get more complicated yet, because some kinds of ludic uncertainty can be self-reflexive. As an object of analysis, rather than something enacted, play involves all sorts of complications and uncertainties, some of which are paradoxical or unresolvable. Consider, for

[5] For an example of this approach to taxonomy, see Greg Costikyan, *Uncertainty in Games* (Cambridge: MIT Press, 2013).

instance, Wittgenstein's skeptical account of rule-following: that as long as I come up with the correct answer, it is impossible to tell with complete certainty whether I am correctly following a rule, because testing the process only involves the further application of rules. Wittgenstein develops this paradox in terms of mathematics (adding 2 + 2), following directions on a work site, and following the rules of a game, among several other cases.[6] This is an example of an uncertainty about play. So on one side, we have games that are organized around genres of uncertainty, and on the other we have uncertainties that shape our understanding of games. The central theoretical argument of my dissertation is that these two elements can come together—that games are often organized around uncertainties about their own nature. This has as many consequences for games, play, and playfulness as metafiction has for novels, but the consequences remain unexplored for games.

Games provide endless experiences of uncertainty, from conceptual problems about the nature of rules to the uncertainty about whether I can beat an opponent at chess. However, a change in how games are produced makes self-reflection newly important in the latter half of the twentieth century. For much of human history, games were products of a whole community, and they evolved and changed according to local custom and ad hoc adjustments. In the eighteenth and nineteenth centuries, games and toys became marketable commodities, made by individuals or companies. Game makers focused attention on the visual and tactile qualities of these games, producing beautifully illustrated boards and exquisite pieces while more or less repeating the same simple mechanic of racing to be the first across a finish line.[7] Even in the early twentieth century,

[6] Ludwig Wittgenstein, *Philosophical Investigations*, trans. GEM Anscombe, P.M.S. Hacker, and Joachim Schulte (Chichester, West Sussex: Wiley, 2009), 80-81/§198-201.
[7] For a collection of such games see Ellen Liman, Arthur L. Liman, and A. Robin Hoffman, *Georgian and Victorian Board Games: The Liman Collection* (New York: Pointed Leaf Press,

after the playground movement and the child study movement had centered the importance of play, changes to the rules and organization of games were primarily pedagogical and utilitarian.[8] It is only after the Second World War that designers, artists, writers, and engineers began to understand play as an experience that could be shaped and colored in its own right. Rather than a simple means for some other end, play became a medium for experimentation and invention.

The transition between these two moments—from a taken-for-granted experience to a designed one—is most clearly visible in the contrasting ways that different generations of artists adapted the game of chess. In 1944, Julian Levy hosted a show at his New York gallery called "The Imagery of Chess." Levy had been responsible for introducing the Surrealists to an American audience, and the show included a wide cast of established and upcoming avant-garde artists from the first half of the century, including Marcel Duchamp, John Cage, Man Ray, André Breton, Max Ernst, Alexander Calder, Yves Tanguy, Ossip Zadkine, Roberto Matta, and two dozen others.[9] Many of these artists produced new artwork specifically for the show, while others exhibited pieces that showcased the ongoing influence of chess in their approach. There were paintings of chess players, surreal chess landscapes, sculptures of anthropomorphized chess pieces, and several novel and finely crafted chess sets. What was decidedly missing from the show was any reinvention of

2017). For a typology of early board game rules, see David Parlett, *The Oxford History of Board Games* (Oxford: Oxford University Press, 1999).

[8] Behind this change is a broader shift in the ideology surrounding leisure time in American culture, which itself has complex economic and political causes. For an account of the ideological shift in leisure and play, see Susan Currell, *The March of Spare Time: The Problem and Promise of Leisure in the Great Depression* (Philadelphia: University of Pennsylvania Press, 2010); Victoria W. Wolcott, *Race, Riots, and Roller Coasters: The Struggle over Segregated Recreation in America* (Philadelphia: University of Pennsylvania Press, 2012); Benjamin Hunnicutt, *Free Time: The Forgotten American Dream* (Philadelphia, PA: Temple University Press, 2013).

[9] Larry List and Ingrid Schaffner, *The Imagery of Chess: Revisited* (New York: George Braziller, 2005), 2.

the game or rules of chess.[10] Chess was serious enough to be an inspiration for important work, but working on play as a medium was impossible to imagine for even the most experimental thinkers of the generation.

Fast forward two decades to the 1960s and we find a dramatic reversal of this state of affairs. Artists in the experimental collective Fluxus not only produced new ways of playing chess, but several of them made chess sets to actively disrupt play. Robert Filliou's "Optimistic Box No. 3," for instance, consists of a chess board without pieces and with two labels affixed. The label on the outside reads: "so much the better if you can't play chess," and on the inside it continues, "you won't imitate Marcel Duchamp."[11] Fluxus artists invented dozens of new toys, puzzles, and games, and they were by no means alone. Several other avant-garde art movements, such as OuLiPo and the Situationists, took up games and play as experimental tools. Board games were growing in popularity and being designed with a wider range of mechanics; wargaming and sports simulation clubs were springing up across the country; tabletop roleplaying was born; and the New Games movement invented several large scale non-competitive games and sports that are now used in elementary school classrooms across North America.[12] The development of the first video games

[10] The same can generally be said of chess in the broader public. Chess had been the subject of some minor rule variants—particularly alternate board arrangements to accommodate more players—in the early decades of the twentieth century. These became increasingly common, and increasingly designed with an eye toward changing the dynamics of chess by those with expert knowledge of the game. Bobby Fischer designed a variant to disrupt the regularity of chess openings, for instance, called *Chess960* (1996). The trend continues today with several video game-based re-imaginings of chess such as *Chess 2* (2014) and the upcoming chess themed game jam. For a survey of these variants, see David Pritchard and John D Beasley, *The Classified Encyclopedia of Chess Variants* (Harpenden, Herts: Beasley, 2007).

[11] Anders Kreuger and Irmeline Lebeer, *Robert Filliou: The Secret of Permanent Creation* (Milano: Mousse Publishing, 2017), 139.

[12] For a historical account of these developments, see Andrew Fluegelman, *The New Games Book: Play Hard, Play Fair, Nobody Hurt* (Garden City, NY: Dolphin Books, 1979); Jon Peterson, *Playing at the World: A History of Simulating Wars, People and Fantastic Adventures, from Chess to Role-Playing Games* (San Diego: Unreason Press, 2014); Tristan Donovan, *It's All*

during the same period is only one symptom of the burgeoning and pervasive importance of play for American culture.

Despite the range of possible examples to illustrate the birth of designed play, Fluxus artists have a special place in this dissertation and in my larger argument. Fluxus was the name taken by a loose collection of artists in the early 1960s, from the US, France, Germany, Japan, South Korea, and several countries in Eastern Europe. To the extent that they shared an approach, it was one that broke with the traditional art world by disrupting the boundaries that separated the spectator from the work, that made art expensive and untouchable, and that placed it in designated gallery spaces.[13] Fluxus went out into the world, brought strangers and stragglers into its proto-performance work, and engaged people's bodies in smelling, rubbing, dragging, and injuring through art.[14] It worked to destroy the cult of artistic skill by making art that was simple, both in the sense that it was often composed of cast-offs and ready-to-hand materials, and in the sense that it used humor and spectacle to make its point readily accessible. Fluxus artists were united by a spirit of minimalism, jest, sensuality, and irreverence that pervaded their otherwise diverse artistic practices.[15] They also innovated two major forms, the multiple and the event-score. The brain-child of Lithuanian ex-pat George Maciunas, Fluxus multiples were an attempt to mass-produce artworks made of cheap materials, and to sell them through mail order catalogs and at a Fluxus storefront.[16] Packaged in plastic boxes with stylized covers designed by Maciunas, these objects

a Game: The History of Board Games from Monopoly to Settlers of Catan (New York: Thomas Dunne Books, 2017).

[13] Gavin Parkinson, "The Duchamp Code," in *From Diversion to Subversion: Games, Play, and Twentieth-Century Art*, ed. David Getsy (University Park: Penn State Press, 2011).

[14] Hannah Higgins, *Fluxus Experience* (Berkeley: University of California Press, 2003).

[15] David Doris, "Zen Vaudeville: A Medi(t)ation in the Margins of Fluxus," in *The Fluxus Reader*, ed. Ken Friedman (Chichester, West Sussex: Wiley, 1998).

[16] Stephen Bury, *Artists' Multiples* (Aldershot UK: Ashgate, 2001), 22-27.

gave artists a form in which their audience could have an intimate encounter with an artwork and not worry about it breaking. Event scores were portable written instructions for performance works, which were shared and re-interpreted by other artists at concerts and shows. They give instructions, sometimes impossible ones, and command a reader to act in silly, irreverent, and uncommon ways.

For many Fluxus artists the ideal objects for accomplishing these goals were games, jokes, and toys because they are participatory, mass cultural, and humorous.[17] What sets Fluxus artists apart from other avant-garde traditions that also made use of play, I argue, is that they were simultaneously working to undermine and disrupt the very elements of games that they were borrowing from. Games were too goal directed, too rule-bound, too autonomous, or too abstract to quite fit with Fluxus aesthetics, and these artists were not afraid to become game designers in order to alter those effects. By doing so, Fluxus artists produced some of the most wide-ranging explorations of what games could be, and did so at the inaugural moment of designed play.[18] Moreover, they often theorized this practice specifically in terms of playfulness. Ken Friedman, for instance, building on Dick Higgins' enumeration of Fluxus principles, describes the playfulness

[17] For a general discussion of the relationship between Fluxus and play, see Garnet Thorne, "Winning Isn't Everything: Fluxus Play, Games, and Gags in the Era of the Spectacle"(MA thesis, University of Illinois at Chicago, 2003); Claudia Mesch, "Cold War Games and Postwar Art," *Reconstruction: Studies in Contemporary Culture* 6, no. 1 (2006), accessed May 12, 2016 https://reconstruction.eserver.org/061/mesch.shtml; Owen Smith, "Dick Higgins, Fluxus, and Infinite Play: An 'Amodernist' Worldview," in *From Diversion to Subversion: Games, Play, and Twentieth-Century Art,* ed. David Getsy (University Park: Penn State University Press, 2011), 118-31; Natasha Lushetich, "Ludus Populi: The Practice of Nonsense," *Theatre Journal* 63, no. 1 (2011); Tim Stott, *Play and Participation in Contemporary Arts Practices* (New York: Routledge, 2015), 22-35.

[18] I focus on the term design for a few reasons. It is representative of a new way of looking, especially at children, that emerged in the 1950s and 60s; Fluxus' aesthetics leaned heavily on graphic and industrial design; and it provides a through line into the contemporary practices of game designers. At the same time, play was written, engineered, imagined, and much more. For context see, Amy Ogata, *Designing the Creative Child: Playthings and Places in Midcentury America* (Minneapolis: University of Minnesota Press, 2013).

that runs through many otherwise disparate works:

> *Playfulness* has been part of Fluxus since the beginning. Part of the concept of playfulness has been represented by terms such as 'jokes', 'games', 'puzzles' and 'gags'. This role of gags in Fluxus has sometimes been over emphasized.... Art was so heavily influenced by rigidities of conception, form and style that the irreverent Fluxus attitude stood out like a loud fart in a small elevator. The most visible aspect of the irreverent style was the emphasis on the gag. There is more to humour than gags and jokes, and there is more to playfulness than humour.... There is the play of ideas, the playfulness of free experimentation, the playfulness of free association and the play of paradigm shifting that are as common to scientific experiment as to pranks.[19]

Friedman represents playfulness as a subtle and pervasive spirit, one that can be hard to perceive against the loud and smelly fart of play, but which resonates across a whole approach and attitude towards creative making. Playfulness inheres in the gag, and in more subtle humor, but it can also be found in places that are not funny at all, where it names something like change and movement.

My two arguments about the articulated structure of playfulness and its history meet and interact in Fluxus. If, as I am arguing, the post-war moment newly understood play to be a designable range of experiences that could be manipulated through technical means, then designers would have to deal with uncertainties in the concept of play. This is even truer for artists who pushed at and investigated the limits of play and games. These investigations of play as a medium made new uncertainties available as topics to play with, and produced new game genres. Reciprocally, novel genres of playfulness developed alongside these design problems as lived practices that responded to organizations of uncertainty. It is this historical change towards the aesthetics of playfulness in an era of designed play that sets the dates and topic for my project. By investigating experimental forms of playfulness during the early days of this transformation,

[19] Ken Friedman, "Fluxus and Company," in *The Fluxus Reader,* ed. Ken Friedman (Chichester, West Sussex: Wiley, 1998), 249. The original set of aesthetic principles that Friedman draws on can be found in Dick Higgins, "Fluxus: Theory and Reception," in *The Fluxus Reader,* ed. Ken Friedman (Chichester, West Sussex: Wiley, 1998).

beyond the ordinary limits of play and games, Fluxus offers a glimpse into a range of possibilities that had not yet solidified in any one direction.

Fluxus artists set the stage for new kinds of playfulness, but video games developed the nascent trends of experimental play into common, shared, and commercialized genres. If the 1950s and 60s witnessed the growing importance of play as a methodological tool, a site of academic inquiry, and an object of technical development, video games represent the hegemonic consolidation of those practices in the present. In order to track the development of playfulness, I thus take a close look at several video games. In particular, I turn to some of the most popular games of the late 1980s and early 1990s for paradigmatic examples of mass cultural play, before the recent process of cultural legitimation began to shape game design. While the past decade has been an important one for experimental trends in video games, with the rise of serious games, art games, and independent tools for game production, I aim to show the continuity between the earlier avant-garde explorations and the most childish, technocratic, and violent forms of play.[20] The pleasures and provocations of playfulness are not only reserved for a knowing and practiced audience. They are pervasive and distributed, the subject of barroom banter and Hollywood scandal.[21] The silly, gross, and dark pleasures of video games might even carry on some parts of the Fluxus spirit more successfully than their more serious and aspirational counterparts.

The overarching ambition of this project is to develop a better account of how we go about

[20] For an account of the experimental trends in contemporary video games and how they might be continuous with the ethos of the historical avant-garde, see Brian Schrank, *Avant-Garde Videogames: Playing with Technoculture* (Cambridge: MIT Press, 2014).

[21] A recent and public example demonstrates how playfulness can be violent, confusing to interpret, and a screen for other motives: Steve Rose, "Mork and Mindy Star Pam Dawber: 'Robin Williams Flashed Me and Groped Me – It Was so Much Fun,'" *The Telegraph*, March 21, 2018, https://www.telegraph.co.uk/tv/2018/03/21/mork-mindy-star-pam-dawber-robin-williams-flashed-groped-much/.

interpreting play. Playfulness is just this process of interpretation. As is probably obvious at this point, this involves several subsidiary goals: to develop a typology of the contemporary forms of playfulness, to theorize that playfulness, to historicize game design practices, to give good readings of particular games. All of these efforts are directed towards revising the faulty and undertheorized assumptions about play that have emerged from postmodern aesthetics and contemporary game studies. Playfulness is my primary tool because it represents concrete, shared, and detailed interpretations of play. By thinking from playfulness we can get to a different methodological starting point. It will require overturning some major assumptions about play and games, assumptions that have deep roots and layered histories. Rewriting this history to set play on a newly interpretive foundation will take the work of many scholars. My project seeks to clarify the tasks and methods for this enterprise, identify the most significant conceptual problems that it raises, and offer some initial solutions.

PLAY, GAME, PLAY STYLE, PLAYFULNESS

With the cardinal directions of my project set out, it is time to take a step back and define four key terms that will come up repeatedly: play, game, play style, and playfulness. These terms are closely related; the first two are the subject of some heated debate, while the second two are their less discussed cousins. We can understand the family resemblance between these four terms as analogous to the grammatical relation between verb, noun, adverb, and adjective, with each highlighting related, but distinct, elements of a single phenomenon.

***Play*.** One of the first robust definitions of play comes from the germinal work of Dutch historian Johan Huizinga. In *Homo Ludens*, he writes that play is

> a free activity standing quite consciously outside 'ordinary' life as being 'not serious,' but at the same time absorbing the player intensely and utterly. It is an

> activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner.[22]

In the decades since, every one of these determinations has been challenged on one ground or another: because play can be used to make money in sports, or because people can be coerced into playing, and so on.[23] Even Huizinga suggests that his own conception of play comes out of a particular European etymology, and that other cultures might understand play in significantly different ways.[24] Perhaps more importantly, many of the qualities that Huizinga attributes to play have slowly migrated to the concept of game. Rules, spatial and temporal boundaries, and an invented system of values all seem more at home in the formal system of a game. The result of this leeching is that play ends up more or less synonymous with a simple sense of freedom without any particular content.

Now, I do think that there is a good argument to be made about the form of play, and that this form is quite close to what Huizinga advocates. However, I have made that argument elsewhere, and here I only need a sparse theory of play that does not require the reader to commit to any particular definition.[25] Play, as I use it throughout my dissertation, is simply an activity. It is more or less distinguishable from other activities, and it may have some qualities that mark it out contextually, but I do not assume that it always possesses any particular trait or essence. What

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[22] Johan Huizinga, *Homo Ludens: A Study of the Play-Element in Culture* (Boston: Beacon Press, 1950), 13.

[23] Huizinga has provided a touchstone for generations of play scholars—for a summary of the disagreements, see my forthcoming essay, "Homo Ludens: A Renewed Reading," in the *American Journal of Play*.

[24] Huizinga, *Homo Ludens*, 28-9.

[25] Play's resistance to definition is well known enough to have become something of a joke even before video game studies tried its hand at the project. For example, Helen B. Schwartzman, *Transformations: The Anthropology of Children's Play* (New York: Plenum Press, 1978), 302-4. My argument is that Huizinga is actually arguing for a phenomenological description of play that is indifferent to the specifics of games. McDonald, "Homo Ludens: A Renewed Reading."

it *does* have is the intentional character of an act: it points both to a player who plays, and a thing which is played-at. In its activity, as Huizinga says, play lays down a pattern that can be repeated, so that even the most aimless child's play becomes "a new-found creation of the mind, a treasure to be retained by the memory."[26] This means that it is impossible to separate play entirely from games; the first always implies the second to some degree.

Game. As with my sparse definition of play, I remain relatively agnostic about the definition of games, though for other reasons. While play has shrunk, games have bloated. Their definition must speak of rules, mechanics, goals, systems, boundaries, balance, and much else.[27] Game scholars also tend to separate out games from other things that are played, like puzzles and toys. In this typology, puzzles are similar to games but have a single correct answer, while toys are like games without a fixed goal. One of the central questions that the Fluxus artists I study ask, however, is precisely how necessary these distinctions and formal elements are. While most or all of the games we have played in our lives likely have rules, does that mean rules are a definitional feature of games? This is not an idle question, but one that Fluxus artist George Brecht poses within an experimental game and through an elaborate design strategy of his own. Rather than prejudge the answer, I want to let it unfold chapter-by-chapter through my readings of experimental games and the aesthetic problems they raise.

That said, I do understand games to be systems composed of many of the elements listed above. It is just that I do not think that the parts of the system are enough to decide whether something is a game or not. Ultimately, I see nothing that formally distinguishes the system of a

[26] Huizinga, *Homo Ludens*, 9.

[27] There are any number of definitions to draw on here. Perhaps the most widely used one states that "a game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome." Katie Salen-Tekinbaş and Eric Zimmerman, *Rules of Play: Game Design Fundamentals* (Cambridge: MIT Press, 2004), 5.

game from any number of complex systems in the modern world, things that range from practicing mathematics to betting on the stock market. My view is that the only quality that makes a system into a game is that it is, or has been, played.[28] On this reading, whether or not something is a game is fundamentally a contextual question, and so my definition of games is purposefully broad. In the same way that play cannot be separated from games, games cannot be understood except through play. One is the act, the other the repeated form that act takes, and I will often speak of 'play and games' together.

Play style. Rather than the question of what play and games are in their essence, this dissertation is primarily concerned with how they get deployed. To that end, the following two concepts—play style and playfulness—are central. Play style is a relatively minor and underdeveloped term in the game studies literature, and one that is typically used to organize major demographic breakdowns between players. In a classic essay on the subject, "Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs," Richard Bartle argues that a genre of game called 'multi-user dungeons' or MUDs attracts four different types of players.[29] "Killers" enjoy having power over others, "socializers" play to interact with others, "achievers" test their skill against goals set by the game, and "explorers" like to discover and push the limits of the game system. Other scholars have built more elaborate typologies on top of this one, or developed their own

[28] This stands in contrast to David Golumbia's recent argument that video games lack play, and McKenzie Wark's assertion that "the game, unlike play, is relatively easy to define. Play is what is excluded from any definition of game to give it the appearance of self-consistency." David Golumbia, "Games Without Play," *New Literary History* 40, no. 1 (2009); McKenzie Wark, *Gamer Theory* (Cambridge, Mass.: Harvard University Press, 2007), 256n90.
[29] Richard Bartle, "Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs," in *The Game Design Reader: A Rules of Play Anthology*, ed. Eric Zimmerman and Katie Salen-Tekinbaş (Cambridge: MIT Press, 2006).

breakdown in relation to different game genres.[30] Distinctions between play styles also arise organically within play communities themselves, which develop a language for talking about the major trends in a game. For example, a lexicon has developed for multiplayer first-person shooter games to differentiate 'camping' from 'run-and-gunning' from 'sniping' and so on.[31] Being able to recognize and differentiate styles is a major part of experiencing play. Whenever a writer describes one chess player as meticulous and another as intuitive, she is commenting on play style; whenever an e-sports announcer describes a move as particularly daring, she is distinguishing a stylistic feature; whenever I think that my teammate is being too nice to our competition, I am worrying about style. It is a ubiquitous part of play.

It also remains under-theorized, in part due to the limitations inherent to the typological approach to play style. This approach lacks the fine-grained distinctions that would allow us to ask how and why just *these* ways of playing become dominant, and makes it difficult to see nuance within each type. Typologies also tend towards a psychological model that makes an individual player the proper unit of analysis. Linking play style to an individual preference—with an assumed basis in character structure, identity, social position, life history, and so on—explains both too much and too little. On the one hand, it is too broad to account for the ways that a person's play style might change over the course of a year, a day, or a single game. An individual might be a

[30] Chris Bateman and Richard Boon, *21st Century Game Design* (Hingham, MA: Charles River Media, 2006), 13-33; Christy Dena, "Emerging Participatory Culture Practices: Player-Created Tiers in Alternate Reality Games," *Convergence* 14, no. 1 (2008); Bart Stewart, "Personality and Play Styles: A Unified Model," *Gamasutra,* September 1, 2011, accessed April 15, 2018, https://www.gamasutra.com/view/feature/6474/personality_and_play_styles_a_.php; Boyan Bontchev and Olga Georgieva, "Playing Style Recognition through an Adaptive Video Game," *Computers in Human Behavior* 82 (2018).

[31] Hector Postigo, "Playing for Work: Independence as Promise in Gameplay Commentary on Youtube," in *Media Independence: Working with Freedom or Working for Free?,* ed. James Bennett and Niki Strange (New York: Routledge, 2015), 209.

'killer' early in the evening because of residual stress from work and become a socializer later on, as she unwinds into the night. On the other hand, it is too narrow to account for the ways that group identity matters to play style. The way someone plays can be more productively understood as more collective than individual preference or choice, something into which a player is acculturated or co-opted. Sports teams, for example, develop shared styles through the direction of a coach, through the interplay of individual strengths and weaknesses, or because they are trying to live up to fan expectations. Distinct approaches can come out of other affiliations too: one town's athletes may be known for their rough and physical play, another for their graceful finesse; or as Thomas Malaby describes, different gambling games might come to organize distinct cultures of risk within a single town.[32] Gender and race also occupy important roles in creating cultures that can positively and negatively shape the experience of play.[33]

A more nuanced theory of play style comes from literary critics Edward Wesp and Eric Hayot, who describe it as roughly equivalent to the strategy a player pursues.[34] When strategies are equally balanced there is nothing in the game to determine the choice of one over another, and so that choice comes down to an expressive difference of style. However, this formulation tells us little more than the fact that a certain strategy is viable within the game, and that it is one among many. It does not tell us the meaning of the strategy to a player. Moreover, if style is about choosing between possibilities that do not impact the outcome of the game, then there are a whole range of

[32] Thomas M. Malaby, *Gambling Life: Dealing in Contingency in a Greek City* (Champagne: University of Illinois Press, 2003).
[33] Iris Marion Young, "Throwing like a Girl: A Phenomenology of Feminine Body Comportment Motility and Spatiality," *Human Studies* 3, no. 1 (1980); Kyra Danielle Gaunt, *The Games Black Girls Play: Learning the Ropes from Double-Dutch to Hip-Hop* (New York: New York University Press, 2006).
[34] Eric Hayot and Edward Wesp, "Style: Strategy and Mimesis in Ergodic Literature," *Comparative Literature Studies* 41, no. 3 (2004).

other elements that should be included alongside strategy.[35] The rhythm with which I bounce a ball, jump rope, or press buttons might differ from another player without conferring an advantage or disadvantage. I mash buttons in a fighting game, you tap them at regular intervals, and we come out even. Or, the metaphors that we use to think about the otherworldly physics of a game might differ—you imagine the avatar as a ball of hard putty, I think of it as an artist's maquette.[36] There are dozens of other such categories in the gestures we use, the uniforms we wear, the fantasies we enjoy. These do not rise to the level of a strategy that organizes my play, but they nonetheless color and shape it. If the concept of play style is broadened to include such features, however, it must also be distinguished from style more generally.

Taking all of this into account, I define play style as: a player's manner of instantiating the formal elements of play in a way that makes it possible to participate in a particular game or range of games. Play style is agnostic about what those formal features are; it only cares about the different ways they can be put to use. Take, for instance, the quality of freedom that is crucial for many theories of play, where the player must feel that she is joining a game of her own accord. Now, each player will have different conditions that need to be met for her to feel free. One will

[35] For some initial steps toward this sense of play style, see Thorsten Botz-Bornstein, "Hermeneutics of Play – Hermeneutics of Place: On Play, Style, and Dream," in *Hermeneutics, Space, and Place,* ed. B. Janz (New York City: Springer Publishing, 2016); Wolfgang Iser, *The Fictive and the Imaginary: Charting Literary Anthropology* (Baltimore: John Hopkins University Press, 1993), 267-9. For a broader sense of how to conceptualize styles of practice, see Michel De Certau and Pierre Mayol, *The Practice of Everyday Life* (Minneapolis: University of Minnesota Press, 1998); Sherry B. Ortner, "Theory in Anthropology since the Sixties," *Comparative Studies in Society and History* 26, no. 1 (1984). For examples of style and practice, particularly in relation to leisure time activities, see Sherry B. Ornter, *Life and Death on Mt. Everest: Sherpas and Himalayan Mountaineerin*g (Princeton, NJ: Princeton University Press, 1999): Loïc Wacquant, *Body & Soul* (Oxford: Oxford University Press, 2004).

[36] Doris Rusch gives a useful account of how such bodily metaphors shape play experiences. Doris C. Rusch, *Making Deep Games: Designing Games with Meaning and Purpose* (Boca Raton, FL: CRC Press, 2017), 53-58.

need to act violently as a way to feel free of social norms, another will feel violence as an intrusion on her personal autonomy and need to exclude it from play, a third will need others to support her actions, and a fourth will balk at such support as a limitation on her agency. Each of these different modes of freedom make play formally possible, but also direct the kinds of game a player will choose to engage in and the manner in which she will participate. A player who feels constrained by physical violence may still take part in a violent game like rugby, so long as a style of play that avoids violence remains open to her. Equally important, this version of play style helps us see its meaning for a player, by measuring the distance between the actual way people act and a generic attribute of play. Where Wesp and Hayot see only equally valid and interchangeable strategies, my definition keeps that freedom of choice and adds a frame of reference from which it can be evaluated. By diverging from a generic sense of freedom, the need to be violent stands out as meaningful.

Playfulness. In most respects, the version of playfulness that I advocate looks like play style. It is similarly composed of motley elements—rhythms, strategies, table talk—that are distinct from both play and games, and have a higher degree of flexibility and ambiguity. Playfulness, however, differs from play style in two important ways. First, play style is empirical while playfulness is not. It is in principle possible to determine how a player or team approaches a game by studying it closely enough. Playfulness, by contrast, always has an aesthetic dimension that rebuffs adequate evidence.[37] If you say that you are being playful, and I feel you are being

[37] While the aesthetic dimension of playfulness is not well-studied, there are some important starts towards such a concept. See, for instance, Roslyn Wallach Bologh, "On Fooling Around: A Phenomenological Analysis of Playfulness," *The Annals of Phenomenological Sociology* 1 (1976); Joseph J. Feeney, *The Playfulness of Gerard Manley Hopkin*s (Burlington, VT: Ashgate, 2008); Mary Flanagan, "Playful Aesthetics: Toward a Ludic Language," in *The Gameful World: Approaches, Issues, Applications*, ed. Steffen P. Walz and Sebastian Deterding (Cambridge: MIT Press, 2014).

offensive, we may be at an impasse where no further evidence can change those feelings. We might simply have different lenses for what counts as playful, even as we feel that everyone else should agree with our account. Developing a good theory of playfulness does not mean reducing this interpretive disconnect, but holding onto it and showing how it is generated by different historical and contextual conditions that give rise to our conflicting interpretations.

The second difference between play style and playfulness is that play style always takes place in the context of play, while playfulness may or may not. Perhaps I walk by a playground at night, with no one playing, but I have a sense that it is a playful space; or I am out dancing and add a slight playful twist to some of my steps without quite knowing it. The central question for theorizing playfulness is what kind of relation these examples have to play. Play style always has, in the act of play, a sign by which to distinguish a particular movement or word from its recurrence in ordinary life. Playfulness lacks the guaranteed context of play and therefore needs to be differentiated from the ordinary world by some other means. Playfulness not only responds to the uncertainty of games, but helps us interpret the ordinary world: to decide that this person dodging and weaving through the office is moving playfully, or that a whoopee cushion is not meant as a slander. One of the major questions for a theory of playfulness is how to characterize the quality that distinguishes it from alternate ways of understanding a situation.

Defining playfulness as a response to a *genre* of uncertainty, especially the self-reflexive genres of uncertainty that characterize the age of designed games, explains the differences between play style and playfulness. The concept of genre involves the generalization or idealization of some elements within the concrete example, bringing in questions of aesthetic judgment. When a player responds to a particular genre of uncertainty, her act is deformed in ways that are characteristic not just of play, but also of the game genre. Seen again in other contexts without play, these genre-

specific patterns are still recognizable. For example, I will argue games of make-believe encourage players to overvalue useless objects in order to create a secretive meaning. When someone praises something worthless in ordinary life, this will seem playful to people familiar with such make-believe. Moreover, the organization of genres of uncertainty depends on a community's sense of what counts as uncertain in the first place. Game genres thus appear as distinctive marks of interpretive communities, and can generate conflict around the experience of playfulness.

In order to bring out the characteristic features of my definition of playfulness as a genre of response more clearly, let me briefly contrast it to some other ways of understanding playfulness. The psychologist Josefa Lieberman pioneering *Playfulness: Its Relationship to Imagination and Creativity* (1977) develops a descriptive framework that correlates an attitude or personality trait that she calls playfulness to an overall pattern of behavior among elementary school students.[38] She understands playfulness to be a compound of spontaneity, manifest joy, and humor, which can show up to varying degrees according to a child's developmental stage. While this psychological approach has dominated the study of playfulness for several decades, it fails to account for the range usages that playfulness has in ordinary language.[39] Sometimes we describe a party as playful,

[38] Lieberman describes these terms in the following way:

> A look at Susanna's behavior tells of her using realistic props for a flight of fancy, including her playmates; moving spatially out of the prop situation and taking the fantasy content of the dream with her; switching to an act of physical exuberance; elaborating the fantasy; and returning to the original place and original activity. All this suggests physical, social, and cognitive mobility in a spontaneous manner. The dancing could have been accompanied, at another time, by laughter and singing. There might also have been a little teasing and poking fun at the others. What emerges, then, is Susanna's way of acting in a play situation: the quality of her play or her style of play. I labeled this behavior 'playfulness.'

Nina J. Lieberman, *Playfulness: Its Relationship to Imagination and Creativity* (New York: Academic Press, 1977), 4.

[39] A cross section of this research includes: Judith A. Chapman, "Playfulness and the Development of Divergent Thinking Abilities," *Child: Care, Health and Development* 4, no. 6 (1978); N. C. Auerhahn and D. Laub, "Play and Playfulness in Holocaust Survivors,"

or the movement of water, or the style of a brush stroke.[40] In these cases, joy, humor, and spontaneity might be the relevant qualities, but they describe external aesthetic features rather than a mood that translates into behavior. The same problem can also apply to animals and people. For instance, I can misinterpret someone who seems gregarious as being playful, when they are really overcompensating for anxiety. Playfulness has no basis in an internal state, though my interpretation is real enough. A second problem is that the methods of psychology require Lieberman to reduce the pluralistic wealth of play down to a single style characterized by spontaneity, manifest joy, and humor. Lieberman attends closely to the ways people play, and throughout her descriptions she continually finds new adjectives to characterize what makes play special and distinct, but this does not translate into her definition. For my theory of playfulness these three attributes only represent one genre of response amidst a wide range of other affects and traits that often run in opposing directions.

A second, and more recent, approach in game studies takes playfulness to be an integration of play into everyday activities. In particular, it defines playfulness as an experience that borrows some formal elements from play—freedom, arbitrary constraints, and uncertainty—while forgoing others.[41] Miguel Sicart, for instance, argues that anything can become playful so long as it is play-

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Psychoanalytic Study of the Child 42 (1987); G. S. Moran, "Some Functions of Play and Playfulness: A Developmental Perspective," *Psychoanalytic Study of the Child* 42 (1987); Anita C. Bundy and Jeanne L. Clifton, "Construct Validity of the Children's Playfulness Scale," in *Divergences and Diversions in Fields of Play*, ed. Margaret Carlisle Duncan, Garry Chick, and Alan Aycock (Greenwich, CT: Ablex Publishing, 1998); Cosby Steele Rogers et al., "Measuring Playfulness: Development of the Child Behaviors Inventory of Playfulness," in *Divergences and Diversions in Fields of Play*, ed. Margaret Carlisle Duncan, Garry Chick, and Alan Aycock (Greenwich, CT: Ablex Publishing, 1998); Monisha C. Akhtar, *Play and Playfulness: Developmental, Cultural, and Clinical Aspects* (Lanham, MD: Jason Aronson, 2011).

[40] For reference, the OED gives several examples of playfulness being used in this way.

[41] Jaakko Stentros, "Playfulness, Play, and Games: A Constructionist Ludology Approach" (PhD diss., University of Tampere, 2015).

like, and the goal of the original activity remains unchanged. Sicart gives the following example: "If [the activity] is using a computer to write a book, the purpose is still writing regardless of how playful we are in the process."[42] Thus playfulness is just play with its autotelic aims removed and replaced. This is a subtractive model of playfulness, a fact which Sicart puts succinctly: "[p]layfulness is a way of engaging with particular contexts and objects that is similar to play but respects the purposes and goals of that object or context…derived from our capacity to play but lacking some of the characteristics."[43] There is a convincing element to this approach, and I will indeed argue that disrupting play through subtraction is an important part of how playfulness becomes visible. Treating playfulness as equal to that subtraction, however, means that play and games are never playful—or, alternately, they are always playful in precisely the same way. It obscures the actual process by which an ordinary activity or scene switches into a playful mood. What would it mean to project and transpose some qualities of play, but not all, onto a scene? Is this an act related to play? Or do we have control over the parts of play that we bring to bear? How, concretely, do I make my use of a word processor feel free, arbitrarily constrained, or uncertain? By ignoring the interpretive work that the typist performs in order to see an action as playful, Sicart begs the question of how playfulness operates.

Where the psychological version of playfulness tracks a human mood and behavior, I look for a relational quality; where it sees a single kind of joyful experience, I see many distinct ways of being playful. Where game studies projects the formal elements of play out into the world, I see a historically determined framework of interpretation that has learned to separate out some situations as playful. The sociologist Erving Goffman describes playfulness, in this sense, as one

[42] Miguel Sicart, *Play Matters* (Cambridge: MIT Press, 2014), 26.
[43] Ibid., 21.

of several 'keys,' in an analogy with the shifting ways a musical theme can be played in different tonal ranges. Keys give a tone to scenes of social life. In Goffman's example, a man who sees his lover flirting in public might take that to mean that he has a rival, that there will be a public scene, or that it is a form of playful teasing. Goffman suggests that a scene is more likely to be keyed as playful when "there is special evidence that the activity could not be meant literally," when a potential action is "physically impossible," or when "seriously spoken words might expose opposition."[44] These may seem like an obvious points, but these are the kinds of interpretive frames that are missing in both Lieberman and Sicart. The problem of playfulness is in recognizing and describing its various forms, and this is precisely the difficulty involved in interpreting play.

Organization of the Chapters

My central theoretical claim is that conceptual uncertainties about play can become the aesthetic core of uncertainty in play. This ludic reflexivity often involves uncertainty over the nature of interpretation, which only twists the problem further. Not only is playfulness an interpretative response to uncertainty, but play and games are crucial to the ways that meaning, signification, and interpretation have been constructed historically.[45] Play and interpretation are

[44] Erving Goffman, *Frame Analysis: An Essay on the Organization of Experience* (New York: Harper & Row, 1974), 49n15.

[45] This is part of the self-reflexivity argument that sparked the core of this dissertation, and which draws on an insight of Bill Brown, who writes of the postmodern concept of play:

> These positions achieve their certainty by exorcising popular conceptions of 'play,' censuring the binaries that ground its banal significance, and therefore legitimizing the intellectual inquiry by marking its distance from—its difference from—popular culture. 'Games,' 'fun,' 'amusement'—these, Derrida contends, never fail to 'neutralize' or 'repress' the 'singularity of play.'
>
> A material unconscious, of course, could not admit such singularity: play in the world is that from which the play of the world cannot be extricated.

united by a circular connection that each of my chapters explores. I have tried to take the methodological implications of this circularity seriously. To my mind, this means that it is impossible to theorize playfulness without transforming the concepts that have been used to understand play; that it is impossible to transform these concepts without looking at their practical effects on game analysis; and that it is impossible to do any of this without tracing the genealogy that has shaped prior theories of play and developing a method to break from that history. Each of my chapters attempts all of these things simultaneously, moving back and forth between them. Rather than summarizing the way I orchestrate these moves—which depends a good deal on the details of each reading—I believe it will be more helpful for the reader to have a picture of how each separate goal runs across the different chapters. Below, I offer an outline of the five major through lines that are important for the broad picture of my dissertation.

Types of playfulness. My overarching approach to playfulness has been to identify and explore several different types in detail. Since theories of play tend to reduce playfulness to a remainder without any content, each chapter works to restore its specificity. In my previous work excavating an interpretive approach in Johan Huizinga's *Homo Ludens*, I identified five varieties of playfulness: *secrecy*, *trickiness, fairness, improvisation*, and *festivity.*[46] In the course of connecting these categories to video game studies, I have added *replayability* as a sixth type, though this list is not meant to be exhaustive. Each one evokes a significantly different set of affects, and each one responds to a different self-reflexive genre of uncertainty. Over the course of the dissertation I explore four of these categories in detail, with each of my chapters describing

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My dissertation is an attempt to work out the ways and reasons for that inseparability. Bill Brown, *The Material Unconscious: American Amusement, Stephen Crane, and the Economies of Play* (Cambridge: Harvard University Press, 1996), 107.

[46] McDonald, "Homo Ludens: A Renewed Reading."

one variety, relating it to specific games, and analyzing its inner logic. Chapter One deals with *replayability*, a repetitive and abstract playfulness that discovers hidden depths in game systems. Replayability feels rich, entrancing, and self-contained, and is organized by a dynamic uncertainty that provokes meaninglessness and uses that to forge new meanings. Chapter Two examines *secrecy*, and what makes some kinds of secrets feel playful while others are deadly or sacred. The distinction turns on the sense of exposure, camaraderie, and worthlessness. I argue that Roger Caillois' games of mimicry and make-believe have a special affinity with secrecy, and that these games are organized around the paradoxical pleasure of pursuing a specific and arbitrary goal within the framework of an autotelic activity. Chapter Three takes up *trickiness*, fittingly one of the trickier categories, and one where the circularity of play and interpretation comes to the fore. Trickiness is characterized by a feeling of impossibility, sudden reversals, and trust. It expands the genre of chance-based games to include puzzles, riddles, and jokes. Finally, Chapter Four moves towards the questions of politics and ethics raised by the nature of *fairness*. Uncertainty here hinges on the meta-communicative framing power of play, when it seems to offer equality between players. Fairness brings out the qualities of agency, conformity, and precision. While the chapters will provide a more expansive description of each variety, these summaries should convey the importance of a granular and specific account of playfulness.

Theory and method. My four chapters develop a cumulative theory of what playfulness is and how to study it. At the center of this is an articulation of what it means for playfulness to be a genre of response to the uncertainty of games. One theory of that relation is that games copy an uncertainty in the world, and establish boundaries around it to tame it and make it safe. This is a common way of understanding games that goes back at least to Sigmund Freud's description of a child throwing away a ball to try and master his anxiety over the fact that he cannot control when

his mother will leave.[47] If this were the case, we could recognize playfulness from the fact that it never goes to extremes and never puts the player in real risk. Such a mimetic theory of uncertainty has some major problems, however, and I argue strenuously against it in my first two chapters. Chapter One argues that this model of original and copy has made a muddle out of the relation between play and language. Early twentieth-century theories of language and meaning modelled themselves on games, especially chess, and game scholars borrowed from these theories when they subsequently based the meaning of games on literary texts. The circularity of model and copy has made it impossible to clarify the way games signify, and at the end of Chapter One I point to a version of playfulness that does not borrow its uncertainty from elsewhere. Chapter Two cashes out this methodological work by showing what a non-mimetic version of playfulness would look like. The self-reflexive uncertainties about play do not have to be copied or tamed, but are features of play and other parts of life in equal measure. In that case, the difficult question becomes: how can a playful response to uncertainty be differentiated from other responses? Rather than making uncertainty safe, this chapter ends by arguing that games split uncertainty apart, with one part managed by the system of the game and one part managed by the player. Neither loses its force, or becomes safe, but both are structured in new ways. The characteristic nature of that split is what makes playfulness recognizable.

Two major questions result from my discussion of genres of uncertainty. First, the idea of uncertainty itself needs some clarification. What does it mean to say that games are uncertain, and what does it mean to taxonomize uncertainty? These are the methodological questions tackled by Chapter Three. Second, if we give up on the idea that a game copies and mimics the world's

[47] Sigmund Freud, "*Beyond the Pleasure Principle*," in *On Metapsychology* trans. John Reddick (London: Penguin UK, 1991), 283-7.

uncertainty, then how should we characterize that relation instead? Chapter Four works out an account of the play-world relation that does not assume some prior divide, but is based in the capacity for responding to the uncertainty that organizes playfulness. Though these are only the bones of a theory of playfulness, by the end of the dissertation some major methodological blocks have been removed. I focus on the dynamic process that generates playfulness because these dynamics are more stable, if abstract, than the specific traits of playfulness that result. I believe these dynamics will allow other scholars to fill in some of the details, and to explore other varieties of playfulness.

A genealogy of play. Each of my chapters starts from a Fluxus case that experiments with new kinds of play and ends with a video game that shows how those pleasures have become part of mainstream culture. I use the space in between to reconstruct the web of discourses that they indirectly share. While many of the artists involved in Fluxus were also involved in early digital and electronic art—such as Alison Knowles' computer generated poetry, George Brecht's partnerships at Bell labs, or Shigeko Kubota's work with video—none to my knowledge actually worked on early games. Even if that connection existed, the importance of these artists is that they make visible an underlying cultural logic of play, and work over that logic until it becomes coherent and exemplary.

I look at several discourses of postmodernity where play and games metaphors make a key idea thinkable. In each case, play and games come to significantly shape the topic that they frame. Together these discourses build into a larger historical story about the genealogy of our play concepts in the present. The historically earliest part of this story comes in Chapter Three, where I look back to the use of "free play" to describe mechanical motion in the eighteenth century, and how that motion served as a metaphor for aesthetic experience. Free play helps Kant and many

after him conceptualize how two fixed and unchanging structures can seamlessly interlock if they are given a space of freedom to interact. That logic comes down through German hermeneutics to shape the post-structuralist theories of play that appeared in the 1960s alongside and in conversation with Fluxus. In a second moment in the early twentieth century, the structural logic of the gear was made more precise through the metaphor of chess, which became a crucial framework in nearly every theory of linguistic meaning in the period. Chess provided a constructivist model of language, and one that uniquely characterized the relation between signifier and signified. Chapter Three looks at the role of play in anthropological discourses of ritual. Anthropology takes up the Kantian model of reconciliation between structure and event through play and uses it to further develop the chess metaphor towards the contextual and performative dimensions of meaning. Finally, Chapter Four looks at the importance of play to the constructivist strain of sociological and political thought in the 1970s and 80s. Taken together, these histories offer my best definition of play, and the best account of why no single definition of play is feasible.

The case studies and theories that I bring together are eclectic and incongruous. Each of my chapters weaves a story with its own momentum and logic, but as a last aside I want to prepare the reader for some rather abrupt interdisciplinary juxtapositions. I take care to treat each of my cases in its own context and terms, whether it is an artwork, a game, a philosophical theory, or a critical text, before connecting it into the circuit of playfulness that my chapters develop. I lean into the juxtaposition. It is my method of drawing together diverse fields that share a crucial problem but rarely talk to each other in contemporary game studies. Playfulness can alight anywhere, and to be its chroniclers we must be ready to forget our assumptions about what counts as 'real' play and stay with playfulness as we find it. Above all, each of the facets that I juxtapose is directed towards the ways that we can, should, and do interpret play. Over and over, I wonder

how we know something is playful and what it means when it is.

Fluxus and postmodern aesthetics. In order to address the rangy field of postmodern aesthetics, I have focused on Fluxus as a paradigmatic microcosm of its issues. Fluxus utilizes all the strategies that a broader survey of postmodernism might hope for: there is the boredom and violence of Dick Higgins' "Danger Music" pieces, the parodic self-aggrandizement of Ben Vautier signing his name to the totality of art and being, the self-reflexivity of George Macunias' films about physical film, and the committed irony of Alison Knowles eating tuna fish and buttermilk for lunch every day of the year. Moreover, it condenses many paradoxes of postmodernity. Fluxus is a broadly international movement that centers the United States and Western Europe, it is a movement that included women and people of color while largely ignoring their politics, and it fetishizes new media and mass culture while never actually integrating itself with them. The porous and flexible nature of Fluxus allows it to stand in for several strands of postmodern aesthetics at once: art, music, poetry, performance, dance, architecture, film, and video are all well represented in the work and approach of the collective. By staying with this group, I can draw attention to the subtle differences in the way each artist uses playfulness, which appear more clearly against the backdrop of their (somewhat) shared project.

Each chapter reads a game by a Fluxus artist for how they wrestle with and articulate one type of playfulness. In Chapter One, I parse the historical references of Shigeko Kubota's "Video Chess" for what it can tell us about *replayability*. In Chapter Two, I turn to a few other chess sets by Takako Saito and Yoko Ono, before zeroing in on a disturbing and *secretive* version of the game of tag that Ono proposes. Chapter Three takes on an elaborate game of cards produced by George Brecht that lacks any kind of rules or directions for play, but uses *tricks* to create a game. Finally, Chapter Four examines Benjamin Patterson's *A Game*, which produces a heap of

confusion out of little more than eleven words, but which leads the player to examine *fairness*. My method has been to analyze these works in detail to demonstrate what they can tell us about varieties of playfulness. However, reading across these examples helps to specify and explain the interest in toys, games, puzzles, play, and jokes that is characteristic not only of Fluxus but of postmodernity more broadly. By connecting these types of playfulness to an uncertainty that also has an ideological and cultural meaning, these case studies help to explain the social relevance of playful postwar art.

Video games. In a parallel set of case studies I look at the mass cultural pleasures of video games. I look at why people replay *Tetris* (1987) in Chapter One, how secrets compel endless devotion to *Super Mario World* (1990) in Chapter Two, the intertextual framework players bring to solve *Kings Quest VI*'s tricky puzzles (1992) in Chapter Three, and what makes *SimCity 2000* feel unfair (1993) in Chapter Four. Each case study represents a major game genre at a critical moment of mainstream success for video games. However, I also turn to these games because they present important problems within game studies that are difficult to solve without a theory of playfulness. For instance, adventure games like *King's Quest* have often been dismissed because they only offer a single correct solution to any problem, eliminating the agency of choosing among multiple actions. A focus on the player's experience, however, shows that there is an inordinate amount of play happening quietly in the background. Similar questions arise about the endless and mindless repetition of puzzle games like *Tetris*, or the need to find every last secret in *Super Mario World*. While readers from other fields may not recognize these debates in the background, game scholars may find it productive to read across these sections for a larger argument about the nature of games and play that incorporates a diverse set of motivations and pleasures.

CHAPTER ONE
Replayability: Play without Truth

To end rehearsal, you gather strength for one last run-through. Afterward, returning emails on a late shift, you play around with your sign-off phrase, making each goodbye more eclectic than the last. That night in bed, far too awake, you count sheep and imagine each mundane coat of muddy wool. Early the next morning at the gym, you assign each exercise an arbitrary point number, comparing today's score to yesterday's and the rest of the week. Watching a politician's speech that evening with your friends, you all drink each time he says some inane phrase. Each of these repetitions in a repetitive world strike a specific tone. They are not boring, tedious, apathetic; nor are they meaningful, exciting, vivid. They fall, at least occasionally and intermittently, in the realm of quiet playfulness that I want to explore in this chapter. Is there such a thing as playful repetition? Most repetition is not playful. Games are often incredibly repetitive, but the repetitive parts are not necessarily playful. If playful repetition does exist, it exists in striking counterpoint to the spontaneity, manifest joy, and humor attributed to playfulness by Josefa Lieberman.

Consider *gamification*, the use of game elements to focus attention and motivate action in non-game situations.[1] Most gamified tasks are repetitive ones, like exercise. Common sense has it that gamification works by associating something pleasurable (games) with something people resist (exercise), and that the affective energy of the former rubs off on the latter. Ultimately, this logic proves paradoxical because the game elements deployed (point, badges, competition) are just as repetitive and mechanical as the actions that they affect. When gamification works, it often does so without overtly pleasurable game elements, nor even simple characteristics like explicit rules,

[1] For a primer on gamification, see Karl M. Kapp, *The Gamification of Learning and Instruction: Game-Based Methods and Strategies for Training and Education* (San Francisco: Pfeiffer, 2012); Yu-kai Chou, *Actionable Gamification: Beyond Points, Badges, and Leaderboards* (Freemont, CA: Octalysis Media, 2015).

goals, mechanics, or boundaries.[2] Nonetheless gamification changes how tedious activities feel, enhancing them not with actual play, nor a coherent game, but with a form of playfulness that is hard to recognize as such: a pleasurable experience of repetition that feels meaningless but fun.

However, the focus of this chapter is not playful repetition itself, but the methodological stumbling blocks that bar its clear articulation. The discipline of game studies, which has developed around digital games over the last twenty years, has inherited a complex methodological history that makes interpreting playfulness difficult. This difficulty is twofold. First, game studies inherits a method that is deeply and confusingly rooted in early twentieth century theories of linguistic, philosophical, and artistic meaning. Chess served as a key metaphor for these theorists and left an imprint on their conception of meaning. In fields ranging from mathematics to phenomenology, from semiotics to artificial intelligence, chess has metaphorized the arbitrary and differential system we call language. When scholars examine the meaning of literal games through the methodological framework built up on these linguistic theories of meaning, things become muddled. Using chess to understand language, and language to understand chess starts a vicious circle.

The second, more recent methodological problem attends the birth of game studies as a discipline in the late 1990s. Prior to this, scholars had studied video games primarily from within English departments, and through the lens of either hypertext fiction, or by likening the performative space of games to theatrical works. New media scholars studied early video games at a moment when post-structural theory was at its height, and video games seemed to literalize the image of some text yet-to-come that would be endlessly readable and interpretable. In that

[2] Patrick Jagoda, "Gamification and Other Forms of Play," *Boundary 2* 40, no. 2 (June 20, 2013): 115-16.

early fray, a new generation of scholars resisted those fashionable frameworks as they struggled to put games at the center of a method that would justify new faculty positions, journals, conferences, and even departments. Many of these administrative and ideological battles found an academic mirror in the so-called narratology/ludology debate—though reconstructions of this debate often miss the important institutional context.[3] In the second half of this chapter I argue that the birth of game studies also entailed a repression, by narratologists and ludologists alike, of the interpretive approach represented by English departments. As a result, game studies developed a formalist leaning that complicates the attempt to interpret playfulness.

Video Chess, by Fluxus artist Shigeko Kubota, neatly encapsulates all of these issues and the logic that animates them. I begin with a reading of this work in order to demonstrate the process by which chess shapes theories of meaning and leads to a methodological circularity. Kubota exploits this circularity and brings out its aesthetic dimension. Next, I systematically trace the language-as-chess metaphor from its origins in late nineteenth century mathematics through the early phases of the linguistic turn into the realm of computation. The chess metaphor's genealogical lines, considered in tandem, help illustrate a broad cultural turn toward games as important tools to think with. In the third section, I look at how early game studies scholars, aiming to separate the formal aspects of games from their representational components, used chess as a paradigm, and initiated the complicated collision of the methodological problems just outlined. I articulate a new approach by which game studies might untangle this knot by attending to playfulness, and in a short final section I re-read *Tetris* (1984) in light of my new methodological guidelines.

[3] See, for instance, Gerald Voorhees, "Criticism and Control: Gameplay in the Space of Possibility," in *Ctrl-Alt-Play: Essays on Control in Video Gaming*, ed. Matthew Wysocki (Jefferson, NC: McFarland, 2013).

This chapter may not focus on repetitive playfulness *per se*, but repetition is nevertheless a through line for the examples I have chosen. Chapter Two will provide the theoretical support for the claim that repetition can be playful. Here I will only suggest the basic elements of its aesthetic. In particular, playful repetition involves what game designers call *replayability*: the quality that pulls a player back into a game time after time, to experience an inexhaustible space of possibility. Nolan Bushnell, the founder of Atari, once said that "[a]ll the best games are easy to learn and difficult to master. They should reward the first quarter and the hundredth."[4] By the end of this chapter, I will show the questions raised by such replayability converge with my methodological ones.

SHIGEKO KUBOTA REPLAYS ART HISTORY

Shigeko Kubota's *Video Chess* (1968-1975) ties together and enlivens the connection between chess and meaning. *Video Chess* explores an aesthetic of repeating and replaying. It is a meditation on how games get caught in interpretive circles, moving between a model of understanding and an object of understanding. Examining *Video Chess* returns us to the moment of the first arcades and home consoles, when the importance of gams in American culture was increasing, but no single ideology of play had yet achieved hegemonic status. Kubota's work is part of a broader turn toward experimental play, when it was no longer and not yet clear what games should be. For the methodological revision I am undertaking in this chapter, it is crucial that this question remain open.

[4] Ian Bogost, "Persuassive Games: Familiarity, Habituation, and Catchiness," *Gamasutra,* April 2, 2009, accessed April 13, 2018, https://www.gamasutra.com/view/feature/132369/persuasive_games_familiarity_.php

Shigeko Kubota was a Japanese émigré who came to Fluxus in search of a community that would give a more expansive place to women artists, and an audience that would understand her experimental performances.[5] After meeting Yoko Ono and John Cage, and corresponding with the self-styled impresario of Fluxus, George Maciunas, Kubota arrived in New York in 1963 and began contributing to a growing body of Fluxus performance work. Maciunas once described Fluxus as a "fusion of Spike Jones, gags, games, Vaudeville, [John] Cage and [Marcel] Duchamp," and that description, with its enshrinement of Cage and Duchamp as the movement's guiding lights, is particularly applicable to Kubota's work.[6] In Fluxus, Kubota also discovered the early electronic work of Nam June Paik, her future husband, and became a pioneering figure in the development of video art in the 1970s.[7] "Video Chess" is a transitional piece that marks the end of her Fluxus period and the start of a new form that Kubota called "video sculpture." As the name suggests, these installations incorporate sculptural elements to distort, move, occlude, and reflect video screens, and to call attention to the physicality of television monitors.

Video Chess is a complex work. At its center is a wooden box with a monitor sized hole cut in its top overlaid with glass. Inside the box, a television monitor faces up through the glass, and below it a fan keeps the television cool. The glass pane is etched with a chessboard pattern, on which sit clear acrylic chess pieces shaped like various prisms. One side commands more angular shapes, cubes, pyramids, triangles; the other marshals cylinders and lenses. A video is projected through the chess board and refracted by the prisms. Several other complementary elements

[5] Midori Yoshimoto, *Into Performance: Japanese Women Artists in New York* (New Brunswick, NJ: Rutgers University Press, 2005), 170-1.
[6] Craig J. Saper, *Networked Art* (Minneapolis: University of Minnesota Press, 2001), 117.
[7] Brook Adams, "Kubota's Video Sculpture: A Biographical Perspective," in *Shigeko Kubota Video Sculpture*, ed. Mary Jane Jacob (Astoria, NY: American Museum of the Moving Image, 1991), 8–12.

surround the installation: two quotes printed on the wall, Kubota's photos, a book of those same photos accompanied by poems, and an EP, all of which depict a public chess match between the two patron saints of Fluxus—Marcel Duchamp and John Cage.[8] Let us rewind a moment and look at this chess match between Duchamp and Cage, which forms the background for *Video Chess*.

John Cage was an experimental composer famous for, among other things, using chance-based methods to create musical scores. He greatly admired Duchamp's work and, in the late 1960s he contrived weekly chess lessons at Duchamp's loft in order to get to know the elder artist. At these lessons Cage would sit and talk, or occasionally play casually with Duchamp and his wife, Teeny.[9] Cage had dabbled with chess imagery before in a work he created for "The Imagery of Chess" exhibit at the Julian Levy gallery in 1944.[10] He was no real aficionado, however, and never became a serious player.

On the other hand, chess was a central part of both Duchamp's life and artistic practice. In his early post-impressionistic and cubist paintings, he took inspiration from the virtual interaction and movement of pieces that chess provided and from the model of mediated communication between intellects that it proposed.[11] In 1923, Duchamp began to play chess more regularly and seriously, spending the next two decades competing internationally as a member of France's team at the chess Olympiads. Rumors circulated that Duchamp had given up his art in order to play

[8] Mary Jane Jacob, ed., *Shigeko Kubota Video Sculpture* (Astoria, NY: American Museum of the Moving Image, 1991), 16-17.
[9] Lowell Cross, "Reunion: John Cage, Marcel Duchamp, Electronic Music and Chess," *Leonardo Music Journal* 9, no. 1 (1999): 37.
[10] Larry List and Ingrid Schaffner, *The Imagery of Chess: Revisited* (New York: George Braziller, 2005), 99-100.
[11] Dalia Judovitz, *Unpacking Duchamp Art in Transit* (Berkeley: University of California Press, 1998), 39-40; Francis M. Naumann, "Marcel Duchamp: The Art of Chess," in *Marcel Duchamp, the Art of Chess* (New York, NY: Readymade Press, 2009), 5.

chess, and while he refuted these assertions, he also worked to fuse the two pursuits.[12] During this period he publicly equated the skill of chess players and artists, co-authored an arcane book on chess end-games, and designed two beautiful chess sets. When Duchamp returned to the art world he continued to make use of chess iconography and staged many photographs and performances that highlighted the relation between his art and his game. For Duchamp, chess was a serious intellectual pursuit that could help raise contemporary art into the realm of the idea and demonstrate the reality of purely conceptual problems.[13] After retiring from competitive tournaments, he continued to play regularly for the rest of his life, at chess clubs against international experts, and as a social occupation that kept him in touch with other artists.

Cage exploited Duchamp's love of chess not only for weekly lessons, but also to stage the public chess game that Kubota documents. In this performance, titled "Reunion," Duchamp and Cage played under a spotlight in a darkened auditorium, with cigars and wine in 1968. The central conceit of this performance was, like Kubota's subsequent installation, a chessboard of custom design—this one constructed by the engineer Lowell Cross in accord with rough guidelines from Cage.[14] Each square was wired to a photo-resistor and started in an off position. When a piece moved to cover or uncover a photo-resistor, it triggered one of sixteen tracks to play on one of eight speakers around the auditorium. The result was a densely layered cacophony of scratches and squeaks, in effect an aleatory composition akin to Cage's other work. Duchamp defeated Cage soundly in twenty-five minutes, though a second game between Cage and Teeny went on for nearly four hours before they ended the event. Kubota was present as a photographer, and took several

[12] Naumann, "Marcel Duchamp: The Art of Chess," 12-27; David Joselit, *Infinite Regress: Marcel Duchamp, 1910-1941* (Cambridge: MIT, 2001), 163.
[13] Naumann, "Marcel Duchamp: The Art of Chess," 42.
[14] Cross, "Reunion," 37-9.

photos which have since become iconic. These images appear on the walls of *Video Chess*, in a book that Kubota published and included in the sculpture, and in the video beneath the installation's etched-glass chess board.

As an experience, "Reunion" was underwhelming—a reviewer for the *Toronto Star* called it "infinitely boring" and most of the audience had walked out by the conclusion of second game.[15] As an image, however, captured and disseminated in Kubota's photographs, the event resonated much more widely. Though Cage lost the game of chess, he came out of the encounter with an important symbolic victory. The match helped establish Cage as the rightful heir to Duchamp's avant-garde work, and even demonstrated that Cage's compositional techniques could subsume one of the master tropes of Duchamp's work—chess. Cage's wired-up board was a trap that flattened Duchamp's most brilliant moves into binary signals for music. Cage took Duchamp's metaphor of chess as an act of intellectual communion where two minds meet across the chess board to converse in abstraction of their bodies, and turned it into an act of succession. Duchamp died later that same year, and Kubota's photographs do the symbolic work of enshrining his penultimate public performance.

In *Video Chess* Kubota revisits and revises these associations, coming to terms with Duchamp's death by envisioning chess through the aesthetics of replayability. *Video Chess* is the first of several works that Kubota produced over the next three decades in explicit dialogue with Duchamp, who she met in 1968. After his death that year she made a pilgrimage to his grave. Kubota commemorates this visit in two video sculptures, *Marcel Duchamp's Grave* and *Video*

[15] Ibid., 41.

Chess, and she likens the central wooden box of *Video Chess* to an imposing grave stone.[16] The photographs and book surrounding the work act as mementos in a remediated wake. However, this memorial does not stabilize an image of the dead—as her photos of Cage and Duchamp already do—but conjures the dead in a ghostly haunting. The video projecting out of the television and onto the chess board brings the historical game between the two masters back to life, creating a fantasy relationship between that game and the chess match at hand. As Kubota puts it, "when two people play *Video Chess*, not only will every move they make be accommodated by the original soundtrack that Cage had composed for the concert, but they will also be accompanied by the images of the two great artists playing from the other side of the world."[17]

Figure 1.1. A still from *Video Chess* depicting Duchamp in sepia at 01:33.

[16] "The grave was standing up out of the ground like a cube, and that form became the basis of my early sculpture *Video Chess*." Kubota quoted in Adams, "Kubota's Video Sculpture: A Biographical Perspective," 8.

[17] Shigeko Kubota, "In Conversation: Shigeko Kubota with Phong Bui," interview by Phong Bui, *The Brooklyn Rail*, September 4, 2007, accessed April 14, 2018, https://brooklynrail.org/2007/09/art/kubota

For the installation, Kubota had her photographs of the Cage/Duchamp match transferred to video and keyed areas of the images to matte and colorize them.[18] She produces a handful of effects with these basic procedures, which constitute a critical re-engagement with her photos. We can see Kubota using these effects to unsettle and reanimate the encounter she captured. In the simplest of her effects, and the one closest to the photographs themselves, she uses the colorized areas to drain the contrast from the stark black and white photos, giving them a yellowish tint that seems to rapidly age the images (Fig. 1.1). As a result, the image that once commemorated a specific historical moment transforms into the faded and forgotten past in general and erases the specifics of the game and its players. A second set of effects superimposes two similar images, with the second image slowly fading in and out at the edge of perception before occasionally taking center stage (Fig. 1.2). Kubota keys and isolates the faces, the most prominent element of these fade effects, so that a faint presence hovers vaguely behind Duchamp's head and creates an eerie and ghostly double. Unlike the filmic dissolve, Kubota's transitions combine the two image signals in non-linear ways, moving back and forth between small gradations with the help of a video synthesizer at New York's Experimental TV Center.[19]

[18] Ya-Ling Chen, "Somewhere between Dream and Reality: Shigeko Kubota's Reunion with Duchamp and Cage," *Tout-Fait: The Marcel Duchamp Online Journal* 2, no. 4 (2002), last updated May 12, 2016, http://toutfait.com/somewhere-between-dream-and-realityshigeko-kubotas-reunion-with-duchamp-and-cage/.
[19] Ibid.

Figure 1.2. A still from *Video Chess* depicting overlaid photos at 06:13.

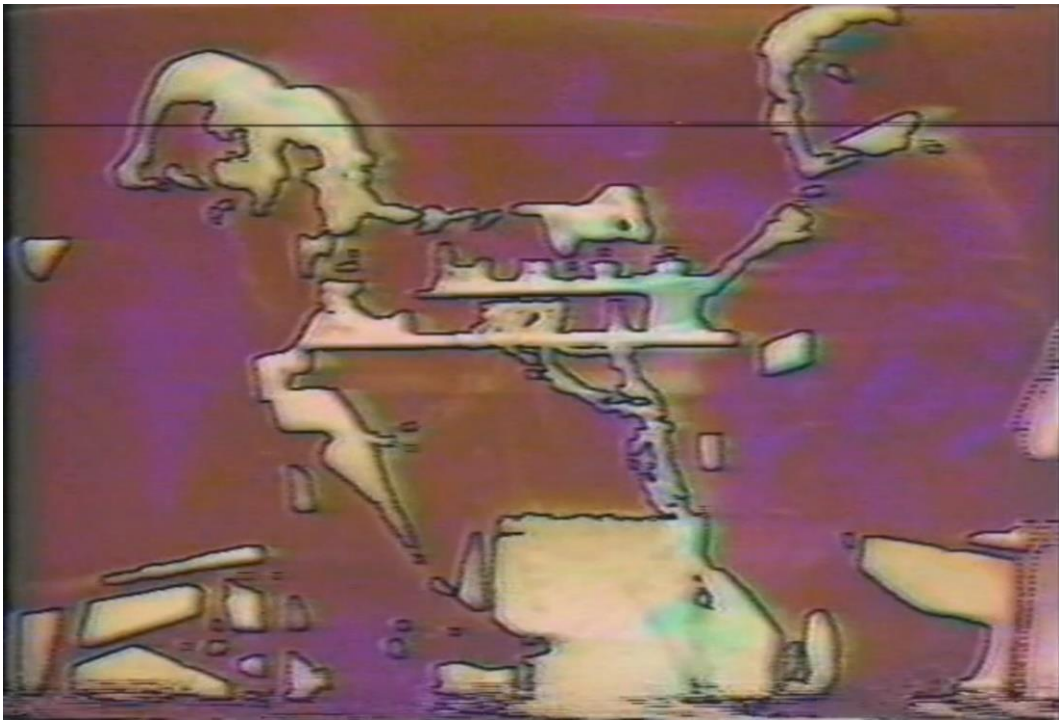

Figure 1.3. A still from *Video Chess* depicting outlined bodies at 05:23.

A third technique plays with the boundaries between keyed section of the image to create bright, shimmering outlines around patches of light and dark (Fig. 1.3). At times these outlines

hover over a version of the image reduced to a few globular patches of color, fuzzy and blurred. Against a backdrop of illegible bodies, the moving outlines take on an energy that lifts them out of the photograph, bringing them to life. These video artefacts create a spiritual excess that exceeds the photographic remainder, as if we were looking through some special device that channels the traces of captured life. In a fourth technique, these outlines are the only thing visible, as the images fade to black and disappear (Fig. 1.4). Kubota plays with the resulting abstract shapes, but the stark contrast of image keeps revealing the hollow outlines of faces, mouths, and eyes. These are haunting death masks, Eduard Munch-like screams, which reveal a more tortured dimension of the photographs.

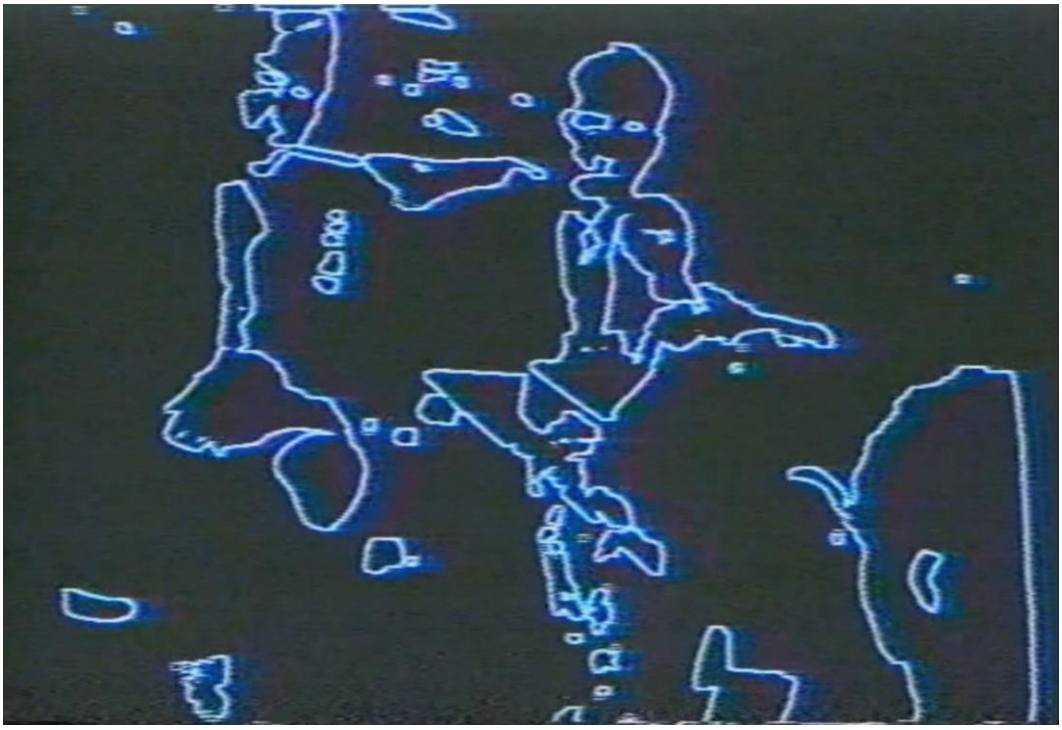

Figure 1.4. A still from *Video Chess* depicting abstract outlines at 04:29.

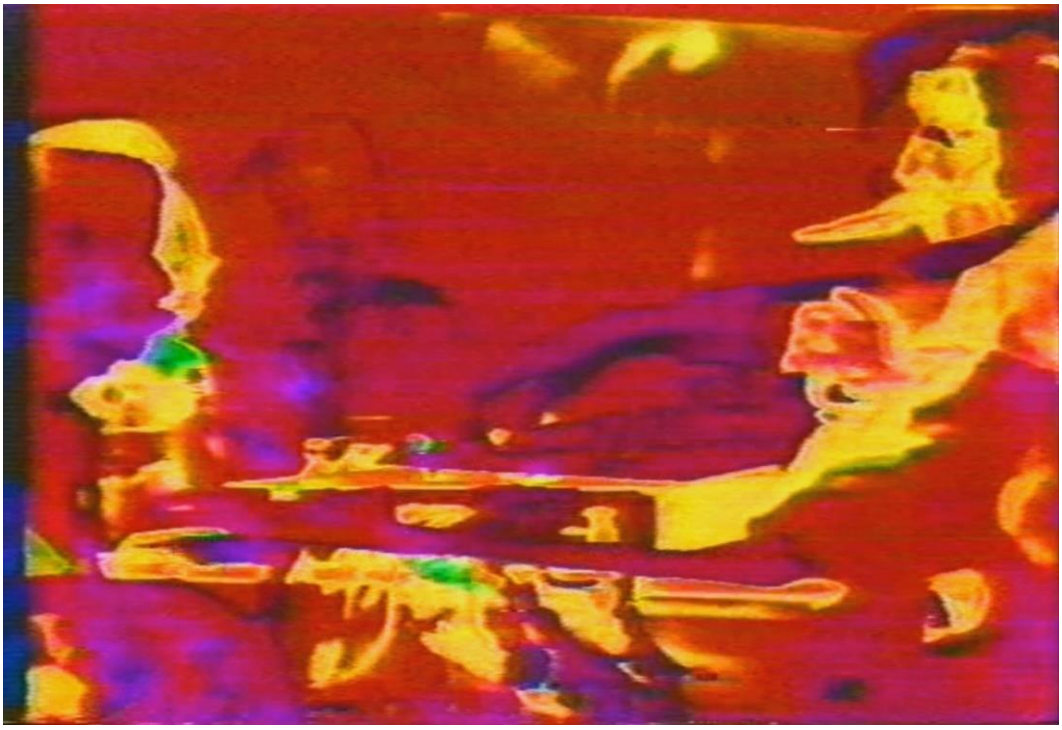

Figure 1.5. A still from *Video Chess* depicting blurred areas of color at 17:49.

Fifth, and finally, there are times where Kubota's manipulation of color comes to the fore, as she separates out sections of a photograph and gives them all the shades of a bruise, from sickly yellow to rich maroon (Fig. 1.5). The lines that divide the sections are oddly apportioned, creating cloudlike swaths, and when Kubota varies their saturation the clouds seem to fluoresce as if electrified. If the outlines are spectral traces, these clouds are a free-form and impersonal energy—more akin to temperatures on an infrared scanner—that video releases from photographs. Over the course of the video, Kubota experiments with these techniques individually and in combination as she tests the possibilities of the medium. Set against a creaking and whistling segment of the music from *Reunion*, each of these video techniques envisions a life beyond death that only video can reveal.

Kubota's transition from photography to video thus marks her understanding of a media-specific aesthetic practice. We learn something new by remediating photography through video, which can replay the footage over and over without degrading the original. This replayability

allows Kubota to attack and alter the footage without losing it, and in the process discover new connections implicit in the original. The image is stripped of its original meaning in order to become abstract and repeatable, and it is supplemented with a creative addition that retroactively appears inseparable from the original. This complex process is also at the heart of how games generate meaning, though we do not currently possess the tools to analyze that process. So let me mark this video specific sense of replayability as foreshadowing replayability in video games.

If the stark black and white photographs freeze a moment in time, simultaneously preserving and killing their subject, Kubota's video reanimates these photos. As her husband and fellow video artist Nam June Paik writes,

> Shigeko discovered death for video. Videotaped death is not a simple death. Whereas you can term real life a two-way communication, videotaped death is a one-way communication. Instead of asking the biblical question, 'Is there life after death?,' she formulated a new question, 'Is there video after death?'[20]

This video afterlife resurrects Duchamp, but in effect (and through effects) it also kills and reanimates John Cage. By remediating her photographs through the expanded vision of video, Kubota takes the act of inheritance commemorated in the photos and gives it a chance to mean something different. The settled act is unsettled, John Cage may not so simply win the larger match against Duchamp.

Indeed, there are several ways in which the installation not only unsettles that history, but enacts Kubota's own claim on the classically patriarchal inheritance of avant-garde mastery. Kubota's glass chess board is both a séance table and a magic lantern. When two people sit down to play a game on the *Video Chess* board, they are not only playing against each other, nor are they simply witnessing the recording of a game between Cage and Duchamp. Instead, the chess game

[20] Shigeko Kubota, "Video Sculpture: Two Phases," press release *Video Viewpoints,* Museum of Modern Art, New York, September 23, 1980.

in the present occurs in the literal light of that past game, and the players necessarily act out some new interaction between the two. Every move on the *Video Chess* board is implicitly compared to the moves of the two famous artists, projected and refracted through the prismatic chess pieces. Kubota creates a loop between the interactive electronics of 1968 and the video response of 1975, which turns her chess game into a four-player match where two people in the present measure wits against Cage and Duchamp. This reading is confirmed by a second version of *Video Chess* that Kubota produced but never displayed, in which the video fades between an image of her playing against a naked Nam June Paik on the "Video Chess" board, and a photograph of Duchamp playing against a naked Eve Babitz (Fig. 1.6).

Figure 1.6. A comparison of two stills depicting Duchamp playing against Eve Babitz and Kubota playing against Nam June Paik, from *Video Chess* at 11:46 and 11:54.

We pass, then, through another transmedial moment—not only from photos to video, but also from the medium specific effects of video to those of games. What does Kubota teach us here? Chess has been a paradigmatic example in game studies since its inception. Figures like Espen Aarseth, Gonzalo Frasca, Celia Pearce, Jesper Juul, Ian Bogost, and Mary Flanagan use chess to debate the nature of games because it seems to provide a clear separation between representational and functional elements of a game. Change the shape of the pieces to whatever form you want, have artists design stylized pieces, use Simpsons characters, play on an electronic board or one that sits on a televisions screen, abstract the game to just numbers and letters, and you can still play chess. Chess is the archetype of a "themeable" game, a game where the core rules and mechanics are independent of its representational elements.[21] The boundary between the core game and its representation supports the idea that there is a "magic circle" around games that separates them from the rest of the world.[22] Insofar as the theme is changeable, it becomes one more part of the ordinary world that we ignore when we play. These two concepts prop each other up, and chess often serves as the meeting point in discussions about them. However, these concepts also elide some of the messiness of actually playing games, and Kubota's *Video Chess* is part of an extended tradition of Fluxus chess sets that reveal how porous the boundary between theme and rule actually is. In the disrupted chess sets of Takako Saito and Yoko Ono, which I examine in the

[21] Espen Aarseth, "Genre Trouble: Narrativism and the Art of Simulation," in *First Person: New Media as Story, Performance, and Game*, ed. Noah Wardrip-Fruin and Pat Harrigan (Cambridge: MIT Press, 2004), 48; Jesper Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds* (Cambridge: MIT Press, 2005), 13-15.

[22] For a brief survey of this literature, see Jaakko Stenros, "In Defence of a Magic Circle: The Social, Mental and Cultural Boundaries of Play," *Transactions of the Digital Games Research Association* 1, no. 2 (2014); Jesper Juul, "The Magic Circle and the Puzzle Piece," in *Conference Proceedings of the Philosophy of Computer Games 2008* (Potsdam, Germany: Universitätsverlag Potsdam, 2008); Mia Consalvo, "There Is No Magic Circle," *Games and Culture* 4, vol. 4 (2009).

next chapter, a small change to the color of the pieces or their shape is used to make it difficult to remember whose pieces are whose, to shift player interest away from rules and undercut the goal of winning.

By contrast, *Video Chess* does maintain a clear distinction between its theme and its rules—the prisms and the projected video do not make it more difficult to play the game. However, it forces us to understand the theme differently, as an integral part of gameplay. When we discuss the theme of chess, we are addressing the metaphoric connection in which the board, pieces, and rules stand in for something else, commonly war. At the same time, chess has another set of references that we do not generally think of as part of its theme, one that we can call metonymic. Each move that a player makes not only stands in metaphorically for an attack or strategy, but also refers to a rich history of play that makes the move itself possible. Every player draws from the personal knowledge of learning chess and from the public history of great matches, important openings, and chess theory. Chess is a paradigmatic case for game scholars because it abstracts the metaphoric axis to the point where almost anything might serve as its theme. This is not true for the metonymic axis, because associations provide the context for choosing among possible examples of play. Chess carries a specific and public repertoire of play styles, and these are bound up with famous personalities, historical periods, national training methods, and intellectual trends.

The metonymic associations between past and present play are ordinarily regarded as within the magic circle, because chess is only reproduced as a shared cultural object by the repetition of people playing it. The relation between any particular game and the rules of chess functions much like the relation between any single speech act and the language it draws from. Kubota's work, however, forces us to recognize that the metonymic references are always already contaminated by the same kinds of resonances as thematic metaphors. Kubota collapses the

difference between metaphor and metonymy by projecting the Duchamp/Cage match, which is simply another past match in her repertoire, as a thematic element of *Video Chess*. Kubota discovers that the arbitrary themability of chess makes it possible to use historical reference as a theme. She demonstrates that the metonymic elements of play contain associations that would otherwise be excluded by the magic circle, but which somehow manage to bypass it and escape its censorship. This goes beyond the traditional criticisms of the magic circle, which argue that it is too rigid a boundary for understanding play, to instead demonstrate an underground dimension to that boundary. A game like chess can metonymically include in the act of play what it explicitly excludes at the level of representation. It is this double register within chess that opens up a space of haunting in which the ghosts of Cage and Duchamp can play alongside the present, and it is this double register that Kubota makes visible for game studies.

Like the logic of replayability, and connected to it, the balance between metaphor and metonym remains obscure for now. Somehow the abstraction and fungability of the one makes possible and invites the contextual ephemera of other. Reciprocally, it seems that a more robust connection between rules and theme forecloses some of the metonymic possibilities of play. I will have cause to return to these questions repeatedly, and develop the logic that underpins Kubota's substitution of metonym for metaphor. For that, however, we need a better account of the relation between chess and language, because the terms of that relation have already been structuring my discussion, and it is worth pausing over the transposition to ask what work it is doing.

Kubota has created a useful scaffold on which to hang two methodological problems that confront the study of games. She unfolds the complex back-and-forth between games as metaphors for understanding the world, and games as objects of understanding. For Duchamp, chess first served as a metaphor in his art before becoming something to be understood as an art itself, then

returning to his artistic work as a richer metaphor. Cage literalized Duchamp's metaphor of chess-as-conversation in order to beat Duchamp on the conceptual field of battle. Kubota repeats and exacerbates Cage's move by making "Video Chess" into a self-renewing literalization of chess as metaphor. There is a *mise-en-abyme* effect to these historical references and Kubota develops the structure of inheritance as a ghostly haunting. Kubota demonstrates a medium specific version of this anxiety of influence, in which the historicity of moves and strategy carries an inescapable remainder. These problems lean heavily on the question of what games mean and how they mean it. To answer this question we must closely examine how 20th century theories of meaning developed in proximity to games.

Chess and Signification

Let us rewind again and tell a different story about chess, one about how chess became a central metaphor for mathematicians, philosophers of language, linguists, and semioticians in the 20th century.[23] This is a story about how chess established a new paradigm of language through the structural relations it depicts between pieces, rules, and players. Without understanding this history, any attempt in the present to interpret the meaning of games or play will be necessarily caught in a methodological circle. Chess is a good, but imperfect, model for language, and its widespread use as a model left some characteristic deformations that make it more difficult to understand the contextual and improvisatory elements of speech. By the 1960s, the chess metaphor had fallen out of favor in the philosophy of language, often replaced by more general discussion

[23] Ahti-Veikko Pietarinen, "Who Plays Games in Philosophy?" in *Philosophy Looks at Chess*, ed. Benjamin Hale (Chicago: Open Court, 2008); Ahti-Veikko Pietarinen, "An Invitation to Language and Games," *Game Theory and Linguistic Meaning*, ed. Ahti-Veikko Pietarinen (Oxford: Elsevier, 2007).

of play. It is the misalignment between chess and language that makes the metaphor's effects visible and important to trace. Parts of this story have been told before; scholars have described the effects of chess on the philosophy of mathematics, the development of artificial intelligence research, and across the *oeuvres* of individual philosophers. By synthesizing these accounts, I want to demonstrate that they are all part of a more general turn towards games as a model of meaning.

The story of the chess-as-language metaphor begins within late nineteenth century philosophy of mathematics. One contemporaneous debate concerned the reality and existence of mathematical facts, whether numbers and functions need to correspond to actual existence in order to be true. Spurred on by developments in the study of probability and the theory of infinite numbers, a few philosophers put forward a radically formalist account as a way of removing "all metaphysical difficulties" that might arise from the reality of impossible numbers.[24] Heinrich Heine and Carl Johannes Thomae turn to chess as a way of describing the relation between the number as sign and what it signifies:

> Arithmetic is a game with signs which are called empty. That means that they have no other content (in the calculating game) than they are assigned by their behavior with respect to certain rules of combination (rules of the game). A chess player makes use of his pieces in a similar fashion: he attributes certain properties to them that constrain their behavior in the game, and the pieces are only external signs for this behavior.[25]

This is as much a theory of language as of mathematics. Chess serves as an exemplary game to describe mathematical operations because each piece on the board is discrete, differentiated, and lends itself to a limited number of determinable results. While Thomae does not press the metaphor,

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[24] Carl Johannes Thomae, *Elementare Theorie der analytischen Functionen einer complexen Verander-lichen*, (Halle: L. Nebert, 1898), quoted in, Michael Detlefsen, "Formalism," *The Oxford Handbook of Philosophy of Mathematics and Logic*, ed. Stewart Shapiro (Oxford: Oxford University Press, 2005), 301.

[25] Thomae, quoted in in Gottlob Frege, *Basic Laws of Arithmetic*, trans. and ed. Philip A. Ebert and Marcus Rossberg (Oxford: Oxford University Press, 2013), 103.

it is also clear that a game like football or golf would not serve the same end. Even in this early form the analogy between chess and language is quite well developed, associating game rules with both mathematical operations and signification, and associating play with calculation or speech.

Thomae's game formalism, based on the chess metaphor, was understood as an extreme position by later mathematicians but was influential as limit case. Set theory, for instance, is another broadly formal and constructivist mathematical tradition, and one of its foundational thinkers Ernst Zermelo analyzes chess as a formal problem. We can see this as a potential legacy of Thomae's work, travelling through mathematics rather than language.[26] Zermelo's chess theorems helped lead to John von Neumann's theory of games and economic behavior. Von Neumann further developed a formal account of chess decision making as the basis of a wider model of economic rationality.[27] It was Gottlob Frege's criticism of this formalism, however, which moved these discussions beyond mathematics twoards linguistic meaning, intertwining chess with the linguistic turn.

The 'linguistic turn' was a term originally coined by a philosopher of the Vienna Circle, Gustav Bergmann, and popularized in a collection of the same name by Richard Rorty. It covers the methodological gambit of 20th century philosophy that shifts philosophy from arguing about the world to arguing about the kind of statements we can make about the world.[28] In this context,

[26] Paul Erickson, *The World the Game Theorists Made* (Chicago: University of Chicago Press, 2014), 36-9.
[27] Ibid., 31.
[28] PMS Hacker gives a useful summary of the history of the linguistic turn in philosophy, Peter M.S. Hacker, "Analytic Philosophy: Beyond the Linguistic Turn and Back Again," in *The Analytic Turn: Analysis in Early Analytic Philosophy and Phenomenology*, ed. Michael Beaney (London: Routledge, 2007). One of the most important essays for framing this discussion was Richard Rorty, "Metaphilosophical Difficulties of Linguistic Philosophy," in *The Linguistic Turn: Recent Essays in Philosophical Method* (Chicago: University of Chicago Press, 1967). For a useful history of the linguistic turn outside philosophy see: Judith Surkis, "When Was the Linguistic Turn? A Genealogy," *The American Historical Review* 117, no. 3 (2012).

philosophers like Gottlob Frege and Ludwig Wittgenstein tried to clarify how sentences refer to things and how the grammar of sentences conditions their truth value. In *The Basic Laws of Arithmetic* (1903), Frege devotes two-dozen pages to explicating game formalism by expanding upon, straightening out, and riffing off of the chess metaphor. Frege first clarifies the relation of chess pieces to mathematical notation by demonstrating that both operate symbolically, purging the lingering belief that materiality matters to either. He then distinguishes between the rules of chess and the theorems of chess strategy—the first he likens to practicing mathematics and the second to the discovery of mathematical principles that reside at a higher level of abstraction.[29] However, even after these attempted clarifications, Frege rejects game formalism in mathematics and the chess metaphor alongside it. Frege believes that mathematical concepts necessarily contain a meaning, such as their relative magnitude, that cannot be explained formally. For a formalist mathematician '2' and '3' are tokens just like a pawn and a knight, and can be manipulated to produce other tokens. Frege, argues that our experience of number includes a natural understanding of relative magnitude which makes it obvious that 3 is larger than 2.[30] As a result, numbers cannot be reduced to arbitrary movements of pieces in chess, and must be taken instead as meaningful signs. The important point for my purposes is not Frege's rejection of chess, but the fact that this rejection explicitly and provocatively conjoins chess to a theory of linguistic meaning. By clarifying the question of how language signifies mathematical concepts, Frege makes several new answers possible.

One alternate response comes from Edmund Husserl, who disagreed fundamentally with Frege's theory of reference generally, and conceptualized the field of phenomenology largely in

[29] Frege, *The Basic Laws of Arithmatic*, 102.
[30] Ibid., 125.

order to account for how we intend meaning. Husserl developed his own version of game formalism in his *Philosophy of Arithmetic* (1891) and during his 1896 course on logic, in which he uses chess as a cursory example of mathematical meaning.[31] There is every reason to suppose Husserl read Thomae's article, and in the *Logical Investigations* (1901), Husserl develops his own elaboration of the chess metaphor as a linguistic model. He uses the metaphor to conceptualize the difference between signs considered in their material reality (sound waves, scribbles on a page), and signs as filled with meaning. That difference is analogous to how "[c]hessmen are not part of the chess-game as bits of ivory and wood having such and such shapes and colors…They become chessmen, counters in the chess-game, through the game's rules which give them their fixed *game-meaning.*"[32] The distinction here is crucial for both language and phenomenology, illuminating the difference between the ideal meaning of an object, or "noema" in Husserl's terms, and the contingent way the same object is grasped empirically. It is also at the heart of the themability distinction. Husserl develops this split as an interior quality of consciousness earlier in *The Logical Investigations,* but in this passage he uses chess to extend the distinction between signifier and

[31] Husserl writes in the *Philosophy of Arithmetic*: "If we fix them once and for all in the form of conventional sign equivalences (in the manner of the rules of a game), then it is clear a priori that we now possess all that is necessary for the independent development of the systematic of signs." Edmund Husserl, *Philosophy of Arithmetic: Psychological and Logical Investigations with Supplementary Texts from 1887–1901* (Dordrecht: Springer, 2012), 253. In his lecture he makes the comparison in the following manner: "Suppose a kind of given signs [sic] is set and memorized and so is a certain number of rules that are like the rules of a game determine how we are allowed to operate with the signs, in such a way that every other way of proceeding is considered unacceptable. Then an arbitrary connection of signs can, on the basis of the rules, be replaced by various equivalent connections of signs….What, then, is their meaning? It is no longer the corresponding arithmetical meaning, because I have wholly abstracted from it. Clearly the meaning now lies in the rules of the game. It is exactly like as in the game of chess: the bishop, castle etc." Husserl in Stefania Centrone, *Logic and Philosophy of Mathematics in the Early Husserl* (New York: Springer, 2010), 79.

[32] Edmund Husserl, *Logical Investigations,* Vol. 1, trans. JN Findlay (New York: Routledge, 2012), 210.

signified into the relational social world. Like Frege, Husserl thinks that meaning in chess has a purely arbitrary relation to its material substratum, but in contrast to Frege, Husserl believes this to be a positive quality that holds true for all varieties of language.

Ludwig Wittgenstein was perhaps the most central figure of the linguistic turn and his prolific use of chess metaphors dwarfs the other philosophers I have examined. Again, Wittgenstein lands on chess when he begins thinking about the philosophy of mathematics in the 1930s, though one of his readers suggests that "the game of chess, importantly modified, provides as near as we can get to a model for the way the world is conceived" in Wittgenstein's early and influential *Tractatus Logico-Philosophicus* (1921).[33] Wittgenstein argues at various points that meaning comes from the full system of linguistic usage, which he often calls a language game. He invents several of these language games, which are dispersed in his texts as small thought experiments with few rules and simple grammar. Wittgenstein, like Husserl and contra Frege, treats the arbitrary nature of meaning as a positive quality, and one that derives from a piece's role within the game.[34] Chess abounds in the pages of the *Philosophical Investigations* (1953) to the point where it looks less like a metaphor and more like one language game among others, materialized by wood rather than words.

Chess helps to frame and explain two of Wittgenstein's most famous arguments about the nature of language. The first feature that fascinates Wittgenstein is what it means to follow a rule, whether in chess, math, or language. He denaturalizes understanding and emphasizes the

[33] Anthony Kenny, *Wittgenstein* (Malden, MA: Blackwell, 2006), 60.
[34] For instance: *"*When one shews someone the king and says: 'This is the king', this does not tell him the use of this piece--unless he already knows the rules of the game up to this last point: the shape of the king. You could imagine his having learnt the rules of the game without ever having been shewn the actual piece. The shape of the chessman corresponds here to the sound or shape of a word." Ludwig Wittgenstein, *Philosophical Investigations*, trans. GEM Anscombe, P.M.S. Hacker, and Joachim Schulte (Chichester, West Sussex: Wiley, 2009), 18/§31.

possibility of misunderstanding or misinterpreting rules. This leads him to argue that rules always take place in a larger context of habit and repetition, even when it comes to such obvious acts as adding 2 + 2. Chess is a key example of this rule following, though by no means the only or even the paradigmatic one. This skeptical element of Wittgenstein's writing has received much attention, and my only addition here is to note that chess is an important demonstrative tool.[35]

Chess comes into its own, however, when Wittgenstein sets about thinking the boundaries of language and how they relate to meaning. He develops a paradox about the nature of games as systems that shares features with Kubota's "Video Chess" and helps to illuminate the metonymic connection between a single game and its background structure. When Wittgenstein conceptualizes many small language games in which words take on different meanings through their use, an inevitable question arises about how a person transitions from one game to another. Wittgenstein devotes much time to this question, but one of the most pointed ways he frames the paradox is in terms of sitting down to play chess:

> There is no doubt that I now want to play chess, but chess is the game it is in virtue of all its rules (and so on). Don't I know, then, which game I want to play until I have played it? Or are all the rules contained in my act of intending? Is it experience that tells me that this sort of game is the usual consequence of such an act of intending? so is it impossible for me to be certain what I was intending to do?[36]

Starting a game of chess becomes paradoxical because the meaning of the word 'chess' does not just depend on the language game of English, it also implies all the rules of another language game, ie. chess itself. Chess neatly illustrates this point because its rules are simple and contained enough

[35] The classic version of this skeptical Wittgenstein can be found in Saul Kripke, *Wittgenstein on Rules and Private Language: An Elementary Exposition* (Harvard University Press, 1982). For a rejoinder that takes up game rules in particular see Stanley Cavell, "Play and the Moral Life," in *The Claim of Reason: Wittgenstein, Skepticism, Morality, and Tragedy* (Oxford: Oxford University Press, 1999), 303–12.

[36] Wittgenstein, *Philosophical Investigations*, 68/§197.

that it is recognizable as a system.[37] In the gap between the intent to play chess and the resultant game, we can see a necessarily confused area in between. Intending to play chess necessarily brings more along with it than it hopes to and more than it can control. Even if the rules of chess explicitly exclude metaphoric associations, the intention to play chess starts from a different language game and brings different associations.

Games can also give rise to this paradox in another way according to Wittgenstein. The problem of attending to, or intending the consequences of, a whole system can also arise in the gap that emerges between one rule and another. Wittgenstein reframes the chess analogy to demonstrate this other case: "[s]uppose it were asked: When do you know how to play chess? All the time? Or just while you are making a move? And the whole of chess during each move?—How queer that knowing how to play chess should take such a short time, and a game so much longer!"[38] One quality of chess, at stake in this passage, is the empirical difficulty of foreseeing the consequences of my actions on the game. The deeper point, however, concerns the arbitrary nature of rules with respect to one another: a rule about how to move pawns does not imply anything about how a castle will move. We can, for instance, play variations of chess where any one rule is dramatically altered while many others stay the same.[39] As a consequence, I can act and make a considered response within a game according to all the relevant rules, but easily lose sight of some others. I can miss seeing an opponent's move or forget that they will be able to put me in

[37] "Imagine someone who believes that mathematicians have discovered a queer thing, √-1, which when squared does yield -1, can't he nevertheless calculate quite well with complex numbers, and apply such calculations in physics? And does this make them any the less *calculations?*" Ludwig Wittgenstein, *Remarks on the Foundation of Mathematics,* trans. GEM Anscombe (Oxford: Blackwell, 1978), 261.
[38] Wittgenstein, *Philosophical Investigations,* 65.
[39] "Of course, there could be a game in a certain sense very near akin to chess, consisting in making the chess moves, but without there being any winning and losing in it; or with different conditions for winning." Wittgenstein, *Remarks on the Foundation of Mathematics,* 116.

check by castling. Reciprocally, my intent to move might draw in other irrelevant associations as motivations. I might remember a move being expedient in a previous game and make it again to my own detriment. Insofar as the rules of the game do not govern my associations, I am free to associate meanings with moves however I want while still playing the game. In both cases, the aporia here is not about how to follow a rule—in these examples we can take this for granted—but about how to move between rules or games. This aporia opens games to both abstraction and arbitrary associations.

Parallel to the tradition that developed out of the philosophy of mathematics, though in relative isolation from it, the language-as-chess metaphor also developed at the turn of the century in the emerging discipline of semiotics. Charles Sanders Peirce, one of the earliest semioticians, was an avid chess player and made several casual uses of the metaphor.[40] It was Ferdinand de Saussure, however, who provided a sustained and influential engagement with chess in his *Course in General Linguistics*—a reconstruction of lecture courses he presented between 1906 and 1911.[41] Saussure's innovation was to treat language as a series of arbitrary connections between signifiers and signifieds where both elements were themselves defined by their difference from other signifiers and signifieds, in a system with no positive terms. By focusing on relations, rather than terms, Saussure provided a powerful method that would come to be known as structuralism, and which would be taken up by many humanistic disciplines.

Ruminations on chess occur throughout the *Course in General Linguistics*. As with Wittgenstein, chess seems to have been an object that Saussure used to think through particularly

[40] Ahti-Veikko Pietarinen, "Peirce's Game-Theoretic Ideas in Logic," in *Signs of Logic: Peircean Themes on the Philosophy of Language, Games, and Communication*, (Dordrecht: Springer, 2006), 77, 82.
[41] Ferdinand de Saussure, *Course in General Linguistics*, trans. Wade Baskin (New York: Columbia University Press, 2011).

knotty problems.[42] In chess one can find analogs to all of the structuralist innovations Saussure introduces: his distinction between language-as-spoken and language-as-a-system (*parole* and *langue*), definition by systematic differences, the relation between signifier and signified, and analysis along synchronic and diachronic axes. In one astonishing passage, which I will quote at length, Saussure elaborates all of these themes. Chess functions rhetorically in several ways throughout the passage, most obviously to bring an abstract system down to a human scale of action. Speaking is an everyday activity, but the *system* of language is not, and he attempts to humanize it by way of the chess metaphor. It is worth paying attention to the technicity of this metaphor, which not only illuminates individual qualities of language, but also provides a methodological frame to organize them. Saussure begins by naming the analogous elements:

> But of all comparisons that might be imagined, the most fruitful is the one that might be drawn between the functioning of language and a game of chess….
>
> First, a state of the set of chessmen corresponds closely to a state of language. The respective value of the pieces depends on their position on the chessboard just as each linguistic term derives its value from its opposition to all the other terms.[43]

Here Saussure says that a given chess piece, a bishop say, is not powerful in and of itself, but varies its importance depending on the total layout of the board.[44] Sometimes that bishop may be key to a checkmate that I am planning, other times it may block my plan to castle. Chess elegantly demonstrates this differential definition because, unlike natural language, the whole state of the

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[42] My reading of chess in both Wittgenstein and Saussure owes much to Roy Harris' monograph on the chess metaphor in both of these writers. Harris dwells on the consistency and inner structure of these thinkers in great detail, and the impact of the chess metaphor. Roy Harris, *Language, Saussure, and Wittgenstein: How to Play Games with Words* (New York: Routledge, 1988).

[43] Saussure, *Course*, 88-89.

[44] "Not only another knight but even a figure shorn of any resemblance to a knight can be declared identical provided the same value is attributed to it. We see then that in semiological systems like language, where elements hold each other in equilibrium in accordance with fixed rules, the notion of identity blends with that of value and vice versa." Ibid., 110.

game can be taken in by the players and relative values can be estimated. Without chess the idea of linguistic 'value' would be much harder to grasp. So far this is close to what the philosophers of mathematics and language argued, but Saussure then draws several uncommon links in the analogy:

> In the second place, the system is always momentary; it varies from one position to the next. It is also true that values depend above all else on an unchangeable convention, the set of rules that exists before a game begins and persists after each move. Rules that are agreed upon once and for all exist in language too; they are the constant principles of semiology.

One would expect that chess rules would correspond to grammar, but Saussure shows that his analogy is operating at a different scale than Frege or Wittgenstein by linking these rules to the principles that govern all languages. Saussure continues, now elaborating the meaning of the moves in the game in accord with this larger scale:

> Finally, to pass from one state of equilibrium to the next, or—according to our terminology—from one synchrony to the next, only one chesspiece has to be moved; there is no general rummage. Here we have the counterpart of the diachronic phenomenon with all its peculiarities. In fact:
>
> (a) In each play only one chesspiece is moved; in the same way that in language, changes affect only isolated elements.
>
> (b) In spite of that, the move has a repercussion on the whole system; it is impossible for the player to foresee exactly the extent of the effect. Resulting changes of value will be, according to the circumstances, either nil, very serious, or of average importance. A certain move can revolutionize the whole game and even affect pieces that are not immediately involved. We have just seen that exactly the same holds for language.
>
> (c) In chess, each move is absolutely distinct from the preceding and the subsequent equilibrium. The change effected belongs to neither state: only states matter.

Again, the analogy differs importantly from its usage in the philosophical literature. We might be inclined to identify the chess players with people conversing, but this is not what Saussure means. Rather, a state of language is composed of the relative relation of its parts: its phonemes, lexical units, or grammatical organization. A change in one of these can take an enormous amount of time,

and generations of ordinary conversation—*parole* in his terminology—only fill in the gap between picking up a piece off of the board and putting it back down. Saussure continues in this vein:

> In a game of chess any particular position has the unique characteristic of being freed from all antecedent positions; the route used in arriving there makes absolutely no difference; one who has followed the entire match has no advantage over the curious party who comes up at a critical moment to inspect the state of the game; to describe this arrangement, it is perfectly useless to recall what had just happened ten seconds previously. All this is equally applicable to language and sharpens the radical distinction between diachrony and synchrony. Speaking operates only on a language-state, and the changes that intervene between states have no place in either state.

As for philosophers of language, the discrete states of chess authorize a comparison in a way that messier games would not. Indeed, the changes that actually occur within linguistic evolution are never as discrete as this. Multiple changes happen simultaneously and some communities hold onto or invent dialectical variations that co-exist within the larger language. The purity with which Saussure separates diachronic change from synchronic relation owes quite a lot to the chess metaphor. The odd consequence is that, in Saussure's analogy, the chess player on either side of the board is just language, playing a game with itself. In a final coda Saussure makes this explicit:

> At only one point is the comparison weak: the chessplayer intends to bring about a shift and thereby to exert an action on the system, whereas language premeditates nothing. The pieces of language are shifted—or rather modified—spontaneously and fortuitously….In order to make the game of chess seem at every point like the functioning of language, we would have to imagine an unconscious or unintelligent player. This sole difference, however, makes the comparison even more instructive by showing the absolute necessity of making a distinction between the two classes of phenomena in linguistics. For if diachronic facts cannot be reduced to the synchronic system which they condition when the change is intentional, all the more will they resist when they set a blind force against the organization of a system of signs.

The point that Saussure is making is quite close to Wittgenstein's. Being able to reduce a "diachronic fact…to the synchronic system" would mean being able to predict which move a player would make from a given state of the board. Chess, in its structure, resists this kind of

reduction and calls for some element of spontaneity from the player. The amount of this spontaneity changes from chess (where the player has a goal) to language (which has no intent) but it stays the same in kind. Saussure's diachronic axis is the history of this spontaneous movement, and the theory of that movement, much like the unpredictability of play in relation to the game.

If Wittgenstein sketches an aporia between the intended and unintended meanings of chess, Saussure differentiates the two dimensions in which that aporia occurs. Roman Jakobson famously extends Saussure's distinction to show that there is an equivalence between the synchronic relations of similarity and metaphor, and between the diachronic relations of contiguity and metonymy.[45] He helps us to understand that these are not only two different dimensions of signification, but that they are interrelated and opposed. At the same time, by bringing these structuralist terms to bear on "Video Chess" we are already caught in something of a vicious circle, because the terms themselves are part of how chess distorts the image of linguistic evolution.

The language-as-chess metaphor, along with its more general cousin language-as-game, can be found across the semiotic tradition. For the next generation of semiologists—Roman Jakobson, Louis Hjelmslev, Algirdas Greimas, Umberto Eco—the chess metaphor helped to point out where "the Saussurian analogy between language and a game of chess can be pushed to its end.'"[46] The game metaphor often comes up as an attempt to mediate or reconcile the synchronic

[45] Roman Jakobson, "Two Aspects of Language and Two Types of Aphasic Disturbances," in *On Language*, trans. Linda R Waugh (Cambridge: Harvard University Press, 1998).
[46] Roman Jakobson, "Proposition au Premier Congrès International de Linguistes," in *Phonological Studies* (New York: Walter de Gruyter, 2002), 6 (my translation). To see the importance of the game metaphor for the other semioticians in this list, see Louis Hjelmslev, *Prolegomena to a Theory of Language* (Baltimore: Waverly Press, 1953); Algirdas Julien Greimas, "About Games," *SubStance* 8, no. 4 (1979); Umberto Eco, *A Theory of Semiotics* (Bloomington: Indiana University Press, 1976).

and diachronic. Greimas, the inventor of the semiotic square, and his colleague François Rastier, push this concept the furthest in their paper "The Interaction of Semiotic Constraints," where they attempt to reduce spontaneity of play to a series of interacting games that language passes through as it moves up from a deep structure to a manifest content. In their words, "[t]he play in question here is not to be understood as a free activity productive of literary objects, but as a long journey punctuated with compelling choices that leads through a series of exclusions and of options."[47] However, by multiplying games they by no means eliminate the spontaneity Saussure highlights, but rather exacerbate its effects at each of the muddled jumps from one set of rules to the next.

From these analyses we begin to see how central aspects of the explanatory paradigm at the heart of the linguistic turn—that anything can be broken down into distinct units, that these behave according to rules, that there is a systematic relation between them, that there are distinct systems whose borders we jump between—originate less in language, or even games generally, than in a particular subclass of games. Chess shapes and constructs a basic model of language whose influence can be felt even in writers who do not explicitly use or think about the metaphor. Chess not only illuminates preexisting aspects of language, but also produces a model in tension with its object. As the analytic and structuralist accounts of language gained momentum, the cracks in the chess metaphor became more apparent and opened up a more general account of language as play.

By the 1950s, those cracks were visible in the metaphor. Gregory Bateson, for instance, wrote a series of dialogues to work out some methodological issues that he saw arising in the philosophy of language, and in the new fields of information theory and cybernetics. In a

[47] Algirdas Greimas and Francois Rastier, "The Interaction of Semiotic Constraints," *Yale French Studies,* no. 41 (1968): 86.

"Metalogue" titled "About Games and Being Serious," Bateson catches sight of the connection between games and language, but puts it on the defensive. He dramatizes the connection between games and language through a dialogue between a father and a daughter as they examine their own conversational norms:

> D: I wish you'd tell me when you're going to change [the rules]!
> F: Hmm—yes—again. I wish I could. But it isn't like that. If it were like chess or canasta, I could tell you the rules, and we could, if we wanted to, stop playing and discuss the rules. And then we could start a new game with the new rules. But what rules would hold us between the two games? While we were discussing the rules?[48]

Here, the father gets into a disagreement with his daughter over whether their conversation is itself a game. The daughter is offended that her father might only be playing with her, which in turn means he is not taking their conversation seriously and perhaps being condescending. The father tries to defend himself by clarifying what he means when he calls their conversation a game: he points out the back and forth movement of conversational turn taking, the 'debating points' they score, and the kind of rules they follow. At the same time, he explicitly contrasts their conversation to games like chess. If conversations happened according to a fixed set of rules, he admits, then everyone would "only parrot all the old clichés."[49] If their dialogue is a game, it is a special kind of game, where the point is to fall into "muddles," and to find one's way out again.[50] Muddles are places without landmark or direction, but also places where fixed ideas can come unstuck and new insights can be gained. Conversations become games about discovering the rules by which to play,

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[48] Gregory Bateson, "Metalogue: About Games and Being Serious," in *Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution and Epistemology* (Northvale, NJ: Jason Aronson Inc., 1972), 28.
[49] Bateson, "Metalogue," 26.
[50] Bateson expands on his idea of muddles in Gregory Bateson, "Why Do Things Get in a Muddle?" in *Steps to an Ecology of Mind*: *Collected Essays in Anthropology, Psychiatry, Evolution and Epistemology* (Northvale, NJ: Jason Aronson Inc., 1972).

even while these rules "are always changing and always undiscoverable."[51] Such games, in the father's opinion, are more akin to a child playing with blocks, or a kitten rough housing. Play is not only communicative, but allows for communications about communication—it frames the meaning of any act and neutralizes it in order to make it signify differently.[52] As Bateson famously put it "[t]he playful nip denotes the bite, but it does not denote what would be denoted by the bite."[53]

Bateson's approach was a bellwether for the fate of the chess-as-language metaphor, though it took longer to register in some circles than others. Claude Shannon, who developed the basic theorems of information theory, drew on the mathematical models that game theory derived from chess to publish one of the first papers on how to program a computer to play a game.[54] The conjunction of information and chess would prove to be important for the early research programs in artificial intelligence, where chess was taken as a microcosm of the problems involved in machine-based translation.[55] Early chess programs searched large graphs of possible moves to select the best possible option, and this same strategy was used to reconstruct the grammatical relations between words in order to guess at their meanings. Historians of early computing have extensively documented the importance of chess as a model of thought from Shannon's program

[51] Bateson, "Metalogue," 30.
[52] Gregory Bateson, "The Message 'This Is Play,'" in *Group Processes: Transactions of the Second Conference*, ed. B. Schaffner (New York: Josiah Macy Jr. Foundation, 1956); Gregory Bateson, "Play and Paradigm," in *Play: Anthropological Perspectives,* ed. Michael Salter (West Point, NY: Leisure Press, 1978).
[53] Gregory Bateson, "A Theory of Play and Fantasy," in *Steps to an Ecology of Mind*: *Collected Essays in Anthropology, Psychiatry, Evolution and Epistemology* (Northvale, NJ: Jason Aronson Inc., 1972), 183.
[54] Claude Shannon, "Programming a Computer for Playing Chess," *Philosophical Magazine* 41, no. 314 (1950).
[55] Nathan Ensmenger, "Is Chess the Drosophila of Artificial Intelligence? A Social History of an Algorithm," *Social Studies of Science* 42, no. 1 (2012).

to the moment where the chess program Deep Blue defeated grandmaster Garry Kasparov.[56] While computer scientists ultimately recognized that the problems of chess and language were significantly different, they helped to extend the metaphor into the 1970s and provide a link between philosophy and early video games.

Chess made some qualities of language visible, but as Saussure's English translator Roy Harris describes, important mismatches that came to the fore in postmodern accounts of language. The rules of chess and the rules of language operate in different ways, for instance. The former are more explicit, formalized, and less able to adapt to novel situations than the latter.[57] Similarly, by looking at chess as a game that the players already know how to play, it becomes difficult to think about the process of learning languages, how we can get into disagreements over words, and how we invent new ways of using language. These features need to be understood in terms of play rather than an established game.

The move from chess to play marked the evolution of structuralist methods into postmodern and poststructuralist ones. Several diverse definitions of play, each with its own metaphorical valences and disciplinary background were used to explain the nature of meaning and significance. As with the chess metaphor, each discourse has left a mark on our methods of interpreting play, and these histories need to be made explicit. In one discourse, anthropologists developed Saussure's structuralist account of language into a way of accounting for cultural meaning more generally. To do so, anthropological writing consistently makes use of play to account for the performative, situated, and phatic elements of meanings in ritual, and how this

[56] Andrew Williams, *History of Digital Games: Developments in Art, Design and Interaction* (Boca Raton, FL: CRC Press, 2017) 30-33; Pamela McCorduck, *Machines Who Think: A Personal Inquiry into the History and Prospects of Artificial Intelligence* (Natick, MA: A.K. Peters, 2004), 171-193.
[57] Harris, *Language*, 70, 74, 85.

becomes an important element in postmodern thought. In another discourse, poststructuralist writers like Roland Barthes and Jacques Derrida developed a metaphor of free-play to describe kinds of meaningfulness that structured rules cannot account for. This sense of play supplements chess with chance and spontaneity in order to better describe the indeterminacy of interpretation. A third sense of play informs constructivist theories in sociology and politics. Here, play is understood as a meta-cognitive function that allows for the interaction and simulation of many simultaneous constraints, in much the way that Bateson frames it. Play, in this tradition, treats the world as if it were a text by bringing our attention to the way we make statements about it. While I explore the inner dynamics and histories of these discourses later in this dissertation, each one introduces a methodological circularity into the interpretation of games that repeats and complicates the circularity of the chess metaphor. That circularity is part of the dynamic I explore in the following section.

Replaying the Origins of Game Studies

Fast forward to the early 1990s, when a generation of scholars was starting to think about new media, computation, and the nature of digital code. Video games were not yet a legitimate object of study in their own right, though they surfaced as common examples and as the topic of an occasional article or dissertation. Video games had to overcome several kinds of suspicion. As a mass cultural and market driven product that appealed to violent and broad tastes, games were dismissed as undeserving of close study. Their connection to the toys and games of children suggested that they were neither serious nor complex. Moreover, the fact that they depended on computers meant, in the popular imagination, that video games were completely predetermined

and lacked any creativity or ethical reflexivity.[58] In order to legitimate video games as proper objects of humanistic inquiry, many new media scholars turned to postmodern theories of meaning that came out of the linguistic turn, and that the chess metaphor made possible. It is in these early days of game studies that I want to locate the two methodological problems that I noted at the outset of this chapter, and which we are now in a position to unpack. In a complicated first gesture, the postmodern theories of meaning that had developed out of the language-as-chess metaphor were applied to video games. This initiated a complex and unrecognized circularity into their analyses, even as critics thought they were likening games to novels, theater, and poetry. However, a second methodological gesture, which rejected these associations in order to establish a separate institutional identity for game studies, makes the metaphor even harder to excavate, and creates a ghostly repression that echoes Kubota's "Video Chess." In this section I unpack these two moves, and suggest some methodological guidelines for practicing a version of game studies that takes this history into account.

Early new media critics were often located in literature and art history departments, and their work coincided with a high-water mark for the trends of postmodern aesthetics.[59] Each of the three discourses about language-as-play that I outlined at the end of the last section were used to legitimate video games. Most broadly, the idea that anything could be 'read' helped to frame the

[58] For a sense of these biases in early criticism, see Gillian Skirrow, "Hellivision: An Analysis of Video Games," in *High Theory/Low Culture: Analysing Popular Television and Film*, ed. Colin McCabe (Manchester: Manchester University Press, 1986); Julian Stallabrass, "Just Gaming: Allegory and Economy in Computer Games," *New Left Review* 198 (1993).

[59] During the early 1990s, for instance, George Landow was Professor of English and Art History at Brown, Katherine Hayles was Professor of English at UCLA, Stuart Moulthrop was Assistant Professor of Literature, Communication and Culture at Georgia Tech, Michael Joyce was Professor of Language and Literature at Jackson Community College, Lev Manovitch was Assistant Professor of Visual Arts at the University of Maryland, Richard Grusin was Professor of Literature, Communication and Culture at Georgia Tech.

hardware, platforms, rules, interfaces, and interactions as 'texts' that told a story and transmitted an ideology.[60] Games, so the argument went, were a medium that was in its infancy both technologically and artistically, but would blossom into something richer given time. This argument was abetted by the fact that text adventure games were a popular genre in the 1980s and early 1990s, which included text as a major component and thus could be said to be 'textual' in a literal sense.[61] Experiments in hypertext literature, which took on serious themes and employed modernist reflections on medium specificity, also helped to legitimate the implicit narrative of progress in which video games only needed a few decades to mature.

In a related trend, though one that draws on a different understanding of play, media scholars made the case that games literalized postmodern aesthetic theories.[62] Where Roland Barthes identified a difference between writerly and readerly texts in the interpretive space they allow a reader, video games seemed to increase the reader's agency exponentially. Where Jacques Derrida demonstrated that there is always an undecidable element of free play in writing, games made uncertainty into an explicit formal element of their aesthetic. Where Judith Butler connected the performative nature of speech acts to the daily repetition of gender, games allowed players to explicitly choose their race and gender as they build their avatar. The citation of such theorists alongside games was calculated to draw on the political and intellectual capital of theory, and make

[60] This discourse begins early with Mary Ann Buckles, "Interactive Fiction: The Computer Storygame Adventure" (PhD diss., University of California, San Diego, 1985).
[61] See, for instance, Nick Montfort, *Twisty Little Passages: An Approach to Interactive Fiction* (Cambridge: MIT Press, 2005).
[62] The most prominent examples of this are George P. Landow, *Hypertext: The Convergence of Contemporary Critical Theory and Technology* (Baltimore: Johns Hopkins University Press, 1992); Michael Joyce, *Of Two Minds: Hypertext Pedagogy and Poetics* (Ann Arbor: University of Michigan Press, 1996); J. David Bolter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge: MIT Press, 1999); Lev Manovich, *The Language of New Media* (MIT Press, 2001). Additionally, this trend is demonstrated by many of the essays in *Videogame, Player, Text*, ed. Barry Atkins and Tanya Kryzwinska (Manchester: Manchester University Press, 2007).

use of the valorization of mass culture in which such theory was already involved. At the same time, the importance of linguistic models to postmodern theory further cemented the idea that games should be understood as texts.

The most prevalent academic analogy for video games, however, was to liken them to theatre. The relation between a player and a game system could be understood as akin to an actor's relation to a script, which sets up the constraints of a story while leaving room for the actor to move, gesture, and interpret.[63] In these accounts, the connection between theater and game was often mediated by the anthropological theories of ritual that themselves used play as a key metaphor. One of the likenesses between games and theater, for instance, is the fact that they both employ bounded spaces. This 'magic circle,' conceptually migrated from discourses on play to ritual and then to theater through the work of Victor Turner and Richard Schechner.[64] When Janet Murray makes the case for understanding the future of games as interactive theatre in *Hamlet on the Holodeck* (1997) she explicitly draws on this anthropological tradition to frame the computer interface as a 'liminal space.'[65] In many ways theatre and play are already closely related through make-believe. So, the turn to theatre as a model by media theorists served to legitimate play, give it a destiny of aesthetic development, and make it comprehensible in academic circles.

In each of these cases, a concept of play—as meta-communication, indeterminacy, and performance—came in to smooth the application of a theoretical framework that was assumed to

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[63] Brenda Laurel, *Computers as Theatre* (Reading, MA: Addison-Wesley Pub. Co, 1993), 6-30; Janet Horowitz Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (Cambridge: MIT Press, 1998), 13-27; Celia Pearce, "Story as Play Space: Narrative in Games," in *Game On*, ed. L. King (London: Lawrence King Publishing Limited., 2002). Additionally, these theories inspired an important proof of concept in Michael Mateas and Andrew Stern, *Façade* (2005), Microsoft Windows and MacOS.

[64] Richard Schechner, *Performance Studies: An Introduction* (New York: Routledge, 2013), 57, 89-122.

[65] Murray, *Hamlet on the Holodeck*, 99.

be primarily textual. These analogies fit because that fit was pre-established by the prevalent use of game and chess metaphors that underpin structuralist and poststructuralist theories in the first place. Play is doubled in these accounts: it appears once in the object of analysis (ie. a videogame) and again in the metaphor that makes that object appear to be a text. While the difference between these two positions goes unremarked and unthought, the game metaphors leave a repressed and forgotten trace. At the origin of game studies is a circularity that shapes every attempt to understand the meaning of games.

Though these strategies of legitimation helped make games objects of academic inquiry, the problematic effects of using textuality to explain games did not escape notice. Rather than excavating the history of play metaphors, however, the next generation of video game scholars sought to begin anew by rejecting the textuality of games outright. For these self-styled ludologists, the idea that games should strive for artistic validation through more complex storytelling felt like an abdication of the medium's pleasures and affordances.[66] Not only was the ideal of development teleological, but it flew in the face of the historical reality that game developers were investing in visual fidelity over emotional depth. Ludologists argued vehemently against the idea that play was the same as interpretation, explaining time and again that video games operate through literal, physical, and programmatic operations. They turned away from the interpretive and textual analysis of games to develop a formalist account of medium specificity in video games.

The foundational text of this approach was Espen Aarseth's *Cybertext* (1997), which drew a clear line between the tools that could be validly taken over from literary theory and those that

[66] For a more extended treatment of this period, see Michalis Kokonis, "Intermediality between Games and Fiction: The "Ludology vs. Narratology" Debate in Computer Game Studies: A Response to Gonzalo Frasca" *Film and Media Studies* 9 (2014); Jan Simons "Narrative, Games, and Theory," *Game Studies* 7, no. 1 (2007).

belonged to a metaphorical and theoretical extension that he described as "theoretical imperialism."[67] Aarseth argued against "a certain rhetorical model used by literary theory...the idea of a narrative text as a labyrinth, a game, or an imaginary world, in which the reader can explore at will, get lost, discover secret paths, play around, follow the rules, and so on," precisely because the metaphor confused two kinds of play.[68] He rejects the text as labyrinth metaphor, but without accounting for the genealogy that connects it to play in the first place. As a result, he cuts himself off from the very elements of games that make them powerful tools for understanding linguistic meaning. While Aarseth maintained an attachment to literary criticism, those who took up his call began developing game studies in contradistinction and isolation from it.

One of the great ironies and symptoms that followed the rejection of linguistic models was that game scholars returned to chess to make sense of the way games signify, just like the philosophers of language before them. Far from escaping the influence of the linguistic turn, ludologists excavated and returned to an earlier version of it. In a later essay, Aarseth attempts to counter the textual metaphor, and in the process brings together several of the themes of this chapter. He begins by emphasizing the themability distinction:

> Games are not "textual" or at least not primarily textual: where is the text in chess?…Any game consists of three aspects: (1) rules, (2) a material/semiotic system (a gameworld), and (3) gameplay (the events resulting from application of the rules to the gameworld). Of these three, the semiotic system is the most coincidental to the game[69]

[67] Espen J. Aarseth, *Cybertext: Perspectives on Ergodic Literature* (Baltimore: Johns Hopkins University Press, 1997), 16.
[68] Aarseth, *Cybertext*, 3.
[69] Espen Aarseth, "Genre Trouble: Narrativism and the Art of Simulation," in *First Person New Media as Story, Performance, and Game,* ed. Noah Wardrip-Fruin, Pat Harrigan, and Michael Crumpton (Cambridge: MIT Press, 2006), 47-8.

Aarseth then discusses the internal system of the game in terms derived directly from Saussure, and that deploy his structuralist logic. Note for instance, the use of "value system" and the implicit distinction between synchronic and diachronic meaning at the end of the passage:

> [G]ames are not intertextual either; games are self-contained. You don't need to have played poker or ludo to understand chess, and knowledge of roulette will not help you to understand Russian roulette. (Neither will cultural knowledge of Russia. On the other hand, *Tetris* is also a dangerous Russian game…) …Unlike in music, where a national anthem played on electric guitar takes on a whole new meaning, the value system of a game is strictly internal, determined unambivalently by the rules. Among the many differences between games and stories, one of the most obvious is that of ambiguity. In *Tetris*, I do not stop to ponder what those bricks are really supposed to be made of.…The pleasure of games is quite different from the pleasures of the novel: for a chess or *Tetris* player, replaying is the norm, while most novels are read only once. You can be an expert chess player without playing any other game, but to understand even a single novel you will need to have studied numerous others.[70]

The passage connects the meaning available through play to the pleasure of replaying in a logic I will explore momentarily. Though Aarseth is likely wrong that most novels are read only once, there is certainly a difference in kind between replaying and re-reading that he gets right. Now, there are many reasons why a game theorist might turn to chess as a paradigmatic game. It is ancient, incredibly important culturally, it has an enormous geographic reach, it allows for deep strategic possibilities that can occupy a lifetime, and it has a complex set of interactions between pieces of different kinds. When ludologists continually turn to chess as a paradigm for how games signify, however, we need to hear the resonance with the linguistic turn.[71]

Accounts of video game criticism in the early 2000s tend to reduce and schematize a binary opposition between ludological and narratological approaches and simplify the disagreement

[70] Aarseth, "Genre Trouble," 48.

[71] A few key examples where chess is taken as a paradigmatic game: Jesper Juul, "The Game, the Player, the World: Looking for a Heart of Gameness," in *Level Up: Digital Games Research Conference Proceedings*, ed. Marinka Copier and Joost Raessens (Utrecht: Utrecht University, 2003) 9-10. Markku Eskelinen, "The Gaming Situation," *Game Studies* 1, no. 1 (2001) n.p.

between them. At its most banal, the debate becomes a question of whether games should include stories. On the narratological side, for instance, Celia Pearce argues that chess shares a narrative structure of regicide, powerful queens, and moral ambiguity with *Macbeth*.[72] Among the ludologists, Gonzalo Frasca counters that "it is impossible [that] the game of chess could be narrative since it is not a recounting, [and] there is no narrator and no narratees."[73] Constructing such a binary misses both the institutional and disciplinary stakes of these arguments, and the deeper confusion over a shared model of signification and hermeneutics. Even when Jesper Juul explicitly cites the use of chess metaphors by Wittgenstein and Saussure, he does so to argue that "game-related research has historically mostly been concerned with using games for studying other matters."[74] Not only does this statement symptomatically overlook the three decades of previous work by anthropologists and literary scholars that looks directly at play and games, it also misses how the linguistic turn and the language-as-chess metaphor continue to structure Juul's own account of chess as a paradigmatic game.[75]

These early and polemical disagreements settled within a few years; the ludologists won institutional support and the narratologists secured a place for story in games. For both, however,

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[72] Celia Pearce, "Towards a Game Theory of Game," in *First Person New Media as Story, Performance, and Game*, ed. Noah Wardrip-Fruin, Pat Harrigan, and Michael Crumpton (Cambridge: MIT Press, 2006).

[73] Frasca, Gonzalo, "Ludologists Love Stories, Too: Notes from a Debate that Never Took Place," in *Level Up: Digital Games Research Conference Proceedings*, ed. Marinka Copier and Joost Raessens. (Utrecht: University of Utrecht, 2003), 6.

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

[75] That neglect continues to be characteristic of game studies, with a few notable exceptions, notably scholars of anthropology or English who see the richness that their fields could bring to video game scholarship. See, for a few examples, David Golumbia, "Games Without Play," *New Literary History* 40, no. 1 (2009); Thomas M. Malaby, "Anthropology and Play: The Contours of Playful Experience," *New Literary History* 40, no. 1 (2009); Patrick Jagoda, "Fabulously Procedural: Braid, Historical Processing, and the Videogame Sensorium," *American Literature* 85, no. 4 (2013).

chess continued to provide a model for how games create meaning, based on a clear divide between metaphor and mechanics. Katie Salen-Tekinbaş and Eric Zimmerman, for instance, turn to chess to separate the meanings that attach to the gaming experience in the closed system of games from the interactions of play and the cultural significance of context.[76] Equally, when game scholars want to push against the methodological suppositions of meaning in game studies, they turn to chess to do so.[77] In particular, the Fluxus chess sets of artists like Shigeko Kubota, Takako Saito, and Yoko Ono have come to stand in for an alternate approach. Fluxus helps to disrupt methodological assumptions, and to capture a moment before the discipline solidified into a particular pattern.

Contemporary game studies inherits a muddle of metaphors. It was not wrong to use the metaphors of play to describe textuality, nor was it wrong for ludologists to reject such metaphors and use chess to describe language. Both of these responses were historically overdetermined by trends in academic theory, technological development, and institutional constraints. Rather, my point is that game studies has no account of the intertwined history that it inherits and that underpins every argument about the nature of games and play. Any attempt to deal with this impasse will have to find a way to negotiate or arbitrate the overlapping claims of games and language, because there is no way to step out of the inherited discourse and draw conclusions separate from history. It might be tempting to try and correct the analogies, to point out where

[76] Katie Salen-Tekinbaş and Eric Zimmerman, *Rules of Play: Game Design Fundamentals* (Cambridge: MIT Press, 2003), 50-52.
[77] Justine Cassell and Henry Jenkins, "Chess for Girls," in *From Barbie to Mortal Kombat: Gender and Computer Games* (Cambridge: MIT Press, 2000); Miguel Sicart, *The Ethics of Computer Games* (Cambridge; MIT Press, 2009), 54; Mary Flanagan, *Critical Play: Radical Game Design.* (Cambridge: MIT Press, 2009), 107-115; Ian Bogost, "Persuasive Games: Puzzling the Sublime," *Gamasutra*, December 23, 2009, accessed April 14, 2018, https://gamasutra.com/view/feature/132613/persuasive_games_puzzling_the_.php.

chess fails to describe language or where linguistic play fails to do justice to video games, but that corrective approach will not get us out of the muddle. There too many kinds of games and too many theories about the nature of language to give us clear criteria for deciding how well this metaphor actually fits. More importantly, the analogy has never been merely descriptive. As Huizinga argued, language helps to construct our fundamental ideas about what counts as a game in the first place, and I have tried to show that games do the same for language in the twentieth century.[78]

Two consequences arise from the methodological injunction against building a foundation by revising the metaphors. First, if we are interested in clarifying the relation between language and games, the objects that we study must themselves be games. While postmodern critics continue to refine their methods for describing the play of readers and texts in innovative ways, examples that are not games in some obvious way will beg the question. Describing a literary text as a game, for example, will be suspicious to a game scholar who believes that an imprecise metaphor is at work, one that elides medium specific differences. On the other hand, insofar as videogame studies has elaborated the notion of games in opposition to the question of linguistic meaning, it offers few adequate tools with which to undertake that study. As a second consequence, the methodology must involve the structuralist and interpretive frameworks of the linguistic turn and be applied to games without recourse to metaphor. Rather than finding equivalents for the concepts of play, games, rules, goals, etc. that match with ideas about meaning, we must discover a shared category that is directly and literally applicable to both realms.

[78] Johan Huizinga, *Homo Ludens: A Study of the Play Element in Culture* (Boston: The Beacon Press, 1950), 28-30.

The category that I have in mind is the aesthetic quality of playfulness. Playfulness comes in many flavors, but it is an animating spirit that can equally pervade or depart from a conversation, a book, a movie, a sport, or a video game. Playfulness solves the methodological conundrum brought on by chess. It is a minimal descriptor that, unlike play, does not imply an agential subject, and unlike games, does not imply an objective structure. Playfulness can be predicated in the same literal sense of chess and speech. It is also messier than play or games, lacking the transcendental freedom of the former and the formal universality of the later. It is deeply entwined with history, in how people play, what they find pleasurable, how much leisure time they have, how that time is segregated through class, gender, race, and ability, and countless other variables. That messiness is valuable, it offers a way to dive into the muddle of history and rethink the meaning of play.

Abstraction, Metonymy, and Replayability in *Tetris*

My next chapter breaks down playfulness in more detail, and demonstrates how it can be used to analyze the aesthetics of games. However, before moving on to that argument, I think it is worth showing what my alternate account of game studies might look like. I close, therefore, on a reading of *Tetris* (1984). *Tetris* makes for a useful test case because of its close association with chess in game studies literature. As in the above quote by Espen Aarseth, the two are seen as interchangeable when it comes to describing the way that games signify. Like chess, *Tetris* is an abstract game whose metaphorical connections can be drawn in many different ways. Like chess, *Tetris* involves a limited range of pieces whose value depends on the spatial arrangement of a board. *Tetris* and chess are also paradigmatic games because they are endlessly replayable, a kind of playfulness that seems to run contrary to the pleasures of narrative. By paying attention to the

repeated, metonymic dimension of replayability in *Tetris*, I will demonstrate an alternate method of analysis for game studies.

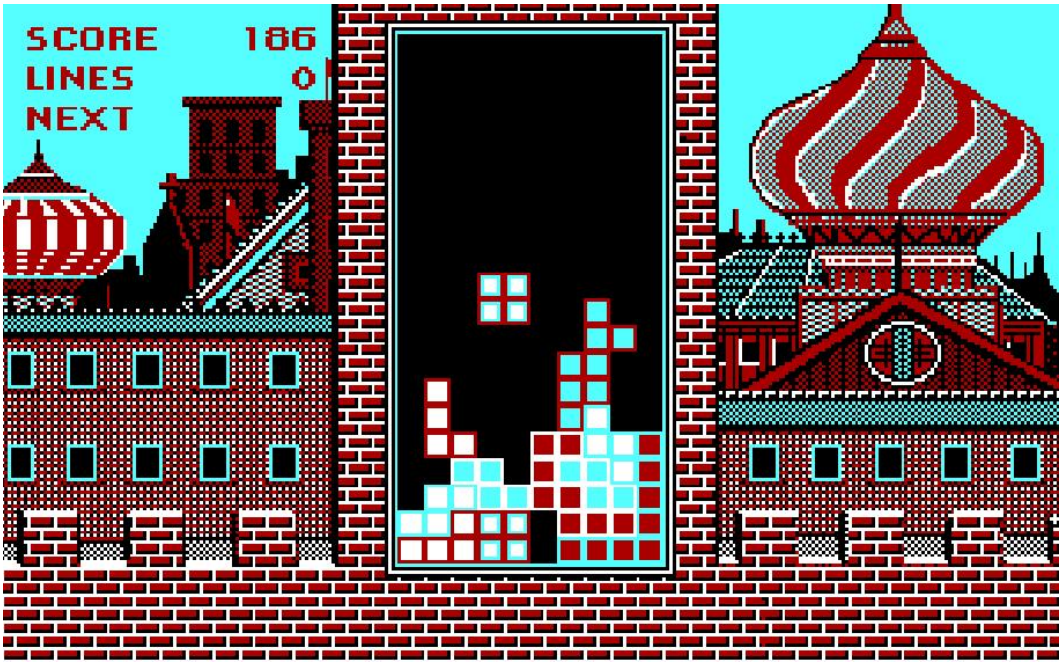

Figure 1.7. Specrtum Holobyte's 1987 release of *Tetris* for the Amiga computer.

Designed by Russian artificial intelligence researcher Alexey Pajitnov in 1984, *Tetris* has seen dozens of iterations and knockoffs during each new generation of game hardware (Fig. 1.7).[79] The core game takes place in a flat, empty rectangle, in which shapes appear at the upper boundary and slowly descend. The player is able to shift these blocks horizontally, rotate them by 90 degrees, and speed their downward progress with the goal of forming unbroken lines of blocks across the screen. Minimalist and abstract, the game touched a nerve in the late 1980s and became one of the most popular and time absorbing games ever. Iconically, the game utilizes seven 'tetrominoes,' a term that denotes any arrangement of four squares that each share an edge. These blocks appear in a random order that makes it difficult to neatly organize the playing field.[80] Though Tetris specifies

[79] The story of how Tetris came to be and was disseminated is told in detail by Dan Ackerman, *The Tetris Effect: The Game That Hypnotized the World* (New York: Public Affairs, 2016).
[80] Marcel Danesi, *The Puzzle Instinct: The Meaning of Puzzles in Human Life* (Bloomington: Indiana University Press, 2004), 195-6.

that the player should continually clear rows of blocks, doing so only speeds up the pace of play. Each cleared space returns the player to the original situation of play, repeatedly and endlessly. This structure has seen many iterations. Some versions of *Tetris* change the width of the playing area, the way blocks are rotated, the speed at which they fall, and a dozen other variables. Similarly, history has proven that game scholars are right to call *Tetris* highly themable: some variants replace the tetrominoes with nude human bodies, set the game amid Russian architecture, or move the screen to simulate the effect of playing while on drugs (Fig. 1.8).[81]

Figure 1.8. *SexTetris* (1993), a variant on the theme of *Tetris*.

As with chess, there has been a dramatic split within game studies over how, or even whether to interpret *Tetris*. In one of the first, and certainly the most controversial interpretations, Janet Murray argues that *Tetris* is "a perfect enactment of the overtasked lives of Americans in the

[81] See, for instance, Daniel Singer, *xTetris* v. 2.0 (1989), MS-DOS; The Dream Team, *Sextris* (1992), MS-DOS; Maddox Games, *X-Tetris* (1996), Microsoft Windows; Mute Fantasies, *Tetripz* (1997), MS-DOS; Serious Games, *Playing History 2 – Slave Trade* (2013), Microsoft Windows.

1990s—of the constant bombardment of tasks that demand our attention and that we must somehow fit into our overcrowded schedules and clear off our desks."[82] Murray's is an allegorical reading, one where each element in *Tetris* has a counterpart in the office environment where the 1987 version of the game would most commonly have been found. Blocks stand in for paper-work, the play-area represents the office, score represents money, playtime represents the work day. The reading draws simultaneously from the representational elements and from what Ian Bogost calls the procedural ones, with the in-game act of 'clearing a line' standing in for finishing work. Despite the conceptual fit, there is almost no evidence within the game itself to suggest such a reading.[83] *Tetris* lacks even the thin resonance with royalty and war that sustains the symbolic world of chess, making Murray's reading that much more provocative for formalist critics. In this vein, other readers have suggested that the blocks stand in for the Berlin wall, or that the game encodes a mentality of communist materialism and Russian nationalism.[84]

Ludologists argue adamantly against such metaphoric readings. Markku Eskelinen, in the first issue of *Game Studies*, calls Murray's approach an "interpretive violence" to *Tetris*. Eskelinen draws a comparison with chess, saying that "[i]t would be equally far beside the point if someone interpreted chess as a perfect American game because there's a constant struggle between hierarchically organized white and black communities, genders are not equal, and there's no health

[82] Murray, *Hamlet on the Holodeck*, 178. See also, Murray's commentary on the resulting backlash in her updated epilogue, 190-92.
[83] Ian Bogost argues that there is a slight suggestion in the game's inclusion of a "boss key," though he argues for understanding Murray's reading as more affective than strictly allegorical. Ian Bogost, *Unit Operations: An Approach to Videogame Criticism* (Cambridge: MIT Press, 2008), 101.
[84] Drew Robarge, "Tetris: Fun in the Cold War," *O Say Can You See: Stories from the National Museum of American History*, Smithsonian, November 6, 2014, http://americanhistory.si.edu/blog/2014/09/tetris-fun-in-the-cold-war.html

care for the stricken pieces."[85] Against such readings, Eskelinen advocates more attention to how a player relates to the temporal categories that organize her experience. Others go further still, and see in *Tetris* an argument against interpreting games at all. Jason Johnson argues that when it comes to game elements, "interpretation is merely self-fulfilled imagination, each as valid and invalid as the next," because connecting abstract rules to the world always involves an act of projection.[86] While I am drawing on a few of the extended commentaries about interpreting *Tetris*, more often than not these arguments appear in the margins and just-so stories of game studies, where *Tetris* is supposed to stand in for everything that makes games different from other parts of culture, everything that makes up the essence of games.

The dichotomy here, like that surrounding chess, remains locked in the methodological muddle that I have outlined above, where ideas from the early linguistic turn implicitly determine the referential structure of games. What happens to this account if we focus on the pleasures and effects of replayability? Aarseth notes the replayability of chess and *Tetris* in order to distinguish the depth of games from that of narrative.[87] If we reread a book or re-watch a film, we might interpret scenes differently or pay attention to details we missed the first time, but this kind of repetition differs fundamentally in games. Each time I play chess I encounter a different order and arrangement of moves, which in this analogy would be like picking up a Jane Austen novel and discovering that the first sentence was missing or swapped out. According to this line of thought, the pleasure of replaying chess cannot be a result of its meaningfulness, because its meaning

[85] Eskelininen, "The Gaming Situation," NP.
[86] Jason Johnson, "No Truth in Game Design: An Argument For Idolatry," *Gamasutra*, July 5, 2010, accessed April 14, 2018, https://www.gamasutra.com/view/feature/134257/no_truth_in_game_design_an_.php
[87] See, for instance, Keith Burgun, *Game Design Theory: A New Philosophy for Understanding Games* (Boca Raton, FL: CRC Press, 2012), xi-xiv.

changes every time. *Tetris*, like other arcade-style games, presents this argument even more forcefully. Whereas chess is replayable, in part, because it is strategically deep, *Tetris* is quite shallow. In chess players have reason to ponder the repercussions of each move. In *Tetris* each move is unique, but passes by so quickly that it returns the player to a zero state. The only recognizable consequences of a move are how full the grid has become and what openings are currently available. The pleasures of this repetition are immediate, visceral, and meaningless; they are about as far as we can get from a novel.

In fact, the kinds of pleasures that we get from rereading or re-watching seem to be inversely related to those of replaying. Games with rich plots, or those that aim at artistic effects, tend to be played once. Even narrative games that explicitly aim at replayability by offering the player meaningful choices, branching stories, and multiple endings rarely create the effect of depth they aim for. If in my first play through I let a character die, only to save them the second time, then the consequences of my act on the game are virtually unlimited and negate my application of prior knowledge. I might replay these games, but each play-through is either a tedious repetition or a singular experience in its own right. The branching decisions limit the relevance of my past play experiences. Abstract games are precisely the reverse, they sort the connections between game elements into a few categories that are highly likely to be relevant repeatedly. Past games of chess help me recognize traps, patterns of influence across the board, and how an opening move might unfold. That complexity is reduced even further in *Tetris*, so that I can start to grasp a limited set of possible situations that can arise in play, and orchestrate the falling blocks. In fact, replayability does not seem to be a judgment from experience at all. A player does not need to replay a game to have the sense that it is replayable, which suggests that it depends instead on an aesthetic

extrapolation within the game itself, albeit one that projects my present play as if it were already in the past.

All of this points to the fact that replayability operates through metonymic rather than metaphoric connections. An abstract game reduces the horizontal connections towards other systems of meaning in order to enrich the vertical connections between this move here and now, and all the past moves I have made or might otherwise draw from. Chess and *Tetris* involve complex system of references, only these references connect differently from those of a novel and differently even other kinds of game. The rub is that, as Kubota helped to demonstrate, metonymic references are never purely concerned with rules and mechanics. When I go to draw on my storehouse of past moves, each one comes with a rich context of situational cues that helped it to make sense at the time. Wittgenstein showed us how contextual openness is an unavoidable consequence of moving between language games, or between rules within a single language game. Because *Tetris* abstracts away its metaphoric connections, these cannot filter the contextual relevance of the various choices I might make. As a result, the fact that I first played Tetris on a personal computer, in the year the Berlin wall fell, and in my school computer lab are all potentially relevant to my style of play. Murray is right to draw a connection to the overworked white collar worker, but she does so for the wrong reason—thinking in terms of metaphor rather than the contingent metonymic history that surrounds *Tetris*. The question is not what *Tetris* resembles, but what happens when it cannot help but resemble.

Now, these contextual connections are surely just as personal and idiosyncratic as Eskelinen and Johnson suggest, and if they were the product of subsequent critical reflection then it would be true that any interpretation of *Tetris* would be valid and invalid in equal parts. However, these connections are made in the act of play itself, not with an eye to truth, but based on a strategy

that suits the player's style. Moreover, while any connection might start off weak and tenuous, the act of replaying a game gives that connection time to develop and elaborate itself. If I contingently associate *Tetris* with my office environment the first time I play, the second time the analogy will appear stronger to the exact extent that it helps me conceptualize my actions in the game. The structure of repetition in replayability can take an initially far-fetched association, and over time make it key to that game's interpretation. This is how I would read the so-called *Tetris* effect, where after extended playtime, *Tetris* players find themselves imagining that the world is composed of tetrominoes.[88] The abstraction of *Tetris* not only accommodates, but demands that we find allegorical connections in the world. The pleasure of replaying is just this working through of the allegorical connections, extending and mastering the logic of whatever world the player connects to their game.[89] Far from an interpretive violence, this kind of allegorical extension is crucial to the replaybility of *Tetris* in the first place. *Tetris* may not have a single meaning or a fixed text, but these connections are part of a public reception that is no more arbitrary than that of a novel or film.

This is a cursory reading, and one that only starts to disentangle the structuralist framework that muddles game studies. My goal is to suggest that playfulness might shift what we attend to in games. Rather than treating *Tetris* and chess as paradigmatic cases that make abstraction, themability, and replayability the essence of games, playfulness helps us view these qualities as

[88] Angelica Ortiz de Gortari, Karin Aronsson, and Mark Griffiths, "Game Transfer Phenomena in Video Game Playing: A Qualitative Interview Study," in *Evolving Psychological and Educations Perspectives on Cyber Behavior*, ed. Robert Zheng (Hershey, PA: Information Science Reference, 2013); Angelica B. Ortiz de Gortari and Mark D. Griffiths, "Prevalence and Characteristics of Game Transfer Phenomena: A Descriptive Survey Study," *International Journal of Human–Computer Interaction* 32, no. 6 (2016).

[89] The question of mastery involved here is a very complex one, and one that runs through theories of play going back, at least, to Sigmund Freud's account of the Fort-Da game. I take this question up more directly in Chapter 3.

an aesthetic strategy. Games are not essentially anti-textual, or anti-interpretive, though some games trade one kind of meaningfulness for another. Nor, for that matter, is play a single thing in these examples. Players are involved in the ongoing process of constructing their style of play, and here that style consists of the contextual cues that seem relevant. As a result, it is possible to start from a different angle, to study games without simply repeating and repressing the confusion between language and play. This chapter has been concerned with clearing the ground and laying the foundations for that project, and in the next chapter I start the real work of theorizing a nuanced concept of playfulness that opens up a new approach to the study of play.

CHAPTER TWO
Secrecy: Play without Reason

You are young, six years old, playing hide and seek in a wooded park. You have found a wonderful hiding spot in a place the looks like it is surrounded by brambles, but in fact hides a comfortable moss carpet. Hiding here means doing nothing, you do not need to move or strategize, only wait in the double anxiety of being found or—worse?—not being found. The tension grows as you hear footsteps along a path, and ebbs as you are distracted by the sight of something incredibly alien. A mushroom, which you later learn is called 'Devil's Tooth,' is itself hiding in a corner glistening with what looks like blood droplets. No one finds you, and when you emerge an hour later you are disappointed to find everyone has already gone home. After school the next day, you bring a friend to the mushroom, making her promise to keep it a secret. Together, you share playful giggles and knowing glances that set you apart from your classmates. You are in a secret society for two, with a mystery that would become boring and public if it were shared. Even after the mushroom melts and the brambles grow over it, even after the spot is dug up for a subdivision, the hiding spot remains an icon of childhood playfulness, symbolic and dreamlike in your memory.

In this chapter, I examine secrecy as a form of playfulness that slips past and through the boundaries that distinguish real things from make-believe, games from ordinary life. Secrets travel on trajectories that can connect the pleasures and motivations of a game like hide-and-seek to everyday activities like sharing secrets while gossiping or flirting. Secrecy is a fascinating form of playfulness because it draws close to the feeling of the sacred while generating an aura of danger and magic. The pleasure in secret objects also attaches to the acts of masking and mimicking. By disguising and concealing my real identity, a playful self is allowed to emerge and behave in clownish or devilish ways. Secrecy can bind a play community together. As Johan Huizinga articulates it, "[w]henever it is a question of taking a vow or being received into an Order or

confraternity or of oaths and secret societies, in one way or another there is always such a delimitation of room for play."[1] Hidden away, playful secrets mock the serious business of states and corporations that keep real secrets, and suggest a hall of mirrors where the act of revelation simultaneously deflates and rejuvenates magic.

In response to the questions about interpretation that my previous chapter raised, my account of secrecy in this chapter presents a positive concept of playfulness that can answer the methodological impasse that binds postmodern aesthetics and game studies. In the introduction, I sketched the outlines of a new way of understanding playfulness as a style of response to games that is transported into everyday life. Here I deliver on that conception. I define a method for recognizing playfulness, elaborate a definition of it, and defend it against some possible criticisms. Summarily, I argue that playfulness needs to be understood as a structure of uncertainty; one where an irresolvable problem is artificially doubled in order to split its contradictory elements into two divergent trajectories. One version of the uncertainty is contained in the rules and organization of a game, while the other becomes a style of action embodied by the player.

I make this argument about playfulness, and for secrecy as one type of playfulness, by looking at three cases where the uncertainty that a secret introduces transforms the nature and function of play. In my first section, I continue to examine the importance of chess as a paradigm for thinking about meaning. In the Fluxus chess works of the 1960s we see an important transition from chess as a guiding metaphor and source of artistic inspiration to chess, and play more generally, as an object of explicit investigation and experimentation. Takako Saito and Yoko Ono make use of concealment and secrecy to question the structural separation between physical object

[1] Huizinga, Johan. *Homo Ludens: A Study of the Play Element in Culture* (Boston: Beacon Press, 1950), 20.

and idealist function in a series of 'disrupted' chess sets. Yoko Ono, in particular, produces fractured games that hide their rules and goals from their player and provoke this player to imaginatively fill in the gaps.

Ono's interest in performance and sincerity provides a through-line to my second section, which examines the anthropological connection between ritual and play. Structuralist anthropologists have argued that many rituals take the form of games—sacred sports that symbolize the acts of gods, board games for helping the dead pass on, dice that predict fortune, and so on—and they have used play as a model for interpreting the meanings of ritual more generally. Play suspends the question of belief that ritual refuses to answer because that answer is secret. In a third section, I look at how the surrealist, anthropologist, and game scholar Roger Caillois brings these discourses together. Caillois argues that playful secrecy involves a process he calls 'expending the secret.' He tries to parse out a safe version of this uncertain process in play from a destructive and sacred one. I argue that Caillois ultimately fails to separate the playful from the sacred, and that this failure can teach us how playfulness is embedded in the everyday world.

My final case study examines how mass market video games use the pleasures of secrecy to capture a player's attention. I look at *Super Mario World* (1990), the first game to use hidden levels in a way that fits Caillois' model of 'expending the secret.' Games before *Super Mario World* used secret codes and items to make things easier on a player, shortening the path to the end of the world or giving her more lives. *Super Mario World* does precisely the opposite: secrets extend and complicate the game, introducing a new motivation for play. Where Ono has her players reflect on the purposes of play while refusing any answers, *Super Mario World* overlays a second set of objectives within its world, transforming reflection into a meta-game. In my reading of *Super Mario World,* I put the model of playfulness derived from Caillois to work, and follow

the process by which a game's secrets captivate a player and draw her into a larger community through magazines, forum posts, and playground discussion.

Concealed Moves

An initial task for developing a theory of playfulness is to determine the conditions under which such an ephemeral and mercurial phenomenon can be studied. Is it possible, for instance, to isolate it? Or does it always occur in some compound with play and games? Is it possible to make playfulness appear with a certain method or trick? Or must we stumble across it haphazardly and take it where it lies? These kinds of questions shape the methodology of interpreting playfulness. In this section I look at a strategy of disruption deployed by Fluxus artists Takako Saito and Yoko that produces a sense of playfulness. Their strategy is secrecy: they obscure one part of a game in order to disrupt its ordinary functioning. As a result, the player is responsible for filling in the blanks and maintaining the world of play. She becomes more complicit in the construction of a play world. Both Saito and Ono explore this logic in relation to chess, whose complex role in theories of language and meaning I examined in the previous chapter. Saito and Ono are interested in the performative acts of play that bring the static structure of chess to life and invest it with meaning. Secrecy and concealment emerge as a means of forcing the structure of the game and the event of play into a delicate and ambiguous balance, wherein playfulness becomes visible.

The Japanese born artist Takako Saito began her reflections on chess by designing several new chess boards and pieces. Saito met Fluxus chairman George Maciunas in 1963, and they quickly became friends. Saito would regularly meet with Maciunas for dinner with other ex-pats

Mieko Shiomi and Shigeko Kubota.[2] As a graphic designer, Maciunas had an interest in the construction techniques that Saito practiced, and commissioned her to build several chess sets to be sold alongside other Fluxobjects and Fluxkits at his New York Fluxshop.[3] The commissioned sets were ornate and beautiful boards, with pieces made from the drill tips that are used to polish precious stones (*Grinder Chess*, 1965), or the precious stones themselves (*Jewel Chess*, c. 1966).[4] These initial boards are much like the works presented at the *Imagery of Chess* show in 1944: stylistic variations that did not interrupt ordinary play.

Saito then began to push the ordinary conception of play through a series of "disrupted" chess sets that infused them with a playful subtext. In *Spice Chess* (1965), for instance, each piece is replaced by a clear jar containing a ground spice, and the pieces can only be differentiated by smell (Fig. 2.1). White's spices are associated with desserts (pawns are cinnamon; rooks, nutmeg; knights, ginger; bishops, clove; king, cardamom; and the queen, anise) and black's with savory dishes (respectively: black pepper, coriander, turmeric, cumin, asafoetida, and cayenne pepper).[5] Other chess sets by Saito, such as *Weight Chess* (1965), force the player to heft the pieces to compare their weight, or in *Sound Chess* (1965) to shake identical boxes to hear the various rattles and scratches they make.

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[2] Midori Yoshimoto, *Into Performance: Japanese Women Artists in New York* (New Brunswick, NJ: Rutgers University Press, 2005), 120.

[3] Maciunas touted unorthodox formats and distribution methods for Fluxus works. In particular, he produced multiple editions of works available for purchase through a subscription, a mail-order catalog, or his New York warehouse. Alongside the event score, the format of the 'artist's multiple' is an equally important challenge to the traditional art world.

[4] Jon Hendricks, *Fluxus Codex* (Detroit: Gilbert and Lila Silverman Fluxus Collection, 1988), 455-461.

[5] Garnett Colleen Thorne, "Winning Isn't Everything: Fluxus Play, Games, and Gags in the Era of Spectacle" (master's thesis, University of Chicago at Illinois, 2003), 28.

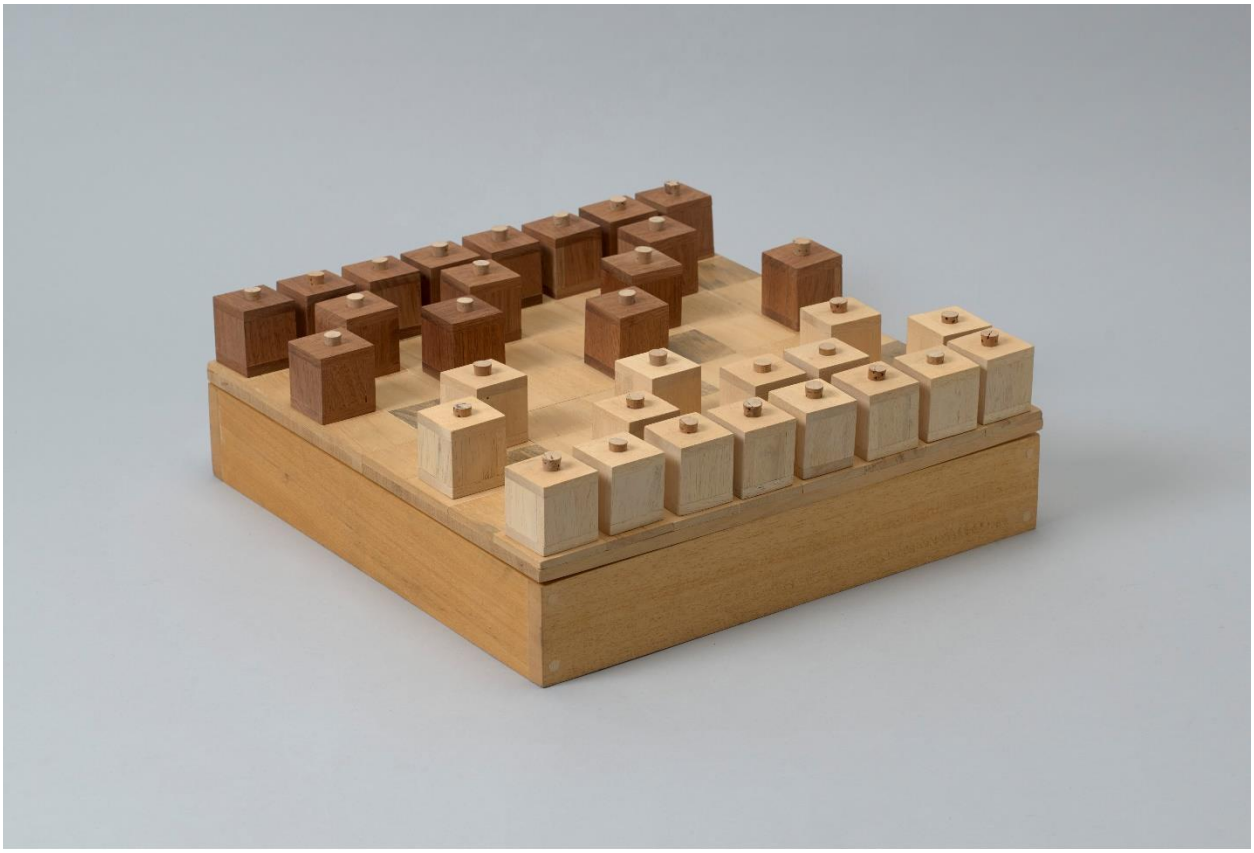

Figure 2.1. Takako Saito, *Spice Chess* (1977).[6]

By foregrounding the stylistic elements of play that ordinarily exist as a background, like gestures, memory, and sensations, *Spice Chess* disrupts the rules of chess without changing them. *Spice Chess* invites players to lean in, perhaps bumping heads while orchestrating turns smelling the pieces, potentially forgetting the arrangement of pieces. It calls attention to what game theorists

[6] Takako Saito (b. 1929) © ARS. Spice Chess. Ca. 1977. Wood chessboard with thirty-two wood and cork pieces containing various spices, overall: 2 11/16 x 12 ½ x 12 ½" (6.8 x 31.8 x 31.7 cm); each piece: 1 9/16 x 1 1/4 x 1 1/4" (4 x 3.1 x 3.2 cm). Publisher Fluxus. Fabricator: Takako Saito. Edition: 9. The Gilbert and Lisa Silverman Fluxus Collection Gift. The Museum of Modern Art, New York, NY, USA. Digital Image © The Museum of Modern Art/Licensed by SCALA/Art Resource, NY. © 2018 Artists Rights Society (ARS), New York / VG Bild-Kunst, Bonn.

Espen Aarseth and Jesper Juul call the "themability" of games, the manner in which a game stays the same despite radical changes to the way it is presented.[7] Saito's work questions the division between the abstract, rule-governed game and the acts of memory, perception, and movement that instantiate those rules. Saito's chess sets make this most cerebral of games into a sensual, contingent, and unrepeatable event. By blurring the themability distinction, Saito disrupts the function of the game. Fluxus scholar Midori Yoshimoto describes how "strategy is undermined by the physical need to utilize the five senses" and as a consequence "[w]inning [is] no longer as important as one's physical interaction."[8] Importantly, Saito does not accomplish this by changing the rules of chess, but finds a pressure point within the rules that transforms the game. The elements that compose a player's style of play, which would ordinarily adjust to fit the game's rules, end up overwhelming and defeating those rules.

In *Spice Chess*, Saito brings out a sense of playfulness by disrupting the game, though she leaves intact the capacity to play. One of her more recent chess sets, *Chess for Mice and Squirrels* (2012), goes a step further and also removes play. In this work, Saito demonstrates that the individuality and exuberance of play can drown out some quieter elements of playfulness, and by concealing the act of play the aesthetic background becomes visible.[9] In this chess sculpture, the stump of a dead tree, around six feet tall, is transformed into a site-specific installation with a board carved into its top. The pieces of the game are made of whole walnuts on short wooden perches of

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[7] Espen Aarseth, "Genre Trouble: Narrativism and the Art of Simulation," in *First Person: New Media as Story, Performance, and Game,* ed. Noah Wardrip-Fruin and Pat Harrigan (Cambridge: MIT Press, 2004), 45–56; Jesper Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds* (Cambridge: MIT Press), 2005.
[8] Yoshimoto, *Into Performance,* 126.
[9] Ralf Binnewirtz, "Exhibition Seewerk," *Ken Whyld Foundation & Association for the Bibliography and History of Chess*, October 5, 2012, https://www.kwabc.org/en/newsitem/exhibition-seewerk.html.

different heights, and placed out of reach of human players. On the side of the tree, a small ladder has been meticulously carved to make it easier for rodents to climb. The 'game' is 'played,' if either of those words is appropriate here, by the anarchic predations of mice and squirrels collecting food. Chess reframes animal action, such that the ordinary struggle for life becomes a playful choice that occurs in a world of abundance and freedom.

Chess for Mice and Squirrels can still be played according to standard chess rules, but its site specific setup is designed to exclude humans. Just out of sight, the concealed board is a metonym for the unwitnessable time and space in which the piece unfolds. The work takes place over the length of a month, well beyond the span of human attention, as rodents carry parts of the installation into the nooks and holes, scattering the game across the park and beyond human sight. Simultaneously, the board reframes the animals' behavior. On one hand, the fact that we cannot watch the animals suggests that a wonderland moment might be happening behind our backs, with animals becoming anthropomorphic figures who sit down at the board for tea and conversation. On the other hand, play is a literal biological behavior that rodents exhibit, and on any given day the chess board might serve as a playground for the rough and tumble chases of squirrels. These possibilities pervade the piece and give it a playful air. *Chess for Mice and Squirrels* conceals the goals and the concrete acts that would allow us to decide if it is serious or not. Over the month of the installation, the pieces moved and disappeared in random ways, and viewers were left with an atmosphere of playfulness without any concrete moment to attach it to. Takako Saito's chess works demonstrate that playfulness can be encountered as an aesthetic experience, and highlights a minimal methodological requirement for isolating playfulness: the structures of play and games have to be *disrupted*, or they will obscure the quiet experience of playfulness.

In these disrupted chess sets Saito pioneers a method of concealment that pushes chess away from abstract thought towards sensual engagement. Yoko Ono, by contrast, takes up Saito's tactic and hones it to a precise and minimalist point. Ono's iconic *White Chess Set* (1966) consists of an ordinary chess board and pieces which have been painted uniformly white.[10] An attached plaque reads: "Chess Set for playing as long as you can remember where all your pieces are." In Saito's chess sets, the differences between pieces are visually concealed, but can be re-discovered by smelling or hefting them. Ono erases the difference between black and white without the possibility of rediscovering it elsewhere. From a clearly divided initial state, the act of play renders the two sides progressively more indistinguishable. *White Chess Set* shifts the register of the competition from strategy and cunning to memory. While some chess grandmasters might be able to play without a board, the ideal player of this work will gradually lose track of her pieces. Saito compensates her player's exasperation with new pleasures, but for Ono concealment highlights the discomforts and demands of secrecy itself. Secrecy plays a crucial role in disrupting play, and becomes more generalized tool in Ono's work.

Even the minimalist act of recoloring chess pieces is enough to separate the feeling of playfulness from the game. *White Chess Set* has canonically been read as a meditation on and subversion of the metaphor of war. The uniformly white color symbolizes universal humanity and the player's eventual inability to discern her pieces reveals the pointlessness of conflict.[11] Its real force, however, is in its modernist reflection on the medium specific qualities of games. If the audience takes it seriously as something to play, rather than just a metaphor, *White Chess Set* is

[10] Hendricks, *Fluxus Codex*, 421.
[11] See, for instance, *Yes Yoko Ono*, ed. Alexandra Munroe and Jon Hendricks (New York: Japan Society and Harry N. Abrams, 2000), 136; Mary Flanagan, *Critical Play: Radical Game Design* (Cambridge: MIT Press, 2009, 112; Greg Costikyan, "Fluxus Games," *Gamasutra*, October 5, 2010, https://www.gamasutra.com/blogs/GregCostikyan/20101005/88191/Fluxus_Games.php

bound to generate new and secondary conflicts between players over the true state of the board.[12] It might even become a game of bluffing and intimidation if one player insists forcefully enough that a piece is hers. By removing all distinction between pieces and spaces, Yoko Ono attacks the presuppositions of games as much as those of war. By undermining the objective criteria through which a winner could be distinguished, *White Chess Set* challenges the idea that winning should guide play. Ono deflates strategic thinking as a means of pursuing victory, insofar as strategy now incorporates a contradictory element: every aggressive move, such as putting an opponent in check, carries the risk of making the board harder to read (because one's piece is in enemy territory). The game designer and theorist Celia Pearce argues that *White Chess Set* belongs to the "category of unplayable games," and while it is still be technically playable, Pearce's comment attests to the inscrutability of what such a player's motives might be.[13] Unlike the pungent joy of *Spice Chess*, Ono's game seems to lead players on a wild chase with no promise of enlightenment, pleasure, or reward. Secrecy is key to disrupting the goal of chess as well as the teleology of goals generally.

Ono's *White Chess Set* is part of a larger investigation of secrecy as a strategy of disruption in her early art and writing. Ono uses secrecy to implicate the audience, to make them responsible for filling in gaps and completing her works. In particular, this is a strategy employed in a number of event scores collected in *Grapefruit* (1964).[14] Event scores are a genre of writing that emerged

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[12] Ian Bogost makes a similar argument, but relies on the viewer's capacity for capriciously inventing interpretations and rules. He writes that "far from undermining chess, Saito's and Ono's chess variants mostly serve to demonstrate the flexibility and resilience of the original game," but seems to miss the point that a player who needs to invent new rules is already playing a different game. Ian Bogost, *Play Anything: The Pleasure of Limits, The Uses of Boredom, & The Secret of Games* (Philadelphia: Basic Books, 2016), 107.

[13] Celia Pearce, "Games as Art: The Aesthetics of Play," *Visible Language* 40, no. 1 (2006).

[14] Yoko Ono, *Grapefruit: A Book of Instructions and Drawings by Yoko Ono* (New York: Simon and Schuster, 1970). Grapefruit does not include page numbers, but for ease of reference I have included my own, which use Roman numerals from the first printed icon, and Arabic numerals starting on the section titled "1 Music."

in the experimental composition seminars taught by John Cage at the New School in 1958 and 1959. They typically consist of short imperative statements written on note cards, resembling minimalist poetry, often with the intent that they be performed like musical scores. Ono's husband at the time, Toshi Ichiyanagi, was a member of Cage's class, and Ono would occasionally sit in and contribute alongside several future Fluxus members and event score authors such as La Monte Young, George Brecht, and Dick Higgins.[15] Cage pushed his students to dispense with music in order to think of composition within a generalized field of sound and silence, and the event score began as a way of organizing this field through language. Music and sound remained dominant themes of Fluxus event scores and shaped the genre's development, but scores quickly grew to encompass light, motion, thought, and anything else that might be annotated.

Rule-based event scores have precursors in Dadaist "recipes" and Surrealist games, and descendants in conceptual art's instructions. All of these forms engage with 'constitutive rules,' which construct the very thing they govern. However, the different inflections of how the rules get followed in Fluxus helps to reveal why these works are so often described as playful rather than game-like.[16] On one hand, Dadaist and Surrealist practices tend to judge the value of a process by its results.[17] These rules leave behind an artifact, such as an absurd poem or a comic drawing, while the instructions themselves remain relatively mundane and easy to follow. André Breton

[15]Heather La Bash, "Yoko Ono: Transnational Artist in a World of Stickiness" (master's thesis, University of Kansas, 2008), 9-13.

[16] Game rules have some special properties compared to other kinds of rules. For a summary of the philosophy of rules see Steven Scott, *The Gamefulness of American Postmodernism: John Barth & Louise Erdrich* (New York: Peter Lang, 2000).

[17] For a catalog of these games, see Alastair Broochie. *A Book of Surrealist Games: Including the Little Surrealist Dictionary.* Ed. Mel Gooding (Boston: Shambhala Redstone Editions, 1995). For an account of the importance of the thing-ness of the result, and its haunting and disconcerting qualities, see Bill Brown, *Other Things* (Chicago: University of Chicago Press, 2015).

explicitly took games for models. As Claudia Mesch describes, the game theorist Johan Huizinga "prompted André Breton…to reclassify almost the entirety of surrealist practice as the playing of games."[18] Conversely, the instructions for conceptual art pieces are famously indifferent to producing artifacts. In conceptual art it is the capaciousness of the idea that dominates, and play, if it occurs, is an ideational playing-out of permutations and combinations.[19] Fluxus events, in contrast, want to be performed. They are fundamentally incomplete or unimaginable without the inventions and stratagems of a performer who is commanded, implored, or cajoled into action. Each Fluxus artist has a particular technique of undermining rules and instructions to disrupt the game and return the act to mere playfulness. These instructions provide a bridge from the rules of chess to rules in general, and from Yoko Ono's practice of painting pieces white to a more general pattern of disruption through secrecy.

Ono's event scores emphasize instructions for painting, architecture, dance, and poetry as much as sound.[20] They are suspended between Dadaist recipe and conceptual art instruction,

[18] Claudia Mesch, "Cold War Games and Postwar Art," *Reconstruction: Studies in Contemporary Culture* 1, no. 6 (Winter 2006): 10.

[19] Perhaps the most famous version of this argument was made by Sol Lewitt who argued that "in conceptual art the idea or concept is the most important aspect of the work. When an artist uses a conceptual form of art, it means that all of the planning and decisions are made beforehand and the execution is a perfunctory affair." Sol LeWitt, "Paragraphs on Conceptual Art," *Artforum* 5, no. 10 (1967): 79–83. More recent scholars of conceptualism have been somewhat more circumspect about the relevance of different instantiations, but Liz Kotz, for instance, argues that a key point of conceptualism is that different iterations could stand in for one another. Liz Kotz, *Words to Be Looked At: Language in 1960s Art* (Cambridge: MIT Press, 2010), 184.

[20] For an account of the event score within Fluxus practices more generally see Kristine Stiles, "Between Water and Stone: Fluxus Performance: A Metaphysics of Acts," in *In the Spirit of Fluxus*, ed. J. Rothfuss, E. Armstrong, and J. Jenkins (Minnesota: Walker Arts Center, 1993); Liz Kotz, "Post-Cagean Aesthetics and the 'Event' Score," *October* 95 (2001); Anna Dezeuze, "Origins of the Fluxus Score," *Performance Research* 7, no. 3 (2002).

holding onto the force of the imperative while making its enactment opaque.[21] Of her event scores, Ono writes that they have "no script as happenings do, though it has something that starts it moving – the closest word for it may be a 'wish' or 'hope.'"[22] Ono specifies her style and its relation to play more closely in her gnomic "The Word of the Fabricator." It is one of the only times in the early 1960s that she reflects explicitly and theoretically on her method, and in it she distances herself from the Zen influenced selflessness and aleatory methods taught by John Cage. Rather than trying to return human beings to the processes of nature, which she describes as "plantlike," Ono valorizes the 'unnatural' capacity to lie. To tell lies, to make believe, to fabricate something in excess of the natural is inescapably part of being human. She speaks of "fictional act[s]" and of human "set[s] of rules, such as belief" that re-structure the natural order.[23] Event scores participate in the subjunctive world that fictionality makes possible. Against the use of chance operations, which only pretend to escape fabrication, Ono suggests diving deeper into the fictionalizing process of life:

> if we assign the most fictional rules, only then may we possibly transcend our consciousness. My current interest is in such a world of fictional rules, the laws of the fabricator: to ask ourselves to imagine a perfect circle and a perfect line which exist only in our conceptual world: to assign ourselves to the nonsense act of counting the number of chimneys all over the world, and the repetition of those acts: to assign such a set of rules to myself.[24]

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[21] This is what I take to be at stake in Hannah Higgins' characterization of Fluxus work as about experience. While I don't share the sense that all Fluxus members have this interest, experience is one of the multiple things that can be given weight by this vague imperative. Hannah Higgins, *Fluxus Experience* (Berkeley: University of California Press, 2003). Bill Brown also concludes his reading of George Brecht with a similar focus on the grammatical mood. Bill Brown, "[Concept / Object] [Text / Event]," *ELH* 81, no. 2 (2014).
[22] Yoko Ono, "To the Wesleyan People," in *Yes Yoko Ono,* ed. Alexandra Munroe and Jon Hendricks (New York: Japan Society and Harry N. Abrams, 2000), 289.
[23] Yoko Ono, "The Word of a Fabricator," in *Yes Yoko Ono,* ed. Alexandra Munroe and Jon Hendricks (New York: Japan Society and Harry N. Abrams, 2000), 285.
[24] Ibid.

All the elements in this passage bear a striking resemblance to the classical definition of play, as formulated by Johan Huizinga, Roger Caillois, and Bernard Suits. Play is freely accepted, it puts the participant in a separate world defined by (the most) fictional rules, it implies an imaginary ideal (a kind of goal), and it provides means for reaching that goal which are nonsensical, inefficient, and repeated. Her complex second sentence is structured by a parataxis that actually establishes a series of logical connectives between the processes involved. The sentence moves from rules to an act of perfect imagination and the transition between the two is facilitated by fiction, which opens up a "conceptual world." When Ono asks us "to assign ourselves to the nonsense act," the acts of mere imagination from the previous clause are put into practice in such a way that their perfection becomes impossible. Ono goes on to say that, "conceptual reality…becomes a concrete 'matter' only when one destroys its conceptuality by asking others to enact it."[25] Perfect circles and perfect lines, which may or may not be connected to the act of counting chimneys (for instance, as graphic representations on a map) are exposed to the contingencies of the world. Finally, this assignation of rules is turned in on the self, which puts them to a test. By personally taking on the rules, Ono discovers whether it is possible to assent to such rules, and more specifically, whether it is possible to follow such a rule from a position of personal autonomy and freedom—from a place of play.

Complicating this already complex picture, however, is the sentence's use of colons. These suggest a second reading where each clause is informed by and completed by the subsequent one, such that we must work backward from the end of the sentence to discern the meaning of the initial fictional rules. Read in this order, Ono proceeds first by accepting some as yet unknown rule as personally binding, in an act of blind commitment and faith. Only then does she enact that rule

[25] Ibid.

according to the means it gives, and all the while the point or ideal of doing the action remains withheld. Next, the exploratory action yields to an implied telos or guiding limit: the act of counting the world's chimneys leads to a sense of the world as an ideal whole (a circle) or to the chimney as an ideal image (a line). Finally, and only after coalescing into this ideal state, the set of rules and goals can be passed on to other players and performers as an object, a game which can be endlessly repeated.

I offer these as two different accounts of how secrecy disrupts rules, games, and play in Yoko Ono's writing. While these readings exist in tension together, neither is primary; they are inseparable yet mutually exclusive. The reader is caught between the temporally progressive and the grammatically regressive formulations. One direction emphasizes the activity of assignation, the other the passivity of the assigned; one direction emphasizes the ideality of the imperative, the other a hopefulness that arises from following; one direction emphasizes the stage of the world, the other the performing self. The fictional rule perpetually generates new concepts from performance and continually destroys those perfect images by subjecting them to practical acts. *One conceals rules to generate a secret meaning, the other conceals goals to exhaust that meaning.* Two strategies of secrecy and exhaustion are linked together here in a simultaneous and double movement, an ambiguity in the etymological sense of being driven (*ag-ĕre)* both ways (*amb-*).[26] These ambiguities are woven into Ono's event scores, and when a performer tries to follow through they find themselves in the back-and-forth movement characteristic of play. Ono thinks through a logic of secrecy that is more general than that explored in *White Chess Set*. Here secrecy is more abstract. It no longer entails concealing a physical facet of a game, or a single rule. Instead, secrecy

[26] On the use of ambiguity and to-and-fro movement in play theory, see Peter McDonald, "For Every To There Is a Fro: Interpreting Time, Rhythm, and Gesture in Play," *Games and Culture* 9, no. 6 (2014) 483-85.

is a way to make ends indeterminate and means unclear, while still demanding action. Secrecy highlights and exacerbates this split, disturbing the balance, and opening up a space of mere playfulness.

The playful double-movement of concealment and exhaustion gets concretely enacted in some of the scores in Ono's *Grapefruit*, particularly in pieces that reference the children's game of hide-and-seek. Two of these, "CONCERT PIECE" and "HIDE-AND-SEEK PIECE," printed on facing pages, emphasize the double, yet oppositional, movement of secrecy by providing alternate readings of hiding from the imperative and hopeful approaches to rule following. In "CONCERT PIECE" the performer is instructed: "When the curtain rises, go hide / and wait until everybody leaves / you. / Come out and play."[27] In this event score, the performer herself becomes the secret and takes on an antagonistic relationship to the audience, who are left fidgety and unsure what to make of the concert. The piece disrupts the ordinary spectacle of performance to create a post-theatrical space. It counsels discipline and patience to reach the state in which one is capable of real play. The instructions make play into the ends of the performance, though what exactly one is supposed to do once play begins remains vague and undetermined. Who could tell beforehand what would happen after such an ascetic performance? The piece builds in ambiguous clues, or framing devices, such as the line break between "leaves" and "you" that makes the sense of abandonment palpable, but this only emphasizes the fact that the performer is without a guide. In other words, the piece seems to give clear instructions, but at its climax it conceals the means that would guide play.

On the other hand, in "HIDE-AND-SEEK PIECE" the performer is told to "Hide until everybody goes home. / Hide until everybody forgets about you. / Hide until everybody dies."

[27] Ono, *Grapefruit*, 36-7.

Again there is an instruction and a promise. Time yawns open where something should happen, but the performer has no idea of what that something could be. Now the activity is entirely determined, but the point or end of the action has been concealed. That the event is impossible to perform does not remove the burden of the imperative to try to perform it. Rather, the score's impossibility renders it incomplete and incoherent, leaving the tense play-act of hiding intact while undermining the game. Furthermore, the tone of "HIDE-AND-SEEK PIECE" differs from "CONCERT PIECE" by brining loneliness into the fore. The act of hiding faces an infinite horizon of complete loneliness as people die and time leads the performer to ever deeper abandonment. Kristine Stiles argues that "HIDE-AND-SEEK PIECE" refers to the trauma of American air-raids that forced Ono's family to hide in the mountains of Japan, fitting with the infinite waiting of this piece.[28] Despite this, hiding retains a miraculous sense of safety, security, and even freedom because it implies that the performer has the capacity to outlive every possible tragedy. The mixture of abandonment and hope is characteristic of Yoko Ono's work, which subjects the performer (often Ono herself) to the potentially violent impulses of an audience. Some famous examples include *Cut Piece*, in which the audience is invited to cut away Ono's clothes, and the film *Rape* (1969), in which a camera follows a stranger through the streets and into her home. In these examples, seriousness and violence do not preclude playfulness, but create an uncomfortable mixture of the two. Playfulness becomes more puzzling and makes us question the ambivalent impulses it allows.[29]

[28] Kristine Stiles, "Being Undyed: The Meeting of Mind and Matter in Yoko Ono's Events," in *Yes Yoko Ono,* ed. Alexandra Munroe and Jon Hendricks (New York: Japan Society and Harry N. Abrams, 2000), 147.
[29], Julia Bryan-Wilson, "Invitation, Sacrifice, Souvenir: Yoko Ono's 'Cut Piece,'" *Oxford Art Journal* 26, no. 1 (2003).

In a sense, the two scores are alternate ways of writing the same event of hide-and-seek. In both cases the performer first waits for the audience to go home before proceeding on to an obscure post-performance space. One realization of the instruction to "play" after the audience goes home in "CONCERT PIECE" could be to continue hiding forever, as in "HIDE-AND-SEEK PIECE." Combined, the two event scores spell out a complete world with a means (hiding) and an end (play), but Ono divides the two processes in order to disrupt the game. These two works stage the contrasting secrecies of Ono's method, and the stages of moving through each performance map directly onto the stages of discovering rules, imagining ideality, undertaking action, and self-assignation I outlined earlier. Both pieces emphasize the force of an imperative on the reader/performer, but also how that imperative disrupts play and game. Just as in *White Chess Set*, the loss of a teleological end or the obfuscation of proper means for acting give the event over to playfulness. In many of Ono's works, including these, a clear and concrete instruction is given, but its means or ends remain secret, hidden from both audience and performer. In each case, the performer is caught between a command, instruction, or rule that pushes her forward, and an indistinct hope that something will come from following that instruction. Between the command and the promise, the performer must play out the uncertain consequences of an event for an extended duration and with no guidance. Ono's events leave the performer in a ghostly time of indecision: at each moment she must ask whether the effect has been accomplished, whether now is the time to stop, whether anything is likely to happen if she continues.

Even as Ono's use of secrecy disrupts the agency of play and the rules of games, it leaves the tone of her pieces ambiguously caught between a violent seriousness and a carefree lightness. Her use of secrecy treads into terrain other than the strictly playful, and is sometimes identified with a feeling of sacred mystery. After a performance of a piece entitled "Striptease for Three," for

instance, which involves a curtain opening on three empty chairs, Ono was approached by a High Monk who was in the audience. The Monk wondered, "why did you have those three chairs on stage and call it a strip-tease by three?" and when Ono replied that it is the same thing whether "chair or stone or woman," the Monk recognized the gesture, commenting "[b]ut that is the same with what we [monks] are doing, aren't you an avant-garde composer?"[30] Like playfulness, the sacred can involve acts of piety where one adheres to a rule without understanding its purpose, and can involve a faith that commits a believer to an end even when it seems impossible to achieve. Ono's work draws on this realm of sacred practices that shares the double movement of play, so that play and the sacred become nearly indistinguishable from one another.

If we follow Ono's method for disrupting games, our account of playfulness ends up in the conundrum. We do not have any means to distinguish it from the sacred. To restate one of the central problems for my dissertation, when a certain gesture, rhythm, or thought appears while we play, it is relatively unproblematic to call it playful. After all, we can always refer back to play as its context. When that gesture occurs without play, then we have no context to help us identify it as playful and we must discover some other trait or criteria that distinguishes it. If play sometimes mimics the sacred, however, it is unclear what token would cleanly separate the two. We might also wonder whether the sacred has a tendency to mimic play. The sincerity of those who practice sacred rites based in secret knowledge has been an ongoing question for anthropologists confronted with non-Western religious practices: 'are they serious when they worship strange gods? Do they believe that their rites actually affect the spirit world? Do they really not know that behind the masks are kinsmen?' The irresolvable epistemological question involved in the secrecy of the sacred binds together the concepts of ritual and play in anthropological thought. In the next section,

[30] Ono, "To the Wesleyan People," 290.

I look to this history for its various attempts to untangle playful and sacred secrets and for criteria that might help identify playfulness therein.

PLAYFUL SECRETS, SACRED SECRETS

Play and ritual have a deep connection in anthropology, stretching back at least to the 1890s.[31] When Johan Huizinga wrote *Homo Ludens* in 1938, he drew on dozens of rituals from the anthropological literature available to him, ranging from Vedic riddle contests to Mexican festal corn dances.[32] A historian by training, Huizinga argued for a systematic relationship between play and ritual, and this argument has had far reaching consequences for both. In the following section I offer a brief genealogy of the connection between play and ritual from structuralism to the present. There are two details that I want to highlight in this history, and both will be useful for theorizing playfulness. First, play and ritual are systematically united and opposed in ways that recall the ambiguity of Yoko Ono's sacred playfulness and playful sanctity. Second, each of the accounts below puts play and ritual into a dynamic structure, where there is an ongoing conversion from one to the other. In each case the conversion follows Ono's method—performance without a goal, hope without a means—to a greater or lesser extent. By surveying these accounts of ritual and play I want to generalize the problem of recognizing playfulness.

Claude Lévi-Strauss is often credited with bringing structuralist thought to anthropology with the publication of *The Elementary Structures of Kinship* in 1949. However, a short essay by the linguist Émile Benveniste published two years earlier may deserve some of that credit.

[31] For a history of play in anthropology see Helen B Schwartzman, *Transformations: The Anthropology of Children's Play* (New York: Plenum Press, 1978); for an anthology of key readings see, Elliott Avedon and Brian Sutton-Smith, *The Study of Games* (New York: John Wiley, 1971).
[32] Huizinga, *Homo Ludens*, 22-6.

Benveniste's essay, "Le Jeu Comme Structure," is a direct response to Huizinga's argument that the sacred is a form of play, and argues the two are better understood as a structural opposition.[33] For Benveniste, the sacred is at the core of what a culture means to its people, and it can be broken down into the mutually supportive elements of myth and ritual. Myth is the content of the sacred, and explains why things happen the way they do. Ritual is the form of the sacred, and consists of practices that have some kind of efficacious relation to world of spirits.

Over time, one aspect of the sacred can begin to dominate the other; rituals can be practiced unthinkingly, or myths can be told without regard for the thing they explain. Note that Ono's terms are already at work in this separation of ends and means. For Benveniste, these autonomous aspects of the sacred turn into play, which "offers an inverted and broken image [of the sacred]" where "only half of the sacred operation is carried out—when the myth alone is translated into words, or the rite alone into acts."[34] Play is not only a result of this fall from the state of balance and grace, but also a force in its own right, which "characteristically recomposes, through make believe, the missing half [of myth or ritual]: in word play, we act as if some actual reality should result; in physical play, we act as if motivated by a rational reality."[35] For Benveniste, the sacred exists as a balance between content and form, while play is an imbalance between them. Over time one becomes the other. Play and the sacred form a binary pair: two poles between which cultural practices are drawn, distended, and recomposed.

Benveniste's essay had two important readers, Roger Caillois and Claude Lévi-Strauss. Thierry Wendling has described the bitter family drama that took place between these two "brothers" of French anthropology. Both sought to inherit the legacy of Emile Durkheim and his

[33] Émile Benveniste, "Le Jeu Comme Structure," *Deucalion* 2 (1947).
[34] Ibid., 163.
[35] Ibid.

nephew Marcel Mauss, both vied for the same university chair, and both struggled over the direction of scholarship in post-war France.[36] In 1955 and 1956, each delivered a series of accusations and recriminations that centered on the use of game metaphors in anthropological inquiry, and specifically the proper type of game to take as a model. Caillois argued that it should be chess, which he believed embodied rationality, competition, progress, and Western scientific values. Lévi-Strauss had employed the chess metaphor himself in *The Elementary Structures of Kinship*, and in the precise structuralist sense that I outlined in the previous chapter, but his argument with Caillois pushed him to champion games of chance as a model of cultural change.[37] Wendling argues that after these debates Caillois and Lévi-Strauss seem to split the territory of play between them. For Caillois, and like the Fluxus artists discussed earlier in this chapter, games became an object of structural study in their own right, one that could capture the style of a whole culture in miniature.[38] Lévi-Strauss abandoned games as objects only to have them proliferate as metaphors throughout his writing. In the next section I will look more closely at Caillois' adaptation of Huizinga and Benveniste. For the anthropological genealogy of ritual, however, it is Lévi-Strauss' famous introduction to *The Savage Mind* (1966), that centers play.[39]

[36] Thierry Wendling, "Une Joute Intellectuelle Au Détriment Du Jeu?: Claude Lévi-Strauss vs Roger Caillois (1954-1974)," *Ethnologies* 32, no. 1 (2010).
[37] "In principle, these games are unaffected by history, since the same synchronic configurations (in the distributions) and diachronic configurations (in the development of the moves) can reappear, even after thousands or millions of millennia, provided that imaginary players keep at it for that length of time. Nevertheless, in practice, such games remain in a continual state of flux" and "Goods are not only economic commodities, but vehicles and instruments for realities of another order….and the skillful game of exchange (in which there is very often no more real transfer than in a game of chess)." Claude Lévi-Strauss, *The Elementary Structures of Kinship* (Boston: Beacon Press, 1969).
[38] Wendling, "Une Joute," 44-5.
[39] Claude Lévi-Strauss, *The Savage Mind* (Chicago: University of Chicago Press, 1966), 1-33.

The Savage Mind repeats and expands the dichotomy that we came across in Benveniste. The book sets up an opposition between two fundamentally different modes of thought that Lévi-Strauss uses to characterize human societies: the scientific mode and the mythic mode. Neither of these approaches, he argues, is intrinsically more valid or rational—but they are qualitatively different in how they organize knowledge. Scientific thought is represented by the engineer, a master of efficiency who determines beforehand what tools are needed for a job. Mythic thought, by contrast, is represented by the quixotic figure of the bricoleur, who is an expert at recombining what lies ready to hand. One is a master of ends, the other of means. In addition to the epistemological contrast between science and myth, and the practical contrast between engineer and bricoleur, Lévi-Strauss also develops a contrast in cultural production. It is here that Benveniste's opposition re-appears, with scientific culture developing through games while mythic culture makes use of ritual. Both games and ritual produce lasting cultural institutions, and make use of impersonal rules and performances that aim to create a change within the community.

Where games and rituals differ, for Lévi-Strauss, is in the effect they have on the community. Games are modern society's secular and individualist substitute for the communal functions of ritual. Games start from the formal assumption that all players are equal, and over the course of play they produce an asymmetry between winner and loser that stands in for a larger split within society. Rituals, by contrast, assume a rift within a community and use rules and structures to reduce that disparity, reconciling the two sides. To demonstrate this, he contrasts a game of soccer to the ritual ball game of the Meskwaki (called the "Fox Indians" by Lévi-Strauss), where the score is predetermined, and players perform in order to restore an ordained order. Though games and ritual move in opposite directions, they are united and reconciled at a higher level by play. Ritual, Lévi-Strauss states, is "also 'played'…like a favored instance of a game, remembered

from among the possible ones because it is the only one which results in a particular type of equilibrium between the two sides."[40] Like Benveniste, Lévi-Strauss also associates myth making with play. The figure for mythical thought, the bricoleur, is derived from a semantic realm of play and leisure, where it "applied to ball games and billiards, to hunting, shooting and riding."[41]

Lévi-Strauss works out the dynamic that connects games and ritual in more detail than Benveniste, adding a dimension of temporality. Ritual marks and commemorates the cyclical recurrence that gives rise to calendrical time, while games produce moments of punctuation and singular expenditure characteristic of the holiday. The Italian philosopher Giorgio Agamben reads this part of *The Savage Mind* as presenting a theory in which games and ritual are central to structuralism: "rites transform events into structures, play transforms structures into events."[42] Agamben further spells out the connection between the two by arguing that ritual and games produce "a differential margin between diachrony and synchrony: history; in other words, human time."[43] In the back-and-forth movement between these two elements, we see a more precise version of Ono's account. Not only does *The Savage Mind* make use of the distinction between means without ends and ends without means, but it also builds in an analog to the process of creating and disrupting rules.

The connection between play and ritual remained an important topic in anthropology in the following decades. In response to a growing cohort of play scholars, Alice Cheska and Michael Salter helped to form The Anthropological Association for the Study of Play (TAASP) in 1973,

[40] Lévi-Strauss, *Savage Mind*, 30.
[41] Ibid., 16.
[42] Giorgio Agamben, "In Playland. Reflections on History and Play," in *Infancy and History: Essays on the Destruction of Experience* (New York: Verso, 1978), 73.
[43] Agamben, "In Playland," 84.

the first academic association to take play as its object.[44] Alongside this growing empirical work, several other anthropologists were pioneering an approach that focused on the ways members of a society make sense of and interpret their own culture. Clifford Geertz, Victor Turner, Mary Douglas, and others emphasized how cultural production functions like a text open to interpretation. Many of their theories were in dialogue with Lévi-Strauss' methodology.[45] Ritual became a key site for contesting the structuralist emphasis on myth and symbolic systems because it offered an embodied and practiced form of meaning making. In that argument, play became a central way of understanding the continual renegotiation of ritual.

Take, for instance, Victor Turner's famous argument about liminality.[46] Turner borrowed Arnold van Gennep's breakdown of the ritual process into three phases, a preliminal phase (rites of separation), a liminal phase (rites of transition), and a postliminal phase (rites of incorporation). Turner focuses on moments of transition, the in-between phase, as a point where the traditional norms and rules of the world are suspended and an initiate is thrown into a frightening and alluring world of anarchy. Turner associates this phase with a moment of creativity, possibility, and cultural production, and it is the liminal phase that authorizes his application of the idea of ritual to contemporary cultural productions like theatre. Turner explicitly understood liminality as a form of play, and developed the concept in relation to the writing of scholars such as Brian Sutton-Smith

[44] Phillips Stevens, "40 Years at Play: What Have We Achieved?," in *Celebrating 40 Years of Play Research: Connecting Our Past, Present, and Future,* ed. Michael Patte and John Sutterby, (Lanham, MD: Hamilton Books, 2016).
[45] Clifford Geertz, "Deep Play: Notes on the Balinese Cockfight," *Daedalus* 101, no. 1 (1972): 1–37. See also Marshall Sahlins' discussion of Levi-Strauss' games. Marshall Sahlins, *Culture and Practical Reason* (Chicago: University of Chicago Press, 1976), 51-2.
[46] Victor Turner, "Liminal to Liminoid, in Play, Flow, and Ritual: An Essay in Comparative Symbology," *Rice University Studies* 60, no. 3 (1974): 53-92.

and Roger Caillois.[47] For all that separates him from Benveniste and Lévi-Strauss, Turner understands play's relation to ritual in fundamentally the same dynamic terms. Mary Douglas gives a similarly play-filled account of ritualistic joking, which has a minor but crucial place in her understanding of ritual.[48]

Clifford Geertz' essay "Deep Play: Notes on the Balinese Cockfight" is a central example of the importance of this dynamic of play in anthropological accounts of ritual. The essay begins by locating Geertz as an outsider in the Balinese community until the day that he and his wife visit an illegal cockfight and experienced an ensuing raid. Their decision to side with the locals and flee rather than waiting to show their papers to government officials builds the community's trust in Geertz and is necessary for his continuing research. For the remainder of the essay, he tries to unpack the importance of the cockfight for the Balinese, showing how cocks, betting, gestures, and much else, expresses the social and psychic dynamics of the community. Geertz would like to see gambling as one cultural activity among many others, interpretable in the manner of a novel, sculpture, or piece of music. That the object of study happens to be a game seems incidental.[49]

Play, nonetheless, forms a keystone for his interpretive strategy, and by following the logic of his piece we can see the continued influence and evolution of Benveniste's formulation. The

[47] Victor Turner, "Carnaval in Rio: Dionysian Drama in an Industrializing Society," in *The Celebration of Society*, ed. Frank Manning (Bowling Green, OH: Bowling Green University Press, 1983).
[48] Mary Douglas, "The Social Control of Cognition: Some Factors in Joke Perception," *Man* 3, no. 3 (1968).
[49] In a special issue of *Play and Culture*, anthropologists discuss the impact of Geertz's essay on the general interest of anthropologists in play, and on the theorizations of play in specialist approaches. Geertz seems not to have made an impact on either. Kendall Blanchard, "Notes on Notes: Geertz's Cockfight and the Academic Legitimacy of Sport," *Play and Culture* 5, no. 3 (1992): 258–63; Jon Donlon and Garry Chick, "Going out on a Limn: Geertz's 'Deep Play: Notes on a Balinese Cockfight' and the Anthropological Study of Play," *Play and Culture* 5, no. 3 (1992).

essay progresses in two parts in relation to the concept of play. In the first half of the essay, Geertz draws on Jeremy Bentham's idea of deep play, a concept that Bentham uses to characterize "play in which the stakes are so high that it is, from a utilitarian standpoint, irrational for men to engage in it at all."[50] Utilitarianism, here, can be taken in the strict philosophical sense, but it also refers to the local and culturally specific norms of what gets taken as practical and wise. Geertz makes the case that cockfights involve depth in the local sense. In these competitions, the Balinese not only risk more money than they can personally afford, but stake their reputation and social standing on the outcome of a match. The loser is even sometimes "driven to wreck his family shrine and curse the gods, an act of metaphysical (and social) suicide," and one that clearly goes beyond the community's norms.[51] In the first half of the essay Geertz draws out a paradoxical opposition between the community's code of rational behavior, and the irrational excesses of cockfighting.

Then, in the second half of the essay, Geertz switches gears. In an abrupt reversal, he begins to undermine his initial paradox by showing that all the threats of deep play are perfectly rational. Gambling, it turns out, does not really change the financial status of the participants in long run, but tends to move money around the community in a balanced fashion. Likewise, Geertz re-describes the risks of humiliation as temporary slights that only last until the start of the next gambling match. Where the first half of the essay makes deep play appear to be an agent of change in the life of the community, the second half shows how play reinforces the status quo. This formal division in Geertz' writing echoes the double-movement I have been tracking, and particularly Lévi-Strauss' division between the effects of ritual and games. Ultimately, Geertz deflates deep play in order to compare it to other interpretable cultural artifacts: "[l]ike any art form…the

[50] Geertz, "Deep Play," 15.
[51] Ibid., 7.

cockfight renders ordinary, everyday experience comprehensible by representing it in terms of acts and objects which have had their practical consequences removed."[52] It is this deflation of the paradox that makes play into just one more cultural form, so that it seems like a mere accident that a game happens to be his subject matter.

At the center of the essay, balanced between the paradox of the first half and the deflation of the second, Geertz offers an alternate explanation of deep play that gets to the dynamic between play and ritual. He suggests that while the stakes might seem irrational "to a Benthamite…to the Balinese what it mainly increases is the meaningfulness of it all. And as…the imposition of meaning on life is the major end and primary condition of human existence, that access of significance more than compensates for the economic costs involved."[53] Rather than explaining away the stakes and treating the risks as illusionary, this alternate approach explains the depth of play through a transcendental value. The untenable stakes of the bet make possible the attribution of any meaning whatsoever to the game. In the Balinese context, gambling juxtaposes the real risk of losing in the limited economies of money and status with the metaphysical risk of losing economy itself. Given that money and status are only important insofar as they take on meaning to the individual, financial loss pales in comparison to the loss of meaningfulness in general. The important distinction is not between a real loss and a symbolic loss, but between the presence and absence of meaning. By going beyond the already existing codes that calculate risk and reward, games can introduce new values.

Geertz' schema works because an irrational moment of play invests a game with meaningfulness. As in Turner's liminal stage, the game has to raise the stakes beyond known and

[52] Geertz, "Deep Play," 23.
[53] Ibid., 16.

calculable consequences, rendering them indeterminate and uncertain. Only after that is it possible for the game to mean one thing or another, for the cocks to stand in for men and the matches to stand in for social status. It is this moment of deep play that moves games from a mere example in Geertz' theory to a necessary and paradigmatic case. It is possible that other art forms do the same work, but their logic is not clear from Geertz' writing, and he might need to suppose a moment of deep play in these arts as well. As in Benveniste's account of play, the uncertainty of the gambling game can both desecrate the holy shrines and create new combinations of meaning. Symbolic anthropology thus picks up where Lévi-Strauss left off, and develops the process by which play transforms the structure of ritual back into an event. In these accounts, ritual comes to stand for structure generally, representing what is fixed, static, timeless and repeated, and play upsets this repetition even if it is only to better re-inscribe the cultural norm.

Contemporary anthropology inherits this complex tradition and continues to link play and ritual, even as their relation is negotiated and re-imagined.[54] The connection is often implicit in

[54] For example, the critiques of Geertz's work that emphasize his mastery through style, nevertheless keep the concept of play alive by returning to the surrealism of Roger Caillois and George Bataille. James Clifford, "On Ethnographic Surrealism," *Comparative Studies in Society and History* 23, no. 4 (1981); Michael Taussig, *Defacement: Public Secrecy and the Labor of the Negative* (Stanford: Stanford University Press, 1999). The work of anthropologists like Margaret Drewal and theatre director Richard Schechner pushed a conceptualization of ritual as based on iterative and dynamic performances. Richard Schechner, "Playing," in *The Future of Ritual: Writings on Culture and Performance* (New York: Routledge, 1993); Margaret Thompson Drewal, *Yoruba Ritual: Performers, Play, Agency* (Bloomington: Indiana University Press, 1992). Indeed, it is not a stretch to trace the problem of performativity back to this question of play and ritual. In another direction, theorists like Laurence Goldman and Adam Seligman have developed ways of seeing ritual's relation to culture as more and other than merely expressive. They emphasize the subjunctive quality of ritual, the way rites can produce new worlds that function 'as if' they accorded with different norms, and these theories use the faculty of make-believe play to get there. Laurence R. Goldman, *Child's Play: Myth, Mimesis and Make-Believe* (New York: Bloomsbury Academic, 1998); Adam B Seligman, "Ritual, Play, and Boundaries," in *Ritual and Its Consequences: An Essay on the Limits of Sincerity* (Oxford: Oxford University Press, 2008).

writing about ritual, without necessarily becoming a topic of theoretical reflection. Throughout this brief survey a double movement keeps repeating itself, where means without ends, and ends without means cycle into each other, splitting the difference between the playful and the sacred. For Benveniste it was the sacred that started with an equal balance that becomes unequal, for Lévi-Strauss it was the games that started out equal and ended in inequality. Geertz refuses to separate out game and ritual, understanding the dynamic as one internal to a single event. Anthropology does not offer a clear answer that separates playfulness from the sacred, and only shows that they share a deep logic. In the next section I look at the other reader of Benveniste's essay on play, Roger Caillois, and how he struggles with this indistinguishability.

Genres of Uncertainty

Roger Caillois was fascinated by precisely the ambiguous double structure of secrecy that I have been tracking and he developed it in a variety of ways throughout his writings. Play and the sacred, in particular, are two embodiments of this aporia in Caillois' thought. Early in his career, while studying under the anthropologist Marcel Mauss, Caillois wrote a book, *Man and the Sacred*, examining the importance of rites, taboos, and mysticism.[55] His interest in this topic continued and deepened when he became a Surrealist, and into his researches with George Bataille at the *Collège de Sociologie*. When Caillois stumbled across Johan Huizinga's work on play in 1943, he found in it a reflection of many of his principle concerns. Caillois was enchanted by Huizinga's daring thesis that religion, and more broadly culture itself, derive from and develop as play. Like Benveniste, Caillois disagreed with the secondary and diminished place that the sacred took in

[55] Roger Callois, *Man and the Sacred*, trans. Meyer Barash (Urbana: University of Illinois Press, 2001).

Huizinga's vision.[56] Over the next several years Caillois reflected on the connection between the two concepts, and addressed it directly in a 1946 essay titled "Play and the Sacred." In this essay, Caillois argues that the spheres of play and the sacred are intimately tied together, but that play is a "pure form" that "has no content," while the sacred exists as "pure content—an indivisible, equivocal, fugitive, and efficacious force."[57] This formulation is quite close to many of the other anthropological theories that attempt to connect play and the sacred through ritual, particularly the opposition between structure and event in Lévi-Strauss.

Elaborating this distinction, Caillois makes it clear that play and the sacred are the respective form and content for an experience of uncertainty. On the one hand, play:

> constitutes a kind of haven in which one is master of destiny. There, the player himself chooses his risks, which since they are determined in advance, cannot exceed what he has exactly agreed to put into play.[58]

This stands in contrast to the uncertainty of ordinary life, from which there is no reprieve, and even more starkly to the sacred, which leaves humans entirely prostrate:

> [c]ompared to [the force of the sacred], man's efforts remain precarious and uncertain, since by definition it is superhuman. He would be unable, in any case, to control it at his pleasure and confine its power to limits fixed in advance. Also, he must revive it, tremble in its presence, and supplicate it in humility. That is why the sacred has been defined as *tremendum* and *fascinans*.[59]

The contrasting relations to uncertainty define the difference between play and the sacred, and this distinction is presupposed in all Caillois' future writing. Play does not have any uncertainty proper to itself, and it only puts limits on uncertain feelings drawn from other domains. Play, in this account, is always secondary and parasitical on the sacred.

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[56] Roger Caillois, "J. Huizinga: 'Homo Ludens. El Juego Y La cultura' (Book Review)," *Sur* 4, no. 108 (October 1, 1943): 75.
[57] Caillois, *Man and the Sacred*, 157, 160.
[58] Ibid., 159.
[59] Ibid., 158.

Something in this formulation continues to trouble Caillois, some ambiguity between play and the sacred repeatedly brings him to re-consider their relation. It is the restlessness of Caillois' account that helps him uncover a subtler logic of secrecy at work beneath the split between the playful and the sacred that is not based on the relation of original and copy. In a classic work of game studies, *Man, Play and Games* (1961), he develops his theory of games as forms of uncertainty into a typology of genres.[60] His innovation is to systematize the diversity of games by analyzing the differences in mood, affect, and pleasure that they evoke. He divides the attitudes of play into four genres: competition, chance, mimicry, and vertigo. Each category operates according to a specific structure of uncertainty that generates a set of feelings peculiar to it.[61] In games of competition, there is an apparent equality between contestants within some circumscribed domain, "speed, endurance, strength, memory, skill, ingenuity, etc." which makes it difficult to predict a winner.[62] Games of chance involve a submission to the caprices of fate and destiny, which favors players who can bear uncertainty and take risks. In games of mimicry or make-believe, the player is caught up in the desire to be "someone other than himself" through disguise, or impersonation, where habitual action becomes improvisatory and inventive.[63] Finally, games of vertigo involve the "attempt to momentarily destroy the stability of perception and inflict a kind of voluptuous panic," through activities like spinning-in-place and roller-coasters.[64] *Man,*

[60] Roger Caillois, *Man, Play, and Games*, trans. Meyer Barash (Urbana: University of Illinois Press, 2001).
[61] Caillois criticizes other ways of organizing games based on the "implement used," the "qualifications required," the "number of players" or "the place in which the contest is waged," as external and seemingly infinite, but these are also the dimension along which the other qualities of play, the relative freedom of players or the kinds of temporal and spatial boundary, might vary. Caillois, *Man, Play and Games*, 11.
[62] Ibid., 14.
[63] Ibid., 19.
[64] Ibid., 23.

Play and Games thus continues to understand play as a form for limiting and controlling uncertainty, while ingeniously using that definition as a starting point for a more nuanced account of its effects.

Within the schema of sacred uncertainty captured and formed by play, however, an anxiety begins to worm its way through the margins and asides of Caillois' text. Play was supposed to be a "pure" formal container for uncertainty, but by distinguishing four attitudes that belong specifically to it, he posits a unique content for play. This transmutation of form into content is the paradox that accompanies every attempt to treat the uncertainty of play as merely a copy of some other uncertainty.[65] Caillois downplays the tension between pure form and impure genres, never questioning the source and distribution of these four attitudes. He presents the genres as if they were ready-made and the only possible ones. In order to defer and displace a confrontation between play-as-form and sacred-as-content, play thus receives a specialized content, but only on the condition that game genres are treated as if they were natural categories.

The sacred may not appear as a key term in *Man, Play and Games*, but its gravitational force is at work just beneath the argument's surface. Symptomatically, whenever Caillois tries to

[65] The idea has seen many iterations, ranging from turn of the century biological and psychoanalytic views of play as a site of mastery, to contemporary sociological and pedagogical arguments for play as a place of safe competition and exploration. See Karl Groos, *The Play of Animals* (New York: D. Appleton and Co., 1898); Sigmund Freud, "*Beyond the Pleasure Principle*," in *On Metapsychology* trans. John Reddick (London: Penguin UK, 1991), 283-7. Erving Goffman, "Fun in Games," in *Encounters: Two Studies in the Sociology of Interaction* (Indianapolis: Bobbs-Merrill, 1961); Kurt Squire, "Open-Ended Video Games: A Model for Developing Learning for the Interactive Age," in *The Ecology of Games: Connecting Youth, Games, and Learning*, ed. Katie Salen-Tekinbaş (Cambridge: MIT Press, 2008). For critiques of the assumptions behind this view from within biology and anthropology see Clifford Geertz, "Deep Play;" Maxeen Biben, "Squirrel Monkey Play Fighting: Making the Case for a Cognitive Training Function for Play," *Animal Play: Evolutionary, Comparative, and Ecological Perspectives*, ed. Marc Bekoff and John Alexander Byers (Cambridge: Cambridge University Press, 1998); Thomas M. Malaby, "Beyond Play: A New Approach to Games," *Games and Culture* 2, no. 2 (2007).

find the origin of the attitudes for competition, risk, masking, or panic, he vacillates between play and religion. Sometimes he sees the impulse to don masks and fall into ecstasy as originating in a feeling for the sacred. At other times, the same impulses of mimicry emerge from the spontaneous and improvised movements of children. The difficulty of deciding between sacred uncertainty and playful uncertainty comes to a head in the chapter “The Corruption of Games,” where Caillois ponders the possibility that his game genres might transgress their boundaries and enter ordinary life. Beyond the hyperbolic assortment of effects that he attributes to unbounded play (multiple personality disorder, alcoholism, general violence), the very question of how play could 'get loose' poses an insoluble aporia. Each impulse seems to originate within play, breaking free to corrupt the outside world, and at the same time to precede play, which only captures and tames it. In either case, if the uncertain attitudes of games can also exist outside their own limits, then nothing separates them from the deadly and mortifying uncertainty of the sacred.

More generally, this aporia is problematic for any account of uncertainty in play that borrows its content from the outside world. It puts the playfulness of play into an irresolvable dilemma. Either the uncertainty of play is faithful to reality in some fundamental sense, such that the player’s response within a game is transferrable to real life situations; but as a consequence that response has been cut off from any frivolity that would render it legible as playful. Or alternately, the game is a fundamentally distorted representation of reality that creates unique situations and responses which are genuinely playful; but by that very token the player’s strategies are not transferrable to the outside world. In either case, once one buys into this mimetic view of uncertainty, there is no sense in talking about playfulness as a style of response outside of play. Caillois’ attempt to differentiate playful from sacred uncertainty on the basis of mimesis in fact

demonstrates the impossibility of doing so, and he appears to realize this at times.[66] His anxiety about the boundary ultimately leads him to formulate another relation between play and the sacred.

In this new logic, uncertainty initially belongs to both play and the sacred equally and in exactly the same sense. When secrecy makes the meaning of an instruction uncertain, it does so for both play and the sacred, and represents a place where these two human institutions overlap. For instance, when Yoko Ono instructs a performer to "come out and play" at the end of a performance provokes an uncertainty about how to play. In the first instance, even within the context of play, that uncertainty is just as likely to feel sacred as it is playful. There is still a difference between a sacred manifestation of secrecy and a playful one, but that difference is a produced through the process of responding to an initially undifferentiated uncertainty. By categorizing game genres on the basis of uncertainty, Caillois gives us a way to think about how a style of responding to uncertainty becomes playful.[67] In the next few pages, I look in some detail at how Caillois frames the ambiguity of concealed means and ends that we first saw in Yoko Ono's work, and how it matters to both play and the sacred. In particular, I will start with the imperative side of the ambiguity, leading us from fixed ideals only to destroy those ideals and open up a space of play.

Caillois' non-mimetic account of uncertainty develops out of his anxiety that play cannot merely copy the content of the sacred and put it into a new form. Predictably this comes to a head around the genre of play that he calls mimicry. Mimicry describes games where children pretend

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[66] Caillois, *Man, Play and Games*, 58.

[67] Recently, for example, Thomas Malaby and Greg Costikyan have returned to uncertainty as a strategy for typologizing games in relation to the real world, and for many of the same reasons that led me to rethink playfulness. Malaby, "Beyond Play"; Greg Costikyan, *Uncertainty in Games* (Cambridge: MIT Press, 2013). For a longer version of the argument, see Thomas M. Malaby, *Gambling Life: Dealing in Contingency in a Greek City*., (Urbana, IL: University of Illinois Press, 2003).

to be something other than what they are, games of masking and masquerade, and the play of identification in spectatorship that characterizes mass sports and theatre. Each of these elements can take on a more playful valence, or a more sacred one, depending on whether they lean towards games or ritual. In the latter case, mimicry gives a playful element to holy days, the outfits and performance of rites, and even to the 'as-if' character inherent in religious belief. The logic that guides the uncertainty of mimicry is one we are already familiar with from Yoko Ono's experiments with event scores, an aporia that pits concealment against exhaustion to drive the performer on to improvised and unforeseen feats. Caillois substitutes the key terms of *secrecy* and *expenditure* for concealment and exhaustion.[68] These terms appear for the first time in his definition of play:

> Without doubt, secrecy, mystery, and even travesty can be transformed into play activity, but it must be immediately pointed out that this transformation is necessarily to the detriment of the secret and mysterious which play exposes, publishes, and somehow *expends*. In a word, play tends to remove the very nature of the mysterious.... All that is mysterious or make-believe by nature approaches play: moreover, it must be that the function of fiction or diversion is to remove the mystery.[69]

The passage is meant to critique a direct link between secrecy and play, specifically that proposed by Johan Huizinga. Instead of simply dismissing this link, however, Caillois replaces the teleological growth of a secret society with a more complex economic process. Secrecy is drawn towards play and then repelled, transformed and expended.

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[68] The connection between secrecy and mimicry is developed quite explicitly by Caillois in the texts considered below. On the link between expenditure and vertigo (and a third common term, "ivresse") see, for instance, Roger Caillois, "A New Plea for a Diagonal Science," in *The Edge of Surrealism: A Roger Caillois Reader*, ed. Claudine Frank, trans. Camille Naish (Durham, NC: Duke University Press, 2003); Roger Caillois, "Paroxysms of Society," in *The Edge of Surrealism: A Roger Caillois Reader*, ed. Claudine Frank, trans. Camille Naish (Durham, NC: Duke University Press, 2003).

[69] Italics in original. Caillois, *Man, Play and Games*, 4.

For any reader of Caillois' work on subjects other than play, the emphasis on the word "*expends*" in this passage is bound to recall George Bataille's essay, "The Notion of Expenditure."[70] In Bataille's economic model, expenditure signifies the portion of production given over to absolute loss as sacrifice or useless destruction, and was modelled on Marcel Mauss' analysis of potlach and gift economies. These ritual and anthropological sources elucidate the connection Caillois imagines between expenditure and secrecy. Michael Taussig has described this link, for instance, in the way secret societies perform initiation rituals centered on a revelation, where the revelation is just that the ritual is performed by men, not spirits.[71] In an explicit echo of Caillois and Bataille, Taussig calls the theatricality of this event "spending the secret," where the revelation displaces and perpetuates the initiate's belief rather than destroying it. Caillois has a similar process of ritual, initiation, and exposure in mind when he describes the way make-believe is structured into games.

Given Caillois' treatment of play as a formal copy of the sacred, his description of mimicry as a genre of play is easily misread as just another example of play copying the real world. Indeed, Caillois does argue that children pretend to be adults they know from life; that masks are meant to mimic gods and mythical characters; and that actors reveal archetypal human qualities. However, he also gives another accent to these examples by pointing to the affect produced by an "actor *fascinating* the spectator," and to a feeling that takes place beyond any question of resemblance: "[a]t a carnival, the masquerader does not try to make one believe that he is really a marquis, toreador, or Indian, but rather tries to inspire fear and take advantage of the surrounding license."[72]

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[70] George Bataille, "The Notion of Expenditure," *Visions of Excess: Selected Writings 1927-1939*, trans. Alan Stoekl (Minneapolis: University of Minnesota Press, 1985).
[71] Taussig, *Defacement*, 142-5.
[72] Caillois, *Man, Play and Games*, 21.

In this example, play appropriates the powers that Caillois earlier identified with the sacred, its "*tremendum* and *fascinans,"* however, these powers exist outside the realm of belief and resemblance.

To dilate this idea, we have to look to Caillois' nuanced account of insect mimicry in *The Mask of Medusa* (1960).[73] Insects have always provided Caillois' reference point for thinking about mimicry, and even in *Man, Play and Games* he mentions that insects provide a model for play. After a long discussion of insect counterfeiting and camouflage as forms of copying, Caillois turns to a third kind of mimicry that evokes the twinned affects of fascination and terror. This third form, what he calls intimidation, no longer relies on resemblance to accomplish its effect, but exposes a secret and almost ontological terror. Caillois' central example are ocelli or 'eye-spots' which are prevalent on the wings of many insects and which are often flashed suddenly to disrupt a predator. It might seem that eye-spots are meant to resemble eyes, but Caillois argues against such an interpretation—going so far as to say that "eyes are frightening because they resemble ocelli."[74] His point is that ocelli do not resemble any actual eyes, but rather resemble the essence or abstraction of 'eye-ness' that other animals have evolved to recognize eyes. Ocelli copy a copy, presenting an image that was never meant to exist, so that its appearance is disconcerting and otherworldly. More disturbing still, the spectator does not know that the heuristic image is actually its own; the power of the ocelli relies on its *secretly* belonging to the spectator. Expenditure, figured as terror or fascination, becomes a product of secrecy itself, internalized into mimicry. The predator has an internalized secret to which it finds itself uncontrollably drawn and repulsed.

[73] Roger Caillois, *The Mask of Medusa*, trans. George Ordish (New York: C.N. Potter, 1964).
[74]Caillois, *Mask of Medusa*, 90.

Games of mimicry, as seen through this insect lens, employ a powerful secret that the player does not know she knows. These games travesty the secret-keeper through performances that discover and exploit an unconscious force. In this sense, an individual or a group that does not know itself well enough becomes the occasion for a guessing game, a grand spectacle, or a masquerade. The two structural positions of masker and spectator within this encounter are by no means equal, though both are subject to an uncertainty that demands spontaneity and improvisation. Games of mimicry, like charades or Simon says ask that the masker continually uncover and approximate the other's secret through all manner of colors, gestures, and insinuation. The spectator finds herself in a scenario that exceeds any category of habitual response, encountering the other-worldly within the world. This encounter demands some new and unpredictable behavior. The same problem confronts the player and religious the devotee, who are both pushed beyond their limits to new practices and styles of response. There is no clear distinction between play and the sacred in this structure, only the uncertainty of being presented with a rule for acting, and a means whose end is elusive and ungraspable because it is fundamentally concealed. Charades and ritual masquerade share the same structure of captivation in which no one can articulate why the performance is so entrancing.

At the same time, Caillois distrusts mimicry. It makes puppets out of people who hold convictions, and he disdains masking as an anarchic cultural practice. While Caillois borrows this version of expenditure from Bataille, he also disagreed with it. Caillois believed that Bataille emphasized the incommensurable and destructive element of gift giving in expenditure at the expense of reciprocity. Rather than a dynamic unique to games of mimicry, the above definition attributes the process of expending the secret more generally to play. The dynamic of play expands on and completes that of mimicry, picking up where it leaves off. In theorizing play as an alternate

path through the economy of expending the secret, Caillois acknowledges the importance of destruction and sacrifice, but argues that ending with destruction omits a crucial phase of expenditure that stays with the waste as waste.

Caillois initially formulates the core of this idea in his lush and semi-autobiographical reverie, "The Myth of Secret Treasures in Childhood." The essay begins where Bataille's theory of expenditure ends, with the detritus, the things destroyed and cast out, removed from circulation. Jewels, but also all sorts of junk "found in the gutters", objects that need to be broken or stolen, the shiny wrappers of ordinary objects, "valueless vials of waste and odd-ends of adult occupations" and anything that raises the specter of a past murder or violence.[75] Caillois calls the idea of treasure the "precise negation" of economic concepts.[76] Play and imagination allow these objects a second life, minted as a new kind of currency by their power to evoke impossible combinations and point to the supernatural. In order to preserve their power, the child is compelled to secret these objects from its parents in ingenious hiding spots. Secret treasures cannot remain secret. They are caught up in a dynamic that exhausts and expends their power for a developmental or teleological end. In these secrets, Caillois sees the child's ability to nurture her ego: secrets produce a sense of identity, a space of opposition to adults, a set of random and idiosyncratic values to which the child is piously bound. This detritus produces secret affinities, and becomes "the supreme token of confidence and the cement of brotherhood."[77] Secrecy produces an affective charge, an energy that binds, but exists only insofar as it produces continued acts of secret keeping or sharing. These acts rejuvenate the secret and confirm its power, though each act is also an exposure to the possibility

[75] Roger Caillois, "The Myth of Secret Treasures in Childhood," in *The Edge of Surrealism: A Roger Caillois Reader*, ed. Claudine Frank, trans. Camille Naish (Durham, NC: Duke University Press, 2003), 259.
[76] Ibid.
[77] Ibid., 258.

of banalization and loss. An economic dynamic arises where the secret can be expended in projects meant to be pious and loyal to it.[78] The initial treasure eventually becomes a relic, its charge expended through the very process of preserving it. Caillois recognizes this fragile relation, writing "by means of the object he has acquired and which he cares for with piety, [the child] opposes to the world that neglects him the first offerings of a personal activity that seems all the more important insofar as the care taken to keep it secret renders it the *less illicit.*"[79] Caillois ends on a note of melancholy as the magic of these treasures diminishes into adulthood.

What appears as a relatively idiosyncratic account of childhood in this essay, reappears across Caillois' oeuvre as a dynamic that links mystery to expenditure as a way of discovering ever deeper forms of mystery. Indeed, on this point Caillois would not compromise intellectually, and broke from symbolist poetry, surrealism, and finally Bataille, as each maintained that secrecy was beyond testing and demystification. These three conceptual frames each held a very different concept of the mysterious, which relied respectively on a sense of the incommunicable sublime, the willful resistance to penetrating mysteries, and participation in a transformative secret that is unshareable.[80] All were anathema to Caillois, who did not want "illuminations that...are meaningless without some prior act of faith—that are pleasurable, in fact, only because of the

[78] In his writings around the time of the Collège, Caillois saw secret societies and brotherhoods as centered around a rigor based on secret ideals that have a public face. The publicity of the secret is carried in the initiate's body and bearing. Roger Caillois and George Bataille, "Brotherhoods, Orders, Secret Societies, Churches," in *The College of Sociology*, ed. Denis Hollier, trans. Betsy Wing (Minneapolis: University of Minnesota Press, 1988).
[79] My italics. Caillois, "Myth of Secret Treasures," 260.
[80] For textual evidence of these positions, see Roger Caillois, *The Necessity of the Mind* (Venice, CA: Lapis Press, 1990); Roger Caillois, "Letter to André Breton," in *The Edge of Surrealism: A Roger Caillois Reader*, ed. Claudine Frank, trans. Camille Naish (Durham, NC: Duke University Press, 2003), 84-86; Roger Caillois, "Interview with Gilles Lapouge, June 1970," in *The Edge of Surrealism: A Roger Caillois Reader*, ed. Claudine Frank, trans. Camille Naish (Durham, NC: Duke University Press, 2003), 142-46.

credence we attach to them" but instead wished for a sense of the "irrational...continuously overdetermined, like the structure of coral."[81] In each falling out, Caillois rejects a form of secrecy that would be its own guarantee to authenticity. Instead he insists on the need for a science of the irrational, and on approachable mystery over closed mysticism. The truly mysterious would welcome, but outpace, every human attempt to understand it, generating new forms and new paradoxes. Play and games appeared to him as a way to answer the demands of mask and rigor simultaneously.

When Caillois argues that play expends the secret, he has in mind a player caught between the paradox of an initial piety to the spirit of play and the rule-bound acts that use up the energy of her secret desire. This dynamic produces uncertainty across play. On the one hand, these acts of piety cannot be assured of measuring up to the desire that founds them because that desire remains a secret even from the player. On the other hand, it is never guaranteed that the player will rediscover and rejuvenate the pleasure of the mystery before its sustenance runs out. Caillois discovers the same aporia that Yoko Ono writes about. In order to join the game, the player must take it on faith that its rules will generate a sense of fun and pleasure, which appears arbitrary and abstract from the outside. The game offers no guarantee, leaving the player to decide at each moment whether to quit or to keep playing in the hope that the game world will become fun. Again, as Caillois makes clear, this same structure binds people to the promise of sects, secret societies, and religious mystery.

The ambiguous meeting point between play and the sacred thus gives rise to two different kinds of uncertainty. One is a specific uncertainty, which we can see in games of mimicry, where a secret that belongs to one player must be brought out into the light. The other is a general

[81] Caillois, "Letter to André Breton," 85.

uncertainty, where the alien structure of a game conceals its pleasures from anyone who is not playing. The former starts with a secret that has been exposed to the public and expended through travesty and manipulation, the latter starts with the defaced remains and builds a new secret. Both kinds of uncertainty have a paradoxical moment where public exposure bolsters the secret and private piety makes it waste away. Both, moreover, have a sacred form just as much as a playful one, epitomized by the fascination of ritual masquerade and the piety to religious commandment. Taken individually there is no way to distinguish between a playful practice and a sacred one, each can be dangerous or safe, controlled or out of control.

It is only when we consider how the two processes of expending the secret interact in practice that a difference between the playful and the sacred emerges. To produce a playful situation, a peculiar simultaneity must bind the general uncertainty of play to the specific uncertainty of the game. A player always confronts both uncertainties at the same time, and her style of play must always negotiate the interaction between them. For instance, while playing charades with friends, I must simultaneously negotiate a general uncertainty about how to properly follow the rules of charades in order to enjoy myself, but also the specific uncertainty of how to communicate my clue to my teammates without speaking. Moreover, the two uncertainties do not simply co-exist, but the general uncertainty of play subordinates the game-specific uncertainty. Which is to say that if I cannot negotiate the anxieties that come up when I play any game or I cannot feel the pull of play, then the specific problems involved in playing charades will never arise. The player confronts an aporia at two levels simultaneously: one relation holds the secret keeper to useless acts of piety (binding her to play), and a second exposes a secret wish in a carnivalesque mirror (binding her to the game). Two styles of response that are normally kept apart

exist simultaneously in the player's experience, bouncing off one another, informing one another. Though the sacred utilizes both uncertainties, it does not share this doubling structure.[82]

The gestures, habits, and heuristics that a player develops in the doubled situation of a game—her style of play—are marked by that doubling, and marked in a way that makes them recognizably playful. For example, games of mimicry funnel the abstract possibilities of play into a specific form, creating structured situations for the uncertainty of guessing to unfold. As a result, a subset of the player's responses to the general uncertainty of participation, responses that the player ordinarily has to manage, are peeled off and organized by the formal structures of the game. The practices of piety and rule-following are disfigured, riven from part of their content. Mimicry brings the player's binding commitment to the game world, which is ordinarily part of the background preconditions of play, into the foreground where it can be a topic for experimentation and transformation. The possibility that someone might use the secret pleasure of being-a-player to fascinate or terrorize me—for example, by impersonating an actor I secretly have a crush on—is itself a part of charades and other games of mimicry. My style of play thus develops in a different direction, isolated, provoked, and protected by mimicry. It becomes recognizably playful.

A reciprocal process of development takes place around the genre-based uncertainty of mimicry. In its sacred form, the aporia of terror and fascination is connected to all the other uncertainties of life, of survival, of eating, or of being eaten. Once the uncertainty of mimicry is doubled by play, however, all these ordinary uncertainties are managed by the general frame of play. The specific rules of charades and other games do not have to adapt to the player's need for safety because the player's general style of play manages all these surrounding considerations. The

[82] If I were to hazard a guess about what the structure does look like, I would say that the sacred involves a cyclical movement from piety to travesty and back. However, this is not my area of expertise.

game focuses on its own specific uncertainty. The aporia, which initially concerns play and the sacred equally, thus takes a fundamentally different form when it is worked out in a specific game. The player's response to each insoluble problem—fascination and piety—transforms the nature of the other problem. Play and game each split off one part of the back-and-forth dynamic so it can focus the uncertainty.

Two styles of play result; one pious, one manipulative. The first is a pious response to the rules that now exist in a naïve utopian form because the secret no longer risks exposure and travesty, having been removed from the general domain of play and placed within the game. The second is a strategy for finding and manipulating the secrets of the game beyond the utilitarian context of the world, since the world's boundaries have been decided by the player's style of joining play. It would be easy to misinterpret either of these elements, to reduce play to a simple copying of a real world uncertainty into a safe and bounded world where it can be mastered. Against such an interpretation stand concrete styles of play, which neither reduce the danger nor limit the problem, but merely separate those two strands into different kinds of response. When those practices are used outside of the game proper, they maintain their utopian or focused character and mark an action as playful. In this way, any person, animal, thing, or event that seems to bend towards secrecy can be playful. Playfulness ultimately rests on a structure of doubling an uncertainty so that it can be split and managed. In the next section we will see what difference this concept of playfulness can make in our understanding of a concrete game.

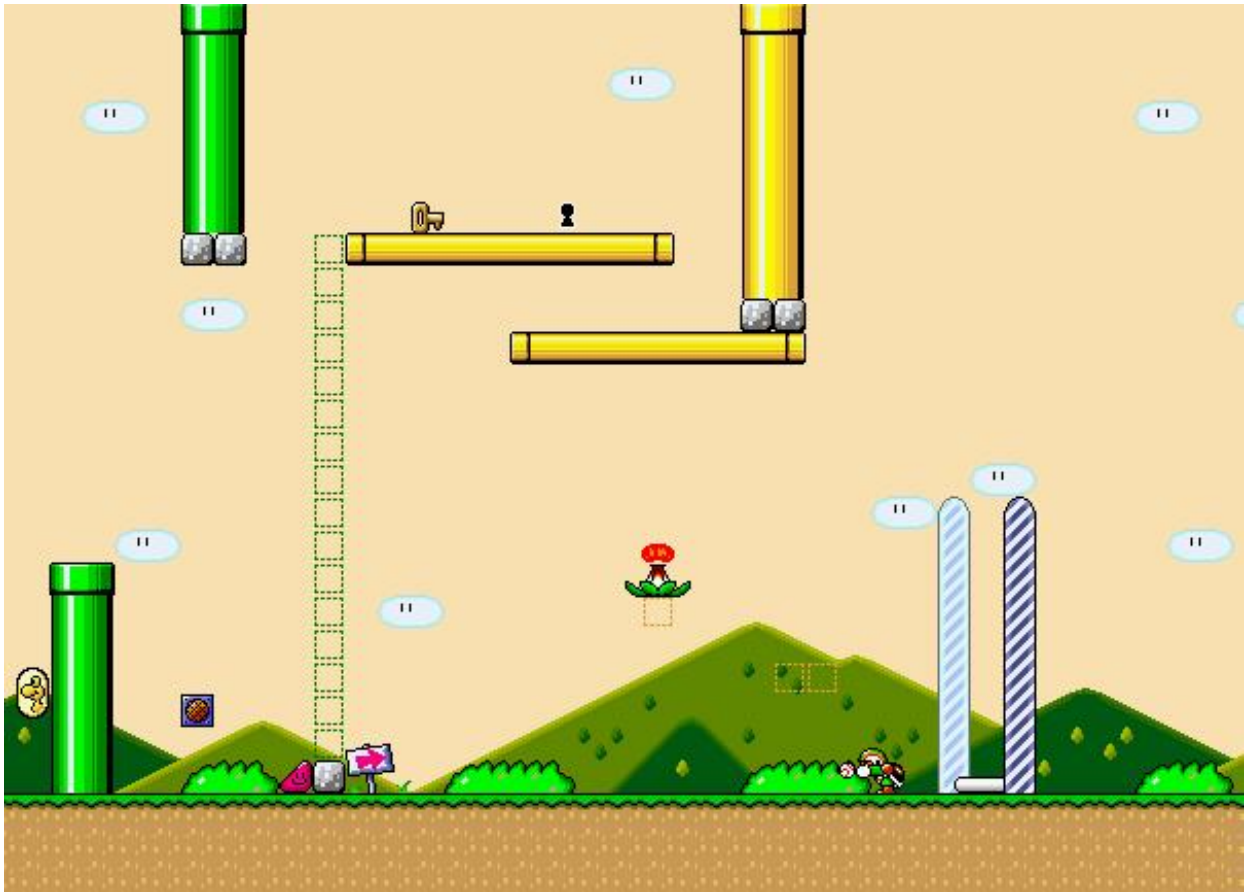

Figure 2.2. A line of empty green blocks leads to a secret exit.

SUPER (SECRET) MARIO WORLD

Imagine a child is playing *Super Mario World* on her brand new *Super Nintendo* in 1991. She has just entered Donut Plains, the second world of the game.[83] Already having passed the introductory platforms of world one, Donut Plains is her chance to learn how to use Mario's cape power-up. At the end of her leisurely stroll through the level, she finds a strange column of unfilled green blocks that lead to a key and keyhole in the sky (Fig. 2.2). She is not very good at flying with the cape—it will take some time to master—so she cannot get to the key. Others who came before her, the seven million Americans who bought the previous *Mario* game and the forty million

[83] Nintendo. *Super Mario World*. Designed by Shigeru Miyamoto (Nintendo: 1991) Super Nintendo Entertainment System.

worldwide who bought *Super Mario Bros.*, already know that such secrets are a common feature of the series. Only two years before, Fred Savage and Christian Slater immortalized the secret 'warp whistles' of *Super Mario Bros. 3* in the film *The Wizard* (1989).[84] She wonders, then, if the key and keyhole might open some hidden passages. This keyhole is the first of many such puzzles in *Super Mario World*, but for all the attention it draws to itself, its solution is neither obvious nor nearby. Charmed by the new game, excited by what seems off limits and mystifying, she discusses it the next day with a friend on the school playground, who, to her dismay, has also not solved this mystery.[85] She turns to her trusty magazine, *Nintendo Power,* for some tips and hints, but stops before she ruins the surprise, reading only enough to realize that the answer to the puzzle waits further along within the game.

When the player chooses to pursue the secrets of *Super Mario World*, her choices hover on the border between the affordances of the game's design and the contingencies of audience's response, between play that responds to an implied path through the game and play based on the knowledge and habits that a player brings to bear upon the game. The game makes it possible to pursue its secrets, and leads the player right up to them, but the choice to follow these secret paths goes beyond the ordinary rules and goals established by the game. It is more like a choice between two different games embedded one within the other. One is the ordinary game, the path laid out for Mario to travel from left to right with a finish line at the end. The other, secret, game is composed of hidden paths that diverge from the through-line, and that are unnecessary to win the

[84] Jeff Ryan, *Super Mario: How Nintendo Conquered America* (New York: Portfolio Penguin, 2012), 98-99. Dollar amounts are based on numbers from VGChartz.com.
[85] To describe these experiences, I am drawing on several nostalgic accounts from other players in Justin Berube, Andrew Brown, Bryan Rose, Zachary Miller, and Matt West, "Remembering Super Mario World," *Nintendo World Report,* September 30, 2015, http://www.nintendoworldreport.com/feature/41242/remembering-super-mario-world.

game. The player's decision to pursue the 'secret game' over the ordinary leads her out to the contexts surrounding play, to comradery, conversation, and research. It also leads back into the game, because the player's discussion on the playground needs the object world of the *Super Nintendo* to support and respond to her devotion. The 'secret game' creates a bridge between the playground and the game world, a bridge my discussion of playfulness aims to account for.

After a couple of days, the player makes it to Vanilla Dome, world three of the game, discovering several more secret keys and levels along the way. She finds some secret worlds through accidents of time and place, others leave traces and trails to follow, and still others are hidden by feints of level design. The sense that this 'secret game' is playful does not depend on a single method of searching. At this point, the player has also discovered the more exhausting side of the secret. *Super Mario World* is, to my knowledge, the first game to use secrets to incorporate additional content and more difficult levels into the game world. Previously, games hid what are called "Easter eggs;" upgrades, shortcuts, and secret passages that make other aspects of gameplay easier.[86] These "Easter eggs" are usually difficult to find or reach, but aid the player in other in-game challenges or make the game shorter. *Super Mario World* turns this conceit on its head; secrets make the game longer and harder. The player is offered two strategies for victory: one valorizes the speed with which she reaches the final boss, and the other demands an exhaustive search for every undiscovered level, hidden pipe, and special costume. A few worlds in, you feel the pull of this second goal, what is known as the "completionist" attitude.

Discussing these secrets in the schoolyard is harder. Fewer friends feel the drive to find and collect everything, though the ones that do start to share a special bond. The secrets hold them

[86] Nick Montfort and Ian Bogost, *Racing the Beam: The Atari Video Computer System* (Cambridge: MIT Press, 2009), 59-61.

together against outsiders, but it is no longer easy to identify this secret with an actual and specific part of the game. There is a nucleus of identity formation happening for these children, beginning to constitute them as 'gamers.'[87] Initially the excitement and mystery of the secrets seemed like an experience that was shared by everyone, but the secret game fails to charm some players, and the relation between players who chose one play style over another is mediated and twisty.

Fast forward a few more days and the player is quite far along in *Super Mario World*, after defeating Bowser, the final boss, she has moved on to the secret star world. She has also developed a style of playing this particular game, which includes an interpretation of the level design, a rhythm of coming home from school to play, a series of lightning quick reflexes for certain kinds of jumps and ducks. Included among these practices is an aesthetic sense of where the designers have placed secrets in each level. For instance, the spatial layout of a level offers clues: secrets are often hidden at the highest part of a level or within a network of pipes.[88] A difficult stretch of level with a reprieve at its end also signals that a secret may lie just a little further if the player is willing to forgo safety and push on. The "POW!" blocks that litter the levels and transform bricks into coins and vice versa for a short time, are a sign that altering the level may grant access to new areas. Finally, the player must be inventive and create new uses for the game's power-ups—such as the cape or Yoshi—that allow the avatar to move in unintuitive ways if she hopes to discover every part of the game. As the levels become more difficult, secret exits tend to be found behind

[87] The importance of collective identities forming around the secrets in game-worlds is fairly widespread, and does not begin with *Super Mario World*. For a short ethnology of a long lasting version of one of these groups, see Craig Owens, "The Quest for Shadow of the Colossus' Last Big Secret," *Eurogamer.net*, October 18, 2015. http://www.eurogamer.net/articles/2013-05-02-the-quest-for-shadow-of-the-colossuss-last-big-secret.

[88] For a close analysis of these level design choices see Patrick Holleman, "Reverse Design: Super Mario World," The Game Design Forum, accessed April 13, 2018, http://thegamedesignforum.com/features/RD_SMW_1.html.

an accumulation and combination of these elements (Fig. 2.3). None are sure-fire ways of discovering the game's secrets, but they contribute to a style of playing-by-searching that is quite different than the ordinary paths the game affords. The player's initial impulse to gather and discover gives way to an interpretive frame of mind. Each discovery offers a little frission of pleasure that draws the player to keep searching, expending huge amounts of time in a quest to uncover every last secret.

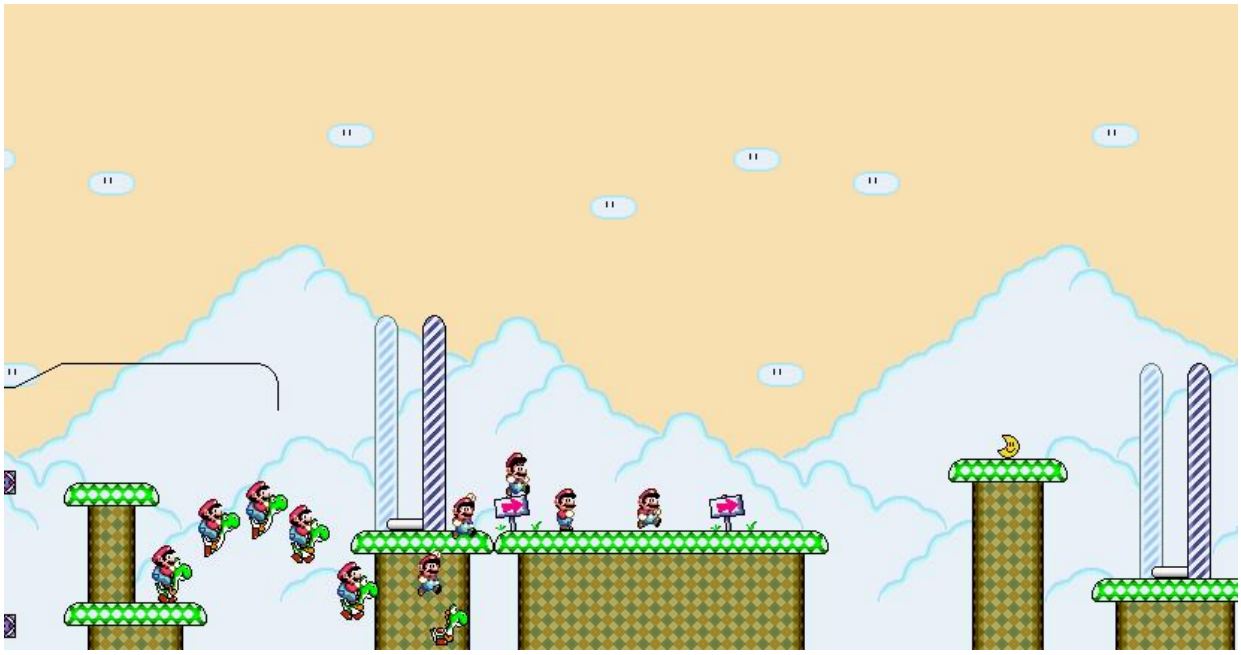

Figure 2.3. Secret exit in "Cheese Bridge," combines an exit after the main exit with an innovative move where the player must sacrifice Yoshi.

Now we can ask how all of this connects to the structure of playfulness I elaborated in the last section. In this short narrative we have watched the player pick up the game, test it out, and find her way deeper into its secret depths. I argued that playfulness takes its character from a structural split within an uncertainty, where half of that uncertainty is organized by a game's rules and half is organized by a player's style of play. In genres of mimicry, that uncertainty was split into a pious devotion to a secret and an exhaustion or exploitation that uses up that secret and brings it out into the open. The cult following of *Super Mario World* attests to its ability to capture

players in its vibrant landscapes that crunch, squish, and spring in uncannily satisfying ways. By learning to read these landscapes, to interpret where they might reveal secrets, players not only demonstrate a mastery of the game's programmatic rules, but also a care and regard for the implicit rules of level design that lead them into a play style based in searching.

Super Mario World makes use of the player's piety, extending it and making visible the unconscious impulses within it. Players discover the secrets in the first place only because the design process is an elaborate game of mimicking and predicting a player's choices before she ever touches the game. It is no surprise that game designers continually iterate on their work by watching play-testers and imagining themselves in the new player's shoes. Mario's designer Shigeru Miyamoto is particularly devoted to this design process, as he reveals in an interview where he narrates the barely perceptible feelings of an imaginary player in the first level in *Super Mario Bros.*:

> We simulated what the player will do. If a suspicious enemy appears, the player will need to jump over it. And again, if we have a question block, they might want to try and tap that as well. When they see a coin it will make them happy, and they will want to try again. Argh! You try and run away but you're hit. But by being hit you become bigger, and that makes you feel really happy…There's a lot of testing whilst the game is being built. I don't give any verbal explanation and just watch them play and see how they do it. And most of the time I think they'll play a certain way or enjoy a certain part and they end up not doing that.[89]

In this sense, video games almost always incorporate a process of make-believe and imaginative transposition into their form through the process of design. The designer holds onto part of the ambiguity of piety by matching the inclinations a player already holds.

[89] Shigeru Miyamoto and Takashi Tezuka, "Miyamoto on World 1-1: How Nintendo made Mario's most iconic level," interview by EuroGamer.net, September 7, 2015, video, 8:18, https://www.youtube.com/watch?v=zRGRJRUWafY.

The ordinary process of playtesting, however, takes on a special cast in relation to a discovering secrets. Secrets present the designer with a dilemma: they need to be placed in line with some, but not all of the player's ordinary inclinations. Without some continuity, the placement would feel random and confusing, but their placement cannot be so obvious as to be rendered trivial. To be secret at all they need to distinguish themselves from the rest of the game. Like the butterfly who capitalizes on the unconscious terror of its predator when it displays its wing spots, the designer is tasked with discovering an unconscious habit, something that the player does not know she wants to do, something dangerous or impulsive, in opposition to the ordinary flow of the game. The secret follows the logic of unconscious impulses that belong unknowingly to the player, and which she discovers as a set of practical hermeneutics for searching out secrets.

Each of the interpretive habits that I identified for finding secrets in *Super Mario World*—at high and low points, after a reprieve, around POW blocks, or with inventive actions—can be re-read as expressing an unconscious impulse that guides a player's approach to the game. For instance, the finish line at the end of a hectic level secures and consolidates the player's efforts, but occasionally there will be more to the level after that finish line. This often means leading Mario to his death countless times before uncovering the secret. The player's drive to go beyond the end of the level is an impulse to sacrifice. Time, effort, and extra lives are squandered to satisfy an impulse that valorizes the mere chance of discovery. Likewise, when a player uses a power-up, she does so by exploring a range of flourishes that the power-up enables without requiring. For instance, when the player jumps off of Yoshi, the game gives that separation a sense of force by propelling the player up while Yoshi is propelled down. The game never requires the player to use this dynamic in ordinary play, but it is the only way of getting to secret parts of some levels. To figure this out players must see movement creatively, not as a utilitarian way of reaching a level's

end. They must learn to move in unusual ways to uncover secrets. Finally, consider the POW! blocks, which capture a desire for the temporary reversal of useful and useless objects, of 'coins' and 'bricks.' This might arise from an unconscious equation, to use Freud's terms, between money and feces, whose exchange players find satisfying for reasons they are unable to make explicit.[90] In all these examples, designers have captured an uncommon impulse, one that is structured enough for a player to pick up on, while diverging from the game's dominant paradigm.

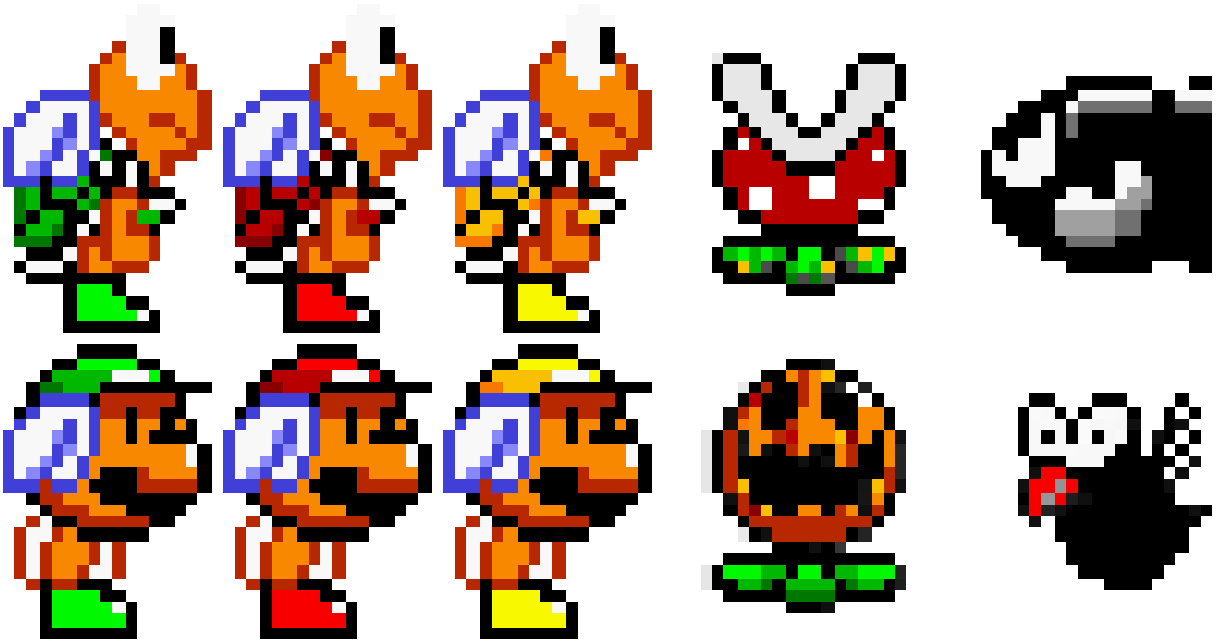

Figure 2.4. A comparison between Mario enemies before and after completing the secret worlds.

Alongside the formal mechanics of secret finding, each of these impulses connect the themes of waste, sacrifice, and expenditure to the logic of secrecy. *Super Mario World* is set in a world that is something of a wasteful feast. With level titles like "Soda Lake," "Butter Bridge," "Cheese Bridge," "Cookie Mountain," and "Chocolate Fortress," the player is asked to imagine that the ground under her feet is edible, like a giant *Candy Land* board. The game also introduces

[90] Sigmund Freud, "Character and Anal Eroticism," in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, ed. James Strachey, vol. IX (1906-1908) (London: The Hogarth Press and the Institute of Psychoanalysis, 1959), 172-4.

Yoshi, a green lizard-like creature, who swallows items and enemies. What Yoshi swallows is often destroyed or transmuted, and there is no counter of how much Yoshi has consumed, in contrast to Mario's enumerative and miserly coin collecting. The game also uses visual metaphors to explore the theme of waste, especially and importantly as a reward for finding and completing all the secret levels. When all the secrets have been found, the game alters its visual palette from vibrant summer colors to autumnal reds and browns. Many of the enemies and items also change their appearance: Koopas swap their turtle shells for parodic Mario heads, Piranha Plants become pumpkins, and Bullet Bills become blackbirds (Fig. 2.4). All of these changes signal a transition to harvest festivals and Halloween masquerade. Fittingly, the costume change that rewards the player's hard work of collection signals a carnivalesque deflation of her labor. Collecting all the small secrets does not reveal any big secret, such as a special ending or final boss, but only a gimmick. Like Saito and Ono, the *Super Mario World* slightly alters its theme to highlight the player's style of play.

In my account of playfulness, the heuristics that the player uses to unravel secrets within the game become equally good heuristics for recognizing playfulness elsewhere. Those heuristics track the interplay between a designer's exploitation of secret impulses, and the player's willingness to play a game that utilizes those same impulses. The game hones the problem of searching, and whenever these same heuristics for finding things are re-encountered in the ordinary world, outside play, they will bear the marks of play. Whenever there is a temporary reversal of the valuable and the valueless, reminiscent of the POW! block, it might feel playful. Whenever the person freely experiments in ways that squander accumulated effort, parallel to the secrets at the ends of levels, it might feel playful. Whenever she makes a flippant gesture with a powerful tool,

recalling the experiments with power-ups, it might feel playful. Playfulness belongs to neither the player nor the game, but coordinates the uncertainty within both until something new emerges

CHAPTER THREE
Trickiness: Play without Rules

You are playing slots. You know that the odds are stacked enormously against you and that the machine is almost entirely in control. All you can do is pull the lever, and with each pull you further confirm the impossibility of winning. You may even feel a sense of safety in losing.[1] Then, suddenly, unexpectedly, and without doing anything different you hit a jackpot. Or, you are watching a magic show. You know, of course, that magic is not real, that the performer is a master of small gestures that redirect your attention. Nonetheless, you feel the magic every time a coin disappears or a card comes up right. Or, you find a riddle written down with no one to tell you the answer. It reads "My first is foremost legally, my second circles outwardly, my third leads all in victory, my fourth twice ends a nominee." After an hour of fruitlessly pondering its meaning, something shifts in your frame of reference and the answer becomes clear.[2] In these examples, the seemingly impossible happens with the most minimal effort, the roles of performer and spectator become blurred as does the distinction between passivity and agency. This is a kind of playfulness that I call trickiness. It has a connection to the 'trick' of card games, to the 'tricks' of magicians, and to trickster figures. It is part of a line of aesthetic thought from the eighteenth century that connects wit with the quick and flexible thinking epitomized by the pun.

Each of these examples draws together the slow work of puzzling over a problem, the shiver of excitement and power as things coalesce, and the lingering sense that the world contains

[1] In my first chapter I referred to the compulsion that brings people back to a game again and again, even when it is not exactly fun. There is a related, but subtly different compulsion at work around the multivalent sense of loss in the games I describe here. I am indebted to the work of Natasha Schull for helping me parse out each element. Natasha Dow Schüll, *Addiction by Design: Machine Gambling in Las Vegas* (Princeton, NJ: Princeton University Press, 2012).
[2] This riddle appears at a gate to the underworld in *King's Quest VI,* a game I analyze later in this chapter. The answer can be found there. *Sierra On-Line. King's Quest VI. Designed by Roberta Williams and Jane Jensen* (Sierra On-Line: 1992) MS-DOS.

something more magical than the background of ordinary experience. I leave the riddle unanswered here for the reader to linger on, because once answered that answer will appear inevitable. It is an effect similar to how a gambler can begin to see her chance wins and losses as the result of a predestined fate.[3] The interplay of literal and metaphoric meaning in riddles conjures a realm of impossible beings for as long as the answer remains uncertain. Riddles suggest a world where things that have a different number of legs in the morning, afternoon, and evening (humans), or of things that can travel around the world while staying in a corner (stamps).[4] For the duration of the uncertainty, common sense is suspended without a new logic taking its place. This chapter is interested in excavating the moment before the answer and discovering what makes it playful.

I will argue that the sense of tricky playfulness comes from playing a game without rules. In the last chapter I looked at how some games disrupt or obscure part of their systematicity—their rules, goals, or means—to provoke the player into providing a creative substitute. Trickiness goes a step further and removes the layer of explicit order altogether. Removing rules raises some difficult questions: can we still call the result a 'game' at all? What gives it coherence for the player? And, how can we talk about that experience? I will explore these questions both aesthetically and philosophically, but my takeaway is that these experiences, while tenuous, can be structured by the very uncertainty that they provoke. If the setup of a trick is well designed, then a feeling of uncertainty can itself become playful, and even game-like. By removing its explicit elements, the implicit order of a problem takes center stage for the brief moment before it is solved and the answer begins to dominate.

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[3] The history of this connection is well summarized in Brian Sutton-Smith, *The Ambiguity of Play* (Cambridge: Harvard University Press, 1997), 52-73.
[4] Nick Montfort, *Twisty Little Passages: An Approach to Interactive Fiction* (Cambridge: MIT Press, 2005), 44.

By moving uncertainty to center stage, I am attempting to re-read and broaden one of Roger Caillois' classic game types, namely *alea* or games of chance.[5] Games of chance are one way of playing with uncertainty, but by focusing on classification, Caillois misses a more dynamic account of the aesthetics of playfulness. To draw the connection between aleatory play and a larger category of games based on interpretive uncertainty, I look at the aleatory art of the 1960s through one of its most probing practitioners—George Brecht. Brecht moves from producing work with chance procedures to producing more obscure and riddle-like works. I focus on *Deck: A Fluxgame* (1965), which is my paradigm of a game without rules, and which I argue represents the culmination of Brecht's thinking about chance.[6] Brecht sets up the problem that the rest of the chapter will attempt to conceptualize, and he gives us an expansive vision of what an aesthetics of trickiness looks like.

From here I track the discourse of artistic genius, against which aleatory art reacted, back to Immanuel Kant's *Critique of Judgment* (1790). For all their differences, both George Brecht and Kant share the idea that play without rules is what grounds aesthetic experience. Kant's philosophical formulation of play clarifies how such games are possible. Going back to Kant also allows me to track a broader genealogy of trickiness from Romantic aesthetics through 20th century hermeneutic philosophy. This lineage reframes Kant's concept of play in much the same way that Brecht reframes the aleatory aesthetics of John Cage, and shows that the broader engagement with interpretive play by postmodern culture is actually an avatar of trickiness. The final part of my chapter looks at how the experiment of games without rules was captured and reframed as one of the chief pleasures of the adventure game genre. I give a reading of *King's Quest VI* (1992) that

[5] Roger Caillois, *Man, Play, and Games*, trans. Meyer Barash (Urbana: University of Illinois Press, 2001), 17-19.
[6] George Brecht, *Deck*, plastic box with offset label, containing sealed deck of offset playing cards, 2 15/16 x 3 11/16 x 7/8 (7.4 x 9.4 x 2.2 cm), Museum of Modern Art, New York.

shows how it achieves expansive moments of play by carefully balancing interpretive cues beyond recognizable rules. *King's Quest VI* shows the interrelation and mutual constitution of interpretation and play by continually cycling one through the other. It simplifies and popularizes the pleasures of trickiness into a commodity.

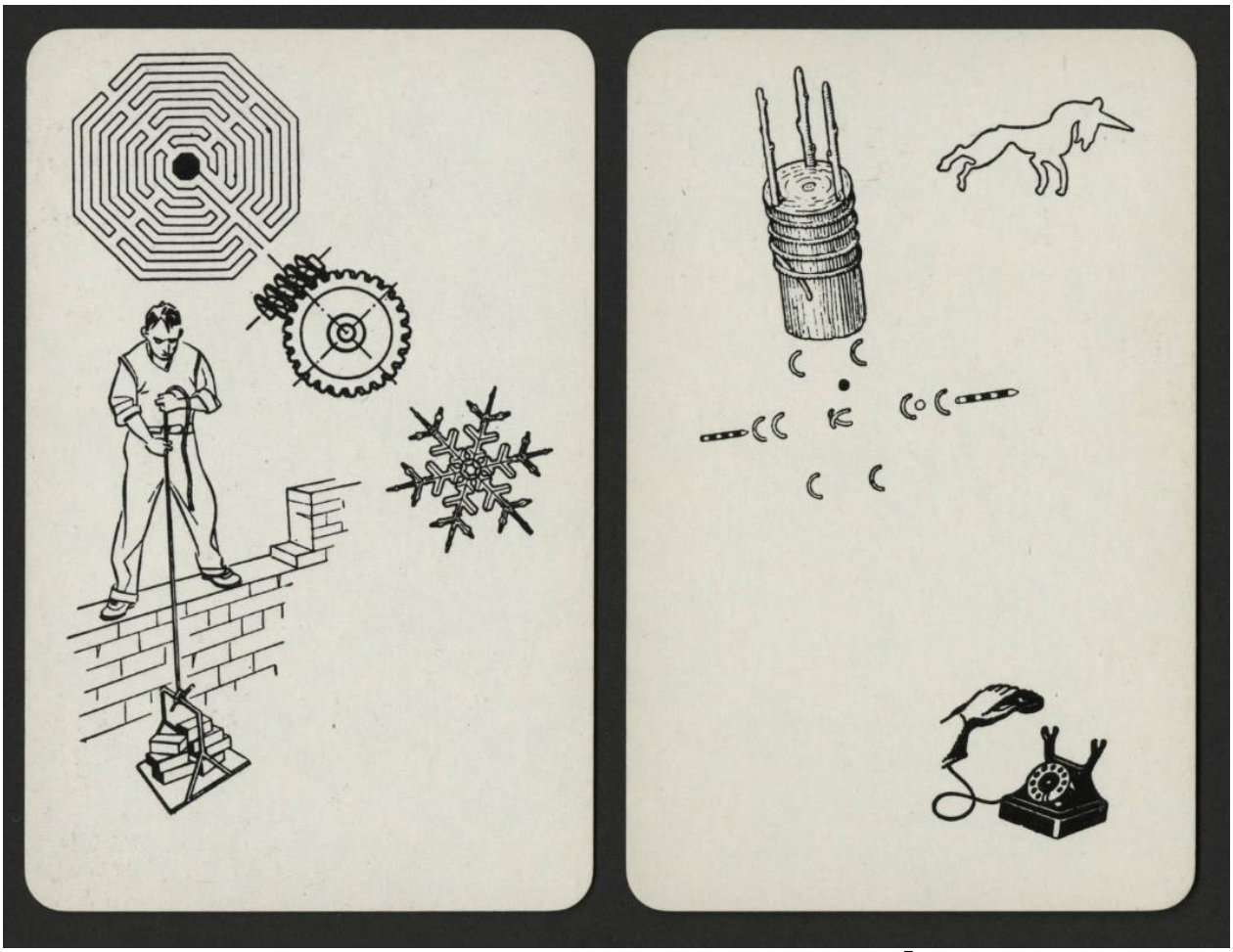

Figure 3.1. Two cards from *Deck: A Fluxgame*[7]

GEORGE BRECHT'S CARDSTOCK

[7] George Brecht (1926-2008). *Deck: A Fluxgame*, 1966. Plastic, Paper, Ink, Cardstock, 6.6cm x 9.2cm x 2.2cm. Photos by University of Iowa, Fluxus Digital Collection, Iowa City.

George Brecht's *Deck: A Fluxgame* (1964) is a singular object, one that hovers on the borderland between toy, game, and puzzle.[8] It consists of sixty-four playing cards that each depict a unique black-and-white collage made up of drawings, diagrams, and photos taken from an encyclopedia (Fig. 3.1). The subject matter of the images is wide-ranging and comes from specialist domains: mechanics, optics, architecture, fluid dynamics, sport, and many others. The cards depict between one and four of these cut-out images, which are placed at all locations on its surface (and sometimes off the border) with no regard for a consistent scale or perspective. The sixty-four cards, more than a standard poker deck and less than a tarot deck, suggest an easy divisibility into four suits of sixteen cards each, or eight groups of eight. Attempting to come up with categories for such suits, however, is a maddening experience. Practically any criteria might be relevant as an organizational principle: cards with human figures, cards with diagrammatic lines, cards depicting scientific experiments, cards with circles. The operation is further stymied by the interpretations that inevitably come into play when a card fits several criteria to varying degrees. So far, all my attempts at a neat classification have come up empty.

The role of each card is a mystery. At times, the collages that adorn the cards seem to add up to something, a thematic association or visual pun. In the left-hand card shown in Fig. 3.1, the snowflake, gear, and octagonal maze all share radial symmetry, an aligned axis, concentric layers, and variegated edges that suggest Brecht is making an analogy between the three objects. All three seem to stand in some relation to the construction worker. Perhaps the visual similarity of the maze to a human brain is meant to suggest each as a metaphor for the worker's thoughts; or, perhaps the bricks suggest the invisible constituent pieces that produce the complex patterns of each. The

[8] As I mentioned in the introduction, these three categories are often distinguished by game scholars. See, for instance, Scott Rogers, *Level up!: The Guide to Great Video Game Design* (Chichester: Wiley, 2010), 7-8; Jesse Schell, *The Art of Game Design: A Book of Lenses*, 2nd ed. (Boca Raton, FL: CRC Press, 2015), 241.

images of a suspended magnet, a lifted phone, and a heraldic unicorn on the second card are more resistant to interpretation. In both cases, the individual cards do not clarify and reveal an overall pattern in the deck, and the random order of the shuffle exponentially expands the possible connections between cards.

Instead of waiting for a reader or viewer to interpret them, the cards ask to be handled, to be spread out on a table and piled up, to be shuffled and dealt. However, the game includes no instructions, rules, or goals. How is one meant to play such a game? The possibilities are overwhelming: is the game for one person or many? Do you deal cards individually or are they flipped publicly? How many should you deal? Are there turns or does everyone play at once? What are you meant to do when you play? How does the game end? Does anyone win? That *Deck*: *A Fluxgame* is a game at all is suggested only by its title and materials. Yet, the cards do ask to be played with, even without any explanation of what that means. People invent all sorts of ways to play in the absence of given rules, they collaborate to improvise stories and tell fortunes, they use the cards as prompts for performance, to inspire drawings, and much else.[9] For all its ambiguity, and it is an immense ambiguity, *Deck* drives players to curious interpretations of its purpose, even while it offers only the smallest footholds of evidence. In *Deck,* one confronts the riddle-like character that pervades all of Brecht's work, the feeling that with an imperceptible change of perspective the topsy-turvy world will stand on its head and become meaningful.

Deck, and George Brecht's art more generally, links together chance, indeterminacy, and freedom through play. In my previous chapter, I argued that playfulness develops out of a split within uncertainty between game genre and player style, but the concept of uncertainty itself was

[9] While trying to understand *Deck*, I have let friends, colleagues, and family experiment with it, and I have taken it to conferences to try with strangers. My suggestion of how it is typically used come from these experiences.

elusive. Brecht can help us pick up the thread of uncertainty and show how deeply intertwined our theories of interpretation are with play. For that we have to contextualize the importance of chance to both Brecht's work and to the aleatory art of the 1950s and 60s more broadly. The Dadaists and Surrealists first pioneered the use of chance in the production of art, but that process gained a wider foothold in American art and writing in the postwar moment. William Burroughs cut-up novels, Jackson Pollock's drip paintings, and especially John Cage's expansive methods of musical composition—ranging from the I Ching to accidental background noise—each represented not just the use of chance, but research into techniques of operationalizing it. Brecht was initially drawn to the art world because his own research into probability theory and the philosophy of science resonated with the uses of chance he found there.[10]

Trained as a chemist, George Brecht spent the first fifteen years of his career with Pfizer and Johnson & Johnson, during which time he began experimenting with chance procedures in drawing and painting. In his spare time, he took a night class on contemporary art that introduced him to Dadaism and Surrealism, as well as Jackson Pollock and John Cage. He began to correspond with Cage in 1956 and wrote an essay on chance methods in science and art the next year titled "Chance-Imagery."[11] When Cage offered a course in experimental composition at the New School for Social Research in 1959, Brecht jumped at the opportunity. Each week of this class, Cage would give a minimal and odd prompt, and during the following week the class would perform and discuss the works that resulted from it. In that space, Brecht not only found a teacher to idolize in Cage, but also met and collaborated with many of the future members of Fluxus.[12]

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[10] George Brecht, *George Brecht—Notebooks: June, 1958-September, 1958*, Vol. I, ed. Dieter Daniels and Hermann Braun (Köln: W. König, 1991), 83.
[11] George Brecht, "Chance-Imagery," in *An Introduction to George Brecht's Book of the Tumbler on Fire*, ed. Henry Martin (Milano: Multhipla Editions, 1978).
[12] "[Irmeline Lebeer:] *What was it that impressed you about [Cage's] course?* [George Brecht:] On the one hand Cage's personality, his way of living, and on the other there was the general

During these sessions, Brecht moved from his early chance-composed paintings towards a method that incorporated the experience of chance—for audience, author, and performer—into a work's reception. By making use of text-based instructions as elements of a musical score, Brecht's work programs moments where the implicit indeterminacy of Cage's compositions is enacted in real-time. This was the beginning of the event score form, which would become a staple of Fluxus practice. Initially, Brecht composed complex tables of values that used cards to instruct performers. For example, his first complete score, "Motor Vehicle Sundown (Event)," is a symphony to be played using cars and trucks by any number of people. Each performer receives twenty-two shuffled cards with simple instructions for operating a vehicle, such as: "Head lights (high beam, low beam) on (1-5), off," or "Accelerate motor (1-3)."[13] The numbers in parentheses represent the duration in seconds in which a performer should complete the action. The result is a structured-but-aleatoric cacophony, where cars occasionally come into complex harmonies with one another. [14] Similarly, in "Card – Piece for Voice," the suit of an upturned playing card instructs the performer to produce a sound according to a schema that Brecht provides where, "Heart: Lips / Diamonds: Vocal cords and throat / Clubs: Cheeks / Spades: Tongue." The number on the card represents the duration that the player should make a sound with that body part. Several of Brecht's other early works operate in the same way, such that each performance changes based on the shuffle of a deck.[15]

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atmosphere of the course." Irmeline Lebeer, "An Interview with George Brecht," in *An Introduction to George Brecht's Book of the Tumbler on Fire*, ed. Henry Martin (Milano: Multhipla Editions, 1978), 83.

[13] George Brecht, "Motor Vehicle Sundown (Event)," in *An Anthology of Chance Operations*, ed. La Monte Young (München: Heiner Friedrich, 1970), n.p.

[14] A recorded performance of "Motor Vehicle Sundown (Event)," organized by Larry Miller, is available at: https://www.youtube.com/watch?v=zj0pxipGNr8

[15] Other examples include "Spanish Card Piece for Objects," and "Candle Piece for Radios"

In this period around 1959, playing cards were Brecht's preferred method of introducing chance into his events, of breaking performers out of their habits, and of reducing the artist's control over the outcome of a work. The choice of a game as a way of representing the experience of chance was only natural for Brecht, who argued in "Chance-Imagery" that the concept of something as abstract and intangible as chance depends on the material details of the equipment capable of exemplifying it. Games have been the central model of such equipment in the form of dice, cards, coins, roulette wheels, lottery draws, and spinners.[16] Brecht notes that even the word chance comes from a "Latin root relating to the falling of dice."[17] While any chance mechanism might be relevant in composition, games are key for Brecht to the experiential and phenomenological understanding of chance. *Deck* continues this line of embodied chance that runs through Brecht's work.

At the same time, Brecht's relation to chance was becoming less straight forward than in his early career. When it comes to chance-based art, critics often highlight two animating contradictions, and while Brecht sidesteps both, he does so in a way that creates a paradox for his early work.[18] A first criticism, one that Susan Stewart brings up, is often lobbed at the very possibility of chance in art. The universe, by these lights, is determined as an endless and implacable causal chain, and any seemingly random work—such as a found poem or piece of automatic writing—can ultimately be traced back to a proximate cause. In "Chance-Imagery," Brecht responds scientifically to such skepticism by noting that since the rise of probabilistic thinking in the 19th century, the notion of strict causality has been untenable, and the theorems of Kurt Gödel and Werner Heisenberg show that uncertainty is the bedrock of reality. Rather than

[16] Brecht, "Chance-Imagery," 137-40.
[17] Ibid., 130.
[18] Susan Stewart, "To Take a Chance," in *The Open Studio: Essays on Art and Aesthetics* (Chicago: University of Chicago Press, 2005), 9–14.

trying to trace uncertainty to its cause, or conversely to its absence—which will always be indeterminate—Brecht brings into focus the experiential quality of uncertainty. Chance only becomes visible when it matters to the observer, when it becomes felt.

Critics of aleatory art also point to a contradiction in the use of chance-based procedures to avoid the authoritarian control of authorship. This criticism contends that far from reducing the artist's agency and direction—as in Cage's ideal of egoless art—aleatory methods actually extend that control by reproducing it at a more abstract level.[19] By setting up a system that programs chance, the artist determines the parameters within which chance can fall: a die will only ever give an answer from one to six, a random number generator has high and low bounds and is deterministic from start to finish. Chance operations, in this view, conceal a will to an even greater sense of control, one that wishes to abolish chance itself. Again, Brecht's response in "Chance-Imagery" is that of the scientist. Throughout his career, Brecht considered his art as a kind of research. Rather than using chance as an ethical constraint, Brecht sees it as an epistemological tool for creating bias-free experiments.[20] Control is important to any experiment, but there must be uncertainty around some testable variable whose possible outcomes can surprise the observer. Giving up control is always a relative procedure for Brecht, the production of a zone of unknowing that is partial and small.[21]

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[19] Branden Joseph, "The Tower and the Line: Towards a Genealogy of Minimalism," *Grey Room* no. 27 (Spring 2007), 58-81.

[20] Brecht articulates the value of chance as "the reason for the importance of randomness for purposes of scientific inference will be the same as the reason for its importance in the arts, that is, the elimination of bias," and "one reason for doing this is to place the painter's, musician's, poet's, dancer's chance images in the same conceptual category as natural chance-images…and to get away from the idea that the artist is making something 'special,' and beyond the world of ordinary things." Brecht, "Chance-Imagery," 136, 141.

[20] Stewart, "To Take a Chance," 9–14.

[21] On this point, see also Anna Dezeuze, "Unpacking Cornell: Consumption and Play in the work of Rauschenberg, Warhol and George Brecht," in *Joseph Cornell: Opening the Box*, ed. Jason Edwards and Stephanie Taylor (Oxford: Peter Lang, 2006), 235-6.

Brecht's vision of aleatory aesthetics, especially as it is articulated in "Chance-Imagery," is more systematic than that of many of his contemporaries. Yet his work undergoes a sudden change around 1961 when he encounters a third contradiction that arises from avoiding the first two: namely, his experiments become too artificial for his scientific approach.[22] After 1961, the elaborately structured possibilities of his playing card works are paired down dramatically. He starts to write simple directions that sometimes amount to a single word and rarely stretch to more than a handful. Indeed, while physical cards remain important to the event scores in *Water Yam* (1963), their content no longer seems to instruct a performer at all, but merely calls attention to ongoing processes within the world. Pieces, such as "Drip Music," which in 1959 read "A source of dripping water and an empty vessel are arranged so that the water falls into the vessel," are simplified to "Second version: Dripping." Unlike the imperative event scores that his contemporaries were still writing, Brecht understood these new works to be an ongoing part of the world. Dripping will always occur, with or without the artificial constraint of a stage, a performer, or an audience. These works drop the programmatic and explicit tools for generating bias-free randomness and raise a new question about the role of chance in Brecht's method.

Authorial control thus came to present a novel problem for Brecht. In a 1966 afterward to the belated publication of "Chance-Imagery," Brecht writes that he could not "have foreseen the resolution of the distinction between choice and chance which was to occur in my own work."[23] Brecht was not worried about exerting a structuring control over the outcome of situations, but he

[22] For a wonderfully detailed accounting of Brecht's development from the mid-1950s to the early 1960s, see Julia Robinson, "From Abstraction to Model: In the Event of George Brecht & the Conceptual Turn in the Art of the 1960s" (PhD diss., Princeton University, 2008); and from a slightly different perspective Simon Anderson, "Living in Multiple Dimensions: George Brecht and Robert Watts 1953-1963," in *Off Limits: Rutgers University and the Avant-Garde, 1957-1963,* ed. Joan Marter (Newark, NJ: Rutgers University Press, 1999).
[23] Brecht, "Chance-Imagery," 147.

did recognize that his scores imposed an alien will upon people.[24] Cage said of one early piece that "[n]obody ever tried to control me so much," and Brecht later reflected that, "[I] learned that lesson there, I realized I was being dictatorial."[25] How not to dictate became a problem, and if it was partly Cage's ethical problem, it was equally the concern of the scientist who realizes that laboratory conditions may not replicate the outside world. By moving from elaborate card pieces to brief and simple scores, Brecht solves this dilemma by leaving the interpretation and realization—or lack thereof—in the hands of the participant. In his notebooks he calls this, somewhat enigmatically, "choiceless choice."[26] It is a phrase that points to his belief that choice is ultimately illusory, and can be integrated as one more variable in an experiment.[27] In the later part of his career, Brecht would even claim that "I'm not at all sure that I've ever invited anybody to think or do anything….I don't demand anything."[28]

Chance, however, still plays a role in Brecht's new, proto-minimalist events, but now in an expanded sense where the whole buzzing world provides the uncertain conditions for realizing a score. Like Cage in his famous silent piece of music, *4'33"*, Brecht understands all sorts of everyday occurrences to fulfill the conditions for an event like "Dripping," without any need for a performer. Noticing a leaky faucet, a rainstorm, or sweat on a hot day would all count as valid performances. For the observer, each is a random occurrence that just happens to coincide with the printed word. The score brings the chance character of the event into explicit view, but does not

[24] This question forms a recurring theme in Brecht's interview with Michael Nyman. Michael Nyman, "An Interview with George Brecht," in *An Introduction to George Brecht's Book of the Tumbler on Fire*, ed. Henry Martin (Milano: Multhipla Ed., 1978), 105–22.
[25] Nyman, "Interview," 115.
[26] Julia Robinson, "In the Event of George Brecht," in *George Brecht, Events: A Heterospective*, ed. Alfred Fischer (Cologne: Museum Ludwig, 2005), 52.
[27] Henry Martin, "An Interview with George Brecht," in *An Introduction to George Brecht's Book of the Tumbler on Fire*, ed. Henry Martin (Milano: Multhipla Ed., 1978), p. 75.
[28] Lebeer, "Interview," 84.

determine it.[29] Chance events, though, are only one of the several species of uncertainty that these scores can provoke. Other kinds of uncertainty are just as, or more, important to Brecht's developing style. If the performer notices the dripping of dewy grass, then the score is realized purely by chance. Brewing a pot of coffee as part of a morning routine, on the other hand, produces a "dripping" that is neither dictated nor random but habitual. The result is ambiguous or uncertain rather than indeterminate, a small kind of distinction, but one to which Brecht's notebooks pay attention.[30] During this period Brecht began to thoroughly explore the ambiguity that a performer faces when interpreting such scores.[31] That ambiguity was a source of delight for him, whether in the inventive interpretations with which other Fluxus members performed his works, or the consternation of art historians foiled in their search for a canonical way to read them.

With the change from chance operations to ambiguity, we might expect to see an exclusion of toys and games that Brecht originally used to model chance. In fact, exactly the opposite occurs. Toys become a staple element of the assemblages and Fluxkits that Brecht created after 1962. Hand puppets, tops, skipping rope, all kinds of balls, alphabet blocks, dominoes, chess pieces, and many more such objects appear throughout his work. Dice and cards also persist, but without the one-to-one correspondence between card and instruction that characterized his early scores. Brecht also produced a series Fluxkits with George Maciunas that take games as an explicit theme. In the *Games and Puzzles* (1965) series, Brecht gives the player outlandish tasks that exacerbate the ambiguity of his simplified event scores. "Swim Puzzle" for instance, consists of four colored

[29] Gascia Ouzounian, "The Uncertainty of Experience: On George Brecht's Event Scores," *Journal of Visual Culture* 10, no. 2 (2011).
[30] Brecht, *Notebooks*, Vol. I, 69.
[31] At the same time as the playing card based pieces, Brecht's notebooks show him working on another piece where each move in a game of checkers is interpreted as an instruction for music. George Brecht, *George Brecht--notebooks: April, 1959-August, 1959*, Vol. III, ed. Dieter Daniels and Hermann Braun (Köln: W. König, 1991), 97

beads, and the instruction "Arrange the beads such that / the word CUAL never appears," and "Ball Puzzle" gives the prompt: "Find ball under bare foot / Without moving, transfer ball to hand." These seem like impossible tasks, but not simply impossible—rather they suggest that the conditions for a satisfying and comprehensible answer exist, if only one knew where to look. This tip-of-the-tongue feeling comes in different ways. Sometimes the task is too easy—it is impossible for CUAL to ever appear because the beads have no inscriptions, and in some editions are replaced by a single seashell. The lack of satisfaction seems to demand another cleverer answer. Sometimes the impossibility comes from a self-imposed constraint—I cannot ask someone to move the ball for me—which again makes a more satisfying answer appear on the horizon. Brecht himself experiences his own puzzles in this way: they are difficult, he writes, "for me too. For one of them it took me several years to figure it out…. I have enough experience to know that when an idea like that comes to me it has to have a solution. I have confidence in myself. In spite of everything."[32] When they are invented, Brecht's puzzles have no solution, but each manages to give rise to its own answer. Games and puzzles offer Brecht a form in which instructions can exist in the ordinary world without becoming commands or walling off a domain of autonomous art. Unlike works in a gallery, or the stage of a theater, games are a part of the everyday, and they sit inert on a shelf until someone wants to play with them. They can be incorporated into his experiments without breaking the frame of ordinary life.

Toys, games, and puzzles continue to serve as models of uncertainty for Brecht, but like his work more generally, they no longer simply signify chance. In particular, puzzles come to stand in for and make explicit the interpretive conundrum that a performer confronts in event scores like "Drip Music." Unlike games of chance, puzzles are ordinarily determined beforehand: they have

[32] Lebeer, "Interview," 88.

a right answer, and that answer becomes trivial and obvious after it has been solved. Before one grasps the solution, and while knowing it is fully determinate, the puzzle remains entirely uncertain for the solver. By provoking minor paradoxes, Brecht's puzzles extend this feeling indefinitely. Despite the difference, both puzzles and games of chance create a similar aesthetic sensation. In both, the world feels stacked against the player, either through enormous odds or incomprehensibility. In both the smallest possible gesture can upend the world. A single cast of a die or turn of a card is enough to change one's fortune, and a slight shift in perspective makes a nonsensical riddle seem obvious. In both there is a deep historical connection to the rhetoric of fate and destiny.[33] Julia Robinson characterizes this aesthetic of Brecht's works through "[t]he irony, the quirky reversals, the wit and the occasional moments of sublime minimalism" that it elicits.[34] The point I want to make is that his style is rooted in a familiar pleasure of games, one that comes from exacerbating uncertainty, and one that marks out Brecht's work as playful.

This context helps to reveal what initially seemed too difficult to parse about *Deck: A Fluxgame*. Like Brecht's early work with playing cards, *Deck* uses cards to highlight the effects of chance. After internalizing the problem of choiceless choice, Brecht does not *instruct* the player about how to play with *Deck:* a player must invite the game into her life. The individual cards still function, as in "Motor Vehicle Sundown (Event)," as possible prompts. *What* the cards prompt, however, is ambiguous and riddle-like, and has more in common with the interpretive conundrums of Brecht's *Games and Puzzles*. It is impossible to take in the whole of *Deck* at once, to try to make global claims about its meaning. So, a randomly dealt hand of cards becomes the ideal way of grasping, quite literally, a subset of *Deck* and making sense out of it. Chance thus becomes one moment within a larger interpretive ambiguity. The two modes of chance and puzzling come into

[33] Sutton-Smith, *The Ambiguity of Play*, 69-73.
[34] Robinson, *A Heterospective*, 127.

a tighter relationship in *Deck* than anywhere else in Brecht's work, and the aesthetics of chance are ultimately included in a more general aesthetic of uncertainty.

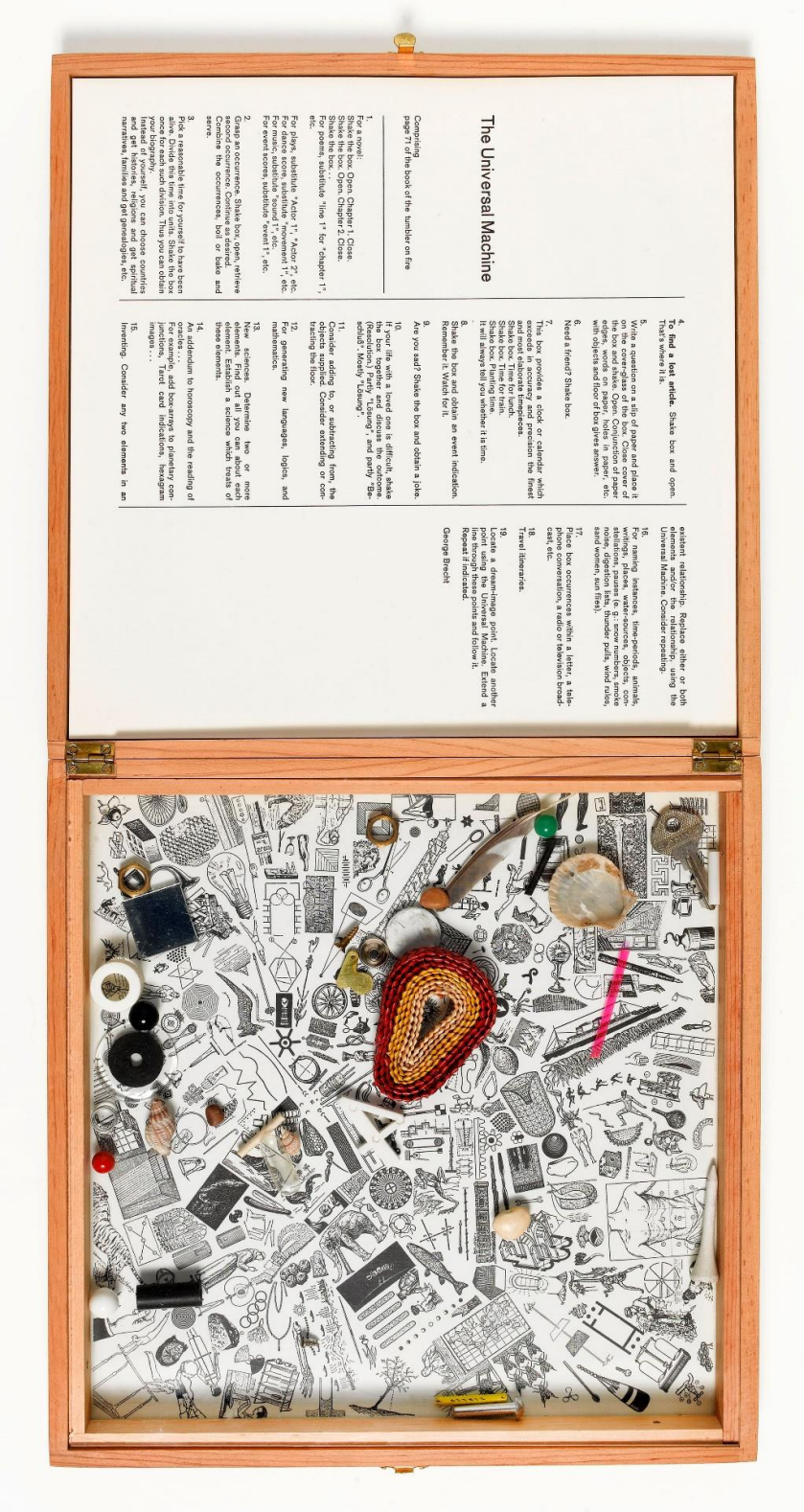

Figure 3.2. Brecht's *Universal Machine II.*[35]

[35] George Brecht (1926-2008). Universal Machine II, 1976. Wood, plexiglass, 4.1cm x 28.2cm x 29.2cm. Inv# AMI1978-889(3). Photo by Georges Meguerditchian. Musee National d'Art

We can specify the tricky playfulness of *Deck* by comparing it with its twin, *Universal Machine II* (1965) (Fig. 3.2). *Universal Machine II* was composed in the same year and made use of the same encyclopedia cut-outs that Brecht re-arranged to make *Deck*.[36] In *Universal Machine II*, the diagrams are condensed onto a single piece of paper, which has been glued onto the back of a wooden box. The box is covered by a sheet of glass, and contains some assorted objects—buttons, metal clips, an awl, or stones—which are unique in each piece. On a facing cover are suggestions for using *Universal Machine II*, such as "For a novel: / Shake the box. Open. Chapter 1. Close. / Shake the box. Open. Chapter 2. Close" or, "New sciences. Determine two or more elements. Find out all you can about each element. Establish a science which treats of these elements" or, "Need a friend? Shake box." Like *Deck*, the act of shaking subordinates chance operations to a moment of interpretive uncertainty. After each shake, the pieces of debris draw connections between two or more of the images in ways that change the meaning of all the involved parts. Unlike *Deck*, though, *Universal Machine II* does have an instruction manual. Without dictating, it still gives suggestions for possible uses, and thereby draws attention to its function as a machine for producing meaning.

Universal Machine II connects the most disparate things into a single universe of sense. By establishing chance relations between its objects, it produces an ontological flattening. An acrobat exists in the same sense as an architectural drawing and a snowflake. *Deck* extends this

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Moderne, Centre Georges Pompidou, Paris, France. © CNAC/MNAM/Dist. RMN-Grand Palais / Art Resource, NY.

[36] Or vice versa, Brecht himself is unsure of the order of operations. Jon Hendricks, *Fluxus Codex* (Detroit: Gilbert and Lila Silverman Fluxus Collection, 1988), 189. *The Universal Machine II* also bears an interesting relationship to Brecht's previous *Universal Machine* (1962/1963), which consists of a shoe-shine stand with input and output slots, where a participant can enter a question and draw out an answer in the form of various bits of writing and photography. Martin, *Introduction*, 27.

operation through a chance combination of cards. Rather than separating objects into things and relations, illustrations and debris, *Deck* makes the illustrations do double duty by allowing the picture plane itself to move as cards are re-arranged by the player. The title of *Universal Machine II* calls attention to the universality of this flattening. At the same time, that title also encodes a critical pun, one that sets up a contrast between Brecht's work and the different kind of computational flattening in the universal *Turing* machine.

The universal Turing machine, described by Alan Turing in 1936, is a theoretical model of a computer that describes how it is possible to build a machine that can perform any computation by reading instructions from a tape, and transforming those instructions according to a table of values. Brecht was interested in computing, and collaborated with James Tenney, a pioneer of computational art in the 1950s and 60s.[37] The above description of Turing's machine—whose first iterations were operated with punch cards—is clearly analogous to Brecht's early use of playing cards to transform an input into a variable output. Indeed, one of Brecht's commentators, Henry Martin, describes his work as "an enormous computer insofar as it accepts any and all information that one cycles into it."[38] However, with his transition away from instructions, Brecht's work no longer establishes universality through the computer's ability to reduce the world into a series of calculable bits. In contrast to computation, *Universal Machine II* borrows a model of universal connection from the encyclopedia form, which establishes an aleatory and indeterminate connection between entries. Encyclopedia diagrams use visual strategies to depict objects from a null or neutral subject position, whose surrounding "whiteness is an arena of potentiality that

[37] Douglas Kahn, "James Tenney at Bell Labs," in *Mainframe Experimentalism: Early Computing and the Foundations of the Digital Arts*, ed. Hannah Higgins and Douglas Kahn (Berkeley: University of California Press, 2012), 133.
[38] Martin, *Introduction*, 41.

fosters connections without fixing them or foreclosing thought experiments."[39] *The Universal Machine II* thus reveals a commitment to a particular kind of universality shared by *Deck*, which suggests anything could be connected to anything else without the mediation of calculation or instruction. *Deck* refines some elements of *Universal Machine II* that remain tied to Brecht's earlier methodology. It introduces more neutral white space between the encyclopedia diagrams, which are densely collaged in *Universal Machine II*, and it eschews the ontological difference between the debris and the diagrams. *Deck* also manages to suggest a world of possible uses in the material and habitual affordances of cards, without a page of explicit directions.

Deck is singular not just because it comes with no instructions, goals, or rules for play—which is equally true of toys and puzzles—but because Brecht uses all the tools at his disposal to embed a sense of a goal and a way of developing rules in the equipment of play itself. Playing with *Deck* is crucial to discovering these affordances. In my experience, there is a basic game—or perhaps a meta-game—that emerges and one that Brecht also seems to have played. In one interview, he describes using *Deck* in such a way that each player makes up rules "as they go along and then unmake[s] them…each player can criticize the other's rules, intervene, and change the rules." Brecht gives an example of one such rule, where "[e]veryone had to take three pictures from three cards and turn them into a joke, improvising."[40] The invitation of the encyclopedic images and the chance structure of the cards allow *Deck* to make the transit from toy to puzzle to game, and back again. It gives the player a push and a hint, but does not give them a means or a map. It is rule-governed but without any rules, purposive without any purpose. *Deck* marks the most accomplished synthesis of Brecht's thinking about chance, instructions, and uncertainty.

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[39] John B Bender and Michael Marrinan, *The Culture of Diagram* (Stanford, CA: Stanford University Press, 2010), 23.

[40] Gislind Nabakowski, "An Interview with George Brecht," in *An Introduction to George Brecht's Book of the Tumbler on Fire*, ed. Henry Martin (Milano: Multhipla Editions, 1978), 95.

From Brecht's aesthetic project we can begin to unfold a few key moments that make up what I am calling trickiness. First, trickiness appears clearest when unaccompanied by explicit rules that direct people to behave in a certain way. Second, it develops a sense of uncertainty that is associated with the act of play. Third, different styles of play, represented by different equipment—cards, skipping rope, alphabet blocks—conjure up different kinds of uncertainty. Fourth, without a binary code—i.e. a set of rules—that makes it possible to know beforehand which operations are possible on a given domain of objects, there is a need for a different kind of representational technology that can produce an aleatory universality. Fifth, the setup of such a situation produces a sense of trust that a solution will emerge, even when that trust is totally baseless, even when the author herself has no idea of what the solution might be. I will return to these five points later in the essay, after exploring the philosophical ground that unites them.

KANT'S USE OF "FREE PLAY"

The aleatory procedures of John Cage and George Brecht come out of a long debate about the nature of an artist's relation to the artwork. Chance based methods are an attempt to deflate the Romantic conception of the artist as a genius who invents new forms without quite understanding how. Cage, in his essay on "Experimental Music," formulates the role of the composer:

> What is the purpose of writing music? One is, of course, not dealing with purposes but dealing with sounds. Or the answer must take the form of a paradox: a purposeful purposelessness or a purposeless play. This play, however, is an affirmation of life—not an attempt to bring order out of chaos nor to suggest improvements in creation, but simply a way of waking up to the very life we're living.[41]

In this brief segment Cage both quotes Immanuel Kant's definition of aesthetic experience as "lawfulness without a law," or "purposiveness without a purpose" from the *Critique of Judgment*

[41] John Cage, "Experimental Music" Silence: Lectures and Writings (Middletown, CT: Wesleyan University Press, 1973), 12.

(1790), and dramatically transforms it.[42] Kant argued that aesthetic experience demands that everyone recognize beauty, but that no one can explain the reasons why. In his vision, the artist becomes a genius or savant who shatters the existing canons of art without being in control of her own talent. The slippage from the first definition to a "purposeless play" both undermines the uniqueness of the artistic genius, and paves the way for Brecht's games without rules.[43] Chance operations deflate aesthetics by moving the transcendent experience of lawless nature into the realm of simple mechanical outcomes produced by children's toys. And yet, Cage and Brecht both hold onto Kant's paradox of aesthetic experience.[44]

Kant shares with Brecht an understanding that play is a necessary component of aesthetic experience because play produces a sense of uncertainty. Kant calls this "free play." and he defines it through the explanatory role it serves in transcendental epistemology. Free play is a concept that is notoriously difficult to interpret, and one that has a long and complex history in Kant's work and afterwards.[45] By returning to Kant's writing we can piece together the logic by which the elements of Brecht's trickiness hang together. Without looking to Kant for some of the first formulations around free play, later art historical developments are obscured. I will start by

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[42] "Only a lawfulness without a law, and a subjective harmony of the imagination with the understanding without an objective harmony—where the presentation is referred to a determinate concept of an object—is compatible with the free lawfulness of the understanding (which has also been called purposiveness without a purpose." Immanuel Kant, *Critique of judgment,* trans. Werner S Pluhar (Indianapolis, IN: Hackett, 2010), 92. While lawfulness is more graceful, I prefer Kenneth Rogerson's translation of the idea as rule-governedness, because it emphasizes the connection to concepts as rules. To my mind, Rogerson comes the closest to a proper explication of how free play functions in Kant. Kenneth F. Rogerson, *The Problem of Free Harmony in Kant's Aesthetics* (New York: SUNY Press, 2008).

[43] Kant, *Judgment*, 85/§18.

[44] For another version of this argument see, Remko Scha, "Readymades, Artificial Art, New Media," in *Exploding Aesthetics*, ed. Annette Balkema and Henk Slager (Atlanta, GA: Rodopi BV, 2001), 40-47.

[45] For a summary of the recent approaches to this problem in Kant scholarship, see Paul Guyer, "The Harmony of the Faculties in Recent Books on the Critique of the Power of Judgment," *The Journal of Aesthetics and Art Criticism* 67, no. 2 (2009).

unpacking some of the basic elements of Kant's philosophical system, including the role of aesthetic experience in relation to theoretical knowledge and practical morals. I will then look more closely at the role of free play in this system, and argue that scholars have not taken the idea of play literally enough.

Understanding free play's role in aesthetic experience will take us into the weeds, but the intuition that guides Kant is clear and straightforward: beauty is always something beyond my comprehension. Something within aesthetic experience exceeds my ability to clearly grasp it, talk about it, or think about it. I return to a beautiful object again and again because it provokes my thought.[46] Like Brecht's game without rules, aesthetic experience is caught between the need for a shared rule and the inability to decide upon that rule. In fact, it is defined by those two impulses. It occupies a middle space between the personal subjective world on one side, and the shared objective one on the other. On the subjective side, aesthetic experience is not the same as a purely personal taste, such as the pleasure which I get from a favorite meal. If someone disagrees about deliciousness of that meal, Kant argues, we would be foolish to try and compare our sensations and reach an agreement. On the objective side, aesthetic judgment is not the same as recognizing the skill that has gone into crafting a well-made object. In that case, any disputes about an object's quality can be resolved with recourse to its suitability for a purpose. Aesthetic judgment occupies a middle ground between these two kinds of 'good' where disagreements can only inspire endless debate. At its root, this is also Brecht's interest in the unsolvable puzzle, which seems to pose conditions for an objective solution, but then transforms each solution back into a merely personal attempt. Rather than particular qualities, such as the beautiful or the sublime, it is this structure of

[46] Gilles Deleuze, *Kant's Critical Philosophy*, trans. Hugh Tomlinson and Barbara Habberjam (London: The Athlone Press, 1984), 54.

aesthetic judgment that fundamentally interests Kant.[47] The central motive of the *Critique of Judgment* is to understand the enigmatic conditions that make such an experience possible.

To understand Kant's theory of aesthetic experience, we need a brief outline of his theory of experience generally. In the *Critique of Pure Reason*, he anatomizes the faculties that make experience possible. The first of these faculties is a passive receptivity of the subject towards the world, what Kant calls sensibility. It is the name for our ability to apprehend sense impressions. Sensibility provides the given elements of experience, over whose givenness the subject has no power. This faculty is supplemented and synthesized by the imagination, which Kant conceives in a particularly broad sense as the organization and re-presentation of impressions into a unified whole or image. Imagination thus plays an active and shaping role in experience, because it structures the results of sensibility into a kind of gestalt. Still, even with both sensation and its reproduction through imagination, nothing within this perceptual field condenses into an object. The third faculty, understanding, introduces the ability to recognize stable and returning elements within that gestalt. The understanding has the capacity to generate concepts, which can be used to grasp the repeated objects of experience. For Kant, these concepts look like bundles of rules that the understanding uses to judge sensations.[48] For something to count as an oak tree, for instance, it would have to conform to the rule that oaks have acorns, leaves with lobes, and grey bark. The concepts of the understanding are organized by a final faculty, reason, which gives patterns of inference—in the form of syllogistic logic—from which a subject can draw valid conclusions.

[47] There are a wide range of judgments that can fit the criteria of aesthetics. However, beauty and sublimity are special cases for Kant because they reveal special facets of such judgment. For a version of this diversity, see Sianne Ngai, *Our Aesthetic Categories: Zany, Cute, Interesting* (Cambridge: Harvard University Press, 2015).
[48] Rogerson, *Problem*, 16-17.

Reason organizes and systematizes concepts, and extrapolates beyond actual experience to generate metaphysical "ideas" about how the world must be put together.

One final wrinkle in this system is important to Kant's aesthetics. The bridge between concepts and imagination is dealt with by a minor faculty that Kant calls judgment. Now there are two ways of moving between understanding and imagination—from concepts to presentations, and from presentations to concepts—and therefore there are two kinds of judgment. First, there is what Kant calls *determinative* judgment, where cognition starts with a concept and seeks out individual cases that could fall under it. For example, I have the rules for what makes an oak tree, and I check whether any of the trees around me are oaks. Second is what Kant calls *reflective* judgment, which starts from the given particulars of a situation and invents new rules that can systematize those particulars. Insofar as aesthetic judgment lacks a concept that makes it recognizable for everyone, it is a subspecies of reflective judgment. Aesthetics, for Kant, is about the struggle to invent rules to describe an ungraspable experience, so that we might share it or think about that experience. Determinative judgements seem simpler to Kant, and though they fall by the wayside in the *Critique of Judgement*, they matter to the aesthetics of trickiness.

By placing the distinction between passive reception and active thought entirely within a subject, Kant transforms an old epistemological question about how our perception can be adequate to the world.[49] No longer is the harmony between myself and the world simply assumed as a metaphysical fact; it must now be produced within my own being. The active faculties each donate their own formative principles in order that nothing needs to be presupposed about the given nature of the world. We do not need to assume that time or space exist in themselves, because these are part of the imagination. We do not need to assume that something really has relations of

[49] Deleuze, *Kant's Critical Philosophy*, 13-14.

causality, substantiality, necessity, etc., because these are part of my conceptual understanding. Each time that an aspect of experience seems to go beyond what could be given empirically, Kant shows that this excess results from the shaping work of my faculties. The sensible forms of space and time, and the pure concepts of the understanding (categories such as possibility, necessity, causality, negation, limitation, inherence, and others) come before actual experience, and condition every possible experience. For an individual to have any world whatsoever, according to Kant, the various faculties must work in concert so that passive sensibility can be unified in a determinate way. Without this fundamental synthesis, experience would be brute and unthinkable or empty and unmoving.

Universality is therefore not a trait of the world, but a feature of the perspectival conditions that shape the world into something shareable in the first place. Kant's epistemology shares the diagrammatic universality that George Brecht makes use of, which dates back to Denis Diderot's first encyclopedia of 1751. The encyclopedic diagram uses representational strategies—orthographic perspective, scale-independent sizing, line drawings—that equalize its possible objects in a manner akin to Kant's. When Brecht contrasts the encyclopedic universality to the computer, he implicitly makes use of this enlightenment history.

Let us now turn to aesthetic judgment, which sets up a contradictory relationship between the faculties. If experience arises from a synthesis of individual sensibility and universal concepts, then how can an aesthetic judgment make a purely subjective claim to universality? This is the puzzle that Kant sets for himself. It is unclear how a particular sensation of beauty can claim universality without relying on a concept to make it communicable. If we recall that concepts, for Kant, are sets of rules, then we can reformulate this situation in his paradoxical formula that

aesthetic judgments are rule-governed but without any particular rule.[50] If there is such a thing, and *Deck* testifies that there is, then it would introduce a gap into the Kantian system between imagination and understanding. It is this gap that the *Critique of Judgement* attempts to measure and come to terms with through free play.

Aesthetic experience is a puzzle because it does the work of conceptualization without concepts, and bypasses the machinery of cognition. Kant does not shrink from this characterization. Rather, he uses it as evidence that there is a natural harmony among the faculties. Specifically, aesthetic judgement can only result when all of the active faculties are free to develop according to their own nature and interests, when no one capability is subordinated to the rule of another. In his two previous critiques, Kant demonstrates the results of an unfettered understanding (in speculative knowledge) and free deployment of reason (in practical knowledge). In aesthetic judgement imagination is able to exercise its own powers freely for the first time. Unlike the other two critiques, however, imagination does not control or "legislate" over other faculties. Rather, all three faculties are in an indeterminate relation, and yet that freedom does not simply lead to anarchy. Of its own accord, the imagination tends towards the general conditions of cognition—towards rule-goverenedness—though it does not and cannot take on any determinate rule or concept from the understanding. In its flights of fancy, the imagination still appears to generate order, rhythm, pattern, and direction; it follows rules of its own design. Its indeterminacy paradoxically generates determinate results.[51]

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[50] It should be noted that I am framing aesthetic judgment in such a way as to avoid the question of pleasure that accompanies the beautiful or the sublime. I do so because I take there to be a range of other, non-pleasurable aesthetic experiences. However, the necessity of pleasure, and its relation to the subject, is a difficult question for Kant scholars. Paul Guyer, *Kant and the Claims of Taste* (Cambridge: Cambridge University Press, 1997) 60-105.

[51] See Dieter Heinrich, "Kant's Explanation of Aesthetic Judgement," *Aesthetic Judgement and the Moral Image of the World* (Palo Alto, CA: Stanford University Press, 1992).

Now it is precisely at this point, and in order to describe the ungraspable freedom of the imagination, that Kant has recourse to the metaphor of free play. Kant borrows the sentiment from 18th century British aesthetics, and the wording from descriptions of mechanical movement.[52] 'Free play' was a technical term that designated the space or freedom that a mechanical part needs in order to operate correctly. For instance, trying to force together the gears of a machine that are spinning during operation will cause them to grind. A gear-wheel needs a certain amount of free play so that it can jostle back and forth until the cogs interlock in precisely the right way. This form of mechanical play also encodes, as a second level of metaphor, the etymological origin of play as brisk or rapid movement.[53] Like the free play of gears, the indeterminate or chance movement of the imagination foreshadows a moment where it will interlock with the structured rules of the understanding. Kant makes use of free play to describe the freedom of the imagination when it is cut loose from concepts, and simultaneously the way that the imagination seems to generate an ordered tension all its own. Through this metaphor, the imagination's freedom is conceived as a random motion that does not impede order, but is rather the very condition under which harmony between the faculties is possible. The moving gear gives us to understand the harmonious faculties, however vaguely, as an encounter between two structures that can interlock when given enough chances. Kant's use of a play metaphor here functions much like Brecht's use of play equipment, interlocking gears are a mechanism for making chance and uncertainty manifest like a deck of cards.

[52] The interest in the contributions of the imagination's freedom to aesthetic experience go back to Joseph Addison's 1711 essay "Pleasures of the Imagination," and the language of play creeps in over the course of the century, in Edmund Burke and David Hume, for instance. There would also be a deeper history to draw out between the terms wit, fancy, and play in the 17th century. I focus on Kant here because his philosophy makes it impossible to take play as *only* a metaphor.
[53] Johan Huizinga, *Homo Ludens: A Study of the Play-Element in Culture* (Boston: Beacon Press, 1950), 32.

That the faculties can freely come into a harmonious relation at all, instead of running in conflicting and anarchic directions, is a basic precondition not only for aesthetics, but also for the orderly functioning of speculative and practical reason. Gilles Deleuze has forcefully argued, in *Kant's Critical Philosophy,* that the third critique is Kant's attempt to show how a harmony between the faculties can be generated rather than assumed.[54] Without a genetic basis, this harmony would lapse back into the theological or pre-critical attitude of the subject mysteriously attached to the world. Phrased another way, in his previous work, Kant shows how it is possible for the given content of sensation to be formed by the categories of the understanding, but this still presupposes that the imagination gives anything whatsoever to thought—that it is not anarchic. As an active force in its own right, there is no guarantee that the imagination will do so, or that it can be made to do so. By tracing aesthetic experience, Kant is proving that the imagination has a tendency to cooperate that arises from within its own free movement. Free play is what allows Kant to prove that such cooperation actually occurs.

Free play thus tethers a specific *a posteriori* aesthetic judgement about a beautiful object to the transcendental conditions of cognition in general. When an object of beauty brings the faculties into a contingent harmony, this harmony is also evidence of the *a priori* possibility of harmony. In other words, a freely achieved harmony means that such a harmony is, in theory, possible. Free play thus has two levels. Sometimes Kant uses it to designate the power of a beautiful object to instigate aesthetic harmony.[55] For instance, when Kant enumerates the fine arts, he also distributes a type of play proper to each. The poet "announces a mere play with ideas;

[54] Deleuze has traced the connection differently, and has ignored a thematic treatment of free play's role in generating this harmony. Instead, he focuses on the beautiful and the sublime as two generative problems for pure and practical reason.
[55] Michael Podro, *The Manifold in Perception: Theories of Art from Kant to Hildebrand* (Oxford: Clarendon Press, 1972), 9-10.

but…in playing he provides food for understanding;" visual art employs a "very common play of our fancy, whereby to lifeless things is attributed a spirit that corresponds to their form;" and musicians work with the "beautiful play of sensations."[56] Each of these arts enervates the imagination in a way that brings it close to the conceptual operations of the understanding. In a separate sense, however, Kant uses free play to name the transcendental condition of cognition in general by which the imagination enters into any ordered relation with concepts.[57] Only because free play is a condition that any subject must meet can a particular aesthetic judgement legitimately take on a universal cast. Free play in this second sense cannot be an object of conceptual or rational investigation, because that would subordinate it to the understanding or to reason. It can only be attested to by an exemplary sensation—namely, free play in the first sense.[58] Whenever Kant talks about free play, he is discussing the evidentiary dimension of the aesthetic judgement, whereby a freedom in practice grants us insight into a transcendental freedom. In each case it is the nature of chance, indeterminacy, and uncertainty in the particular metaphor of play that helps us see and imagine the ungraspable relation of our cognitive faculties.

The metaphor of free play as mechanical motion fulfills a peculiar role in this deduction of transcendental freedom, as do Brecht's uses of cards, or toys, or riddles. Each metaphor functions slightly differently. The content of mechanical motion highlights the dimension in which an example of free play can fulfill its function as evidence of a transcendental connection. According to Kant's epistemology, we cannot positively know anything about the nature of the transcendent in-itself. When he discusses the concept of freedom in relation to the moral will, for instance, Kant is careful to describe that freedom as "merely a negative principle (namely, of mere opposition)"

[56] Kant, *Judgment,* 190-195/§51
[57] Ibid., 62/§9
[58] Ibid., 63§9

in contrast to the ordered causality that occurs in our experience.[59] When it comes to the free play of the faculties, however, such a negative principle does not go far enough. Kant needs evidence not only of the possibility of freedom, but the possibility of a freedom that spontaneously harmonizes. In order that it not be anarchy, freedom must have the positive attribute that it run in the direction of conceptual rules. The metaphor of free play, however vague and self-effacing it appears, determines the way that this directedness of transcendental freedom will be understood. The moment of genesis, whereby two disconnected principles come into contact, is modeled for Kant on the indeterminate chance that two gears will interlock. By identifying the formal quality that produces harmony with *play*, Kant smuggles in some minimal content into the transcendental freedom of the imagination. This does not exactly violate the bar on knowing the in-itself; Kant is only demonstrating the possibility that imagination comes into harmony, and he has every right to do so via play. The example does not claim to be adequate to the actual freedom of the imagination, even though Kant is constrained from offering any reasons why it is inadequate. He is limited to using examples as his only evidence because he must exclude the concepts of the understanding or the ideas of reason.

In that case, we might well wonder whether play is the right example to use. Does the metaphor of free play clarify the process by which the faculties come together, or does it determine that freedom in a misleading way? Why does Kant turn to play rather some other metaphor? He might well have talked about a power of *creative* freedom, and implicitly drawn a connection to the idea of generativity in birth, or to the spontaneous choices of a god.[60] Insofar as creative

[59] Kant, *Judgment*, 10/§I

[60] Jacques Derrida, "Economimesis," *Diacritics* 11, no. 2 (1981): 2–25. Derrida argues roughly the same relation holds between transcendental and empirical, but he thinks that Kant uses nature as a model rather than play. Here I think Derrida misses the positive contribution that the term play makes in Kant's theory.

freedom matches the powers of cognition, it would provide an alternate model of harmony between the faculties. The choice of one metaphor over another always highlights some elements while effacing others, and play is an apt choice for Kant's enlightenment project. Play is a human capacity and part of the empirical world. Unfortunately, these qualifications do not go very far towards a positive understanding of play as a choice of metaphor, and measured against the transcendental freedom of the imagination, all metaphors seem equally inadequate.

However, play also has some formal aspects that make it a better representative for the freedom of the imagination than other possibilities like creativity. Like other possible metaphors, play allegorizes the movement from an indeterminate relation between the faculties, to free interaction and harmonization. Unlike others metaphors, it elevates this transition into a self-conscious theme. Uncertainty is a precondition for play that gives a players a range of choices within which they are free to act. Without the feeling of uncertainty, a game lapses into the tedium of the foregone conclusion and the coercion of a fixed match.[61] Players constantly strive to resolve the uncertainty of the game in their own favor. For a game to persist from moment to moment, it must resist the players' efforts and preserve its uncertainty. Players focus on uncertainty and develop strategies for surmounting it, systems for beating the odds, and rituals to bring them into closer resonance with it.[62] Games must constantly outpace these efforts, and continually reassert their organizing problem. These efforts develop uncertainty, freedom, and harmonization into an explicit theme of play.

[61] Huizinga, *Homo Ludens*, 10-11.
[62] For instance, Thomas Malaby gives a robust account of the various cultures of risk-taking that develop around four different gambling games, and how those cultures structure the lives of their players outside the games. Thomas Malaby, *Gambling Life: Dealing in Contingency in a Greek City* (Chicago: University of Illinois Press, 2003).

Phrased in more Kantian terms, the experience of uncertainty in play produces a sense of the indeterminate range of possible outcomes or responses to the uncertainty. Unlike, for instance, Heisenberg's uncertainty principle, this indeterminacy is not dependent upon a concept. Indeterminacy can serve as a model for freedom in the first place—as chance interaction of gears—because it manifests a range of possibilities. The more a concept is brought to bear on the definition of that indeterminacy, the more limited its application to transcendental freedom. Play thus moves in a metaphorical chain from uncertainty to non-conceptual indeterminacy to a model of freedom. In contrast to other metaphors, play pushes its extraneous empirical content into the background, and foregrounds an epistemological condition of not-knowing. If transcendental freedom must be determined by empirical content, play filters and minimizes its effect.

Out of this first point comes an equally important second point: the uncertainties and freedoms of play are not all of a single type. Each game develops its own method of creating indeterminacy.[63] In the previous chapter, I highlighted at least four genres of uncertainty in Caillois' typology of competition, chance, mimicry, and vertigo. In each case, play engages a different kind of freedom: now a sense of strategic choice, now a sense of relative power, now a sense of spontaneous becoming, now a sense of pure movement. If free play implies the trial-and-error wobbles of a moving gear for Kant, it simultaneously includes a capacious range of other freedoms as virtual substitutes. Better still, if games are constantly being invented in response to new historical problems and moments, then play contains an infinite array of possible ways to characterize the movement of the imagination. Play becomes a laboratory of freedoms and an archive of uncertainty. The importance of this flexibility when it comes to the freedom of the

[63] The game designer and critic Greg Costikyan has recently attempted to enumerate and catalog the variety of uncertainties that games use. He suggests several major types, but his list could be easily be expanded. Greg Costikyan, *Uncertainty in Games* (Cambridge: MIT Press, 2013).

faculties should be clear: if we must use an empirical example in an analogy with the transcendental, then it should be a metaphor that itself aspires to collect and represent the totality of ways that things can be free.

In this light, Brecht's experiments with chance effects starts to make some sense, as does his wider use of toys and games. His goal is to reveal the specific feeling of lived uncertainty that comes from a shuffle or a toss. Brecht allows us to think about the variable metaphoricity of play through the cards, toys, dice, board games, spinners, and puzzles that make up his work. He inhabits the Kantian logic quite precisely. First, by looking towards the universal conditions of judgement that, as in *Deck,* allow his art to draw a connection between anything whatsoever by way of uncertainty. Second, by recognizing that the result needs to go beyond the human capacity for understanding if that uncertainty is to manifest itself. Chance operations create rule-governedness without rules, and purposiveness without purpose, even as they shift production away from the human artist.

Brecht takes us a step beyond Kant as well. While Kant works hard to efface the metaphoricity of free play to the point where it seems naturalized and unproblematic, Brecht foregrounds the slippage between empirical play and its transcendental employment. The contrast is clearest in the moment when Kant comes to describe the actual games and entertainments of his era: "the play [or game] of chance, the play of tones [in music], and the play of thought [or of wit]."[64] Even though gambling, parlor music, and jokes all have some amount of free play, Kant refuses to recognize them as art. In a wonderfully baroque passage, Kant argues that in witticisms, "nothing is thought," and jokes only produce a pleasurable bodily change through:

> alternating tension and relaxation of the elastic parts of our intestines that is communicated to the diaphragm….The lungs, meanwhile, rapidly and intermittently expel air, and so give rise to an agitation that is conducive to our

[64] Kant, *Judgement*, 202/§54, translator's insertions.

> health. It is this agitation alone, and not what goes on in the mind, that is the actual cause of our gratification [in the joke][65]

In jokes, play only rises a minimal level above personal gratification, and quickly falls back into mere bodily excitement. For Brecht, in contrast, these three amusements define the trajectory of his career. First he experiments with games of chance, then extends this to the orchestration of sound and music, before finally settling into an inventive wittiness. Brecht demonstrates how each of these amusements can be part of aesthetic experience, and in the process refuses to separate out the empirical problem of play from its transcendental metaphor. Brecht erases the dividing line that would quarantine pure free play from its practical examples. *Deck* is both the avatar of this task, and the work of art that accomplishes it most fully.

By looking to Kant, then, the elements of trickiness begin to draw together. Universality becomes the condition of aesthetic experience in need of an explanation, and it needs to be explained without recourse to rules. Playful uncertainty becomes a way of capturing the experience of a positive freedom of the interaction between the faculties, and the variable play equipment takes on the role of an exemplar. Finally, trust comes out in the results of the operation, attesting to the fact that things could be anarchic but are not, and that the world of sense is contingent but actual. In explaining the process, however, trickiness has gone from one particular aesthetic practice to something that underpins aesthetics in general. The next section returns to trickiness some of its limited and specific interventions.

THE RADICALIZATION OF "FREE PLAY" IN HERMENEUTICS

By comparing George Brecht to Kant, some of the logic that guides trickiness becomes clearer, yet there are some crucial differences. Brecht emphasizes that creativity arises from

[65] Ibid., 205/§54

senseless operations rather than genius. He expands beyond chance to models of uncertainty taken from riddles and puzzles. Finally, he actively elaborates and celebrates the metaphoricity of play. These moves take Brecht away from Kant's philosophy of cognition towards an aesthetic investigation of uncertainty. Brecht is not alone in following this path, but part of a broad turn among postmodern artists and philosophers to re-address the nature of free play as *interpretive*. In this section I examine the intervening history that connects Brecht to Kant through three vignettes about Friedrich Schiller's transformation of Kant's aesthetics, Friedrich Schleiermacher's adoption of that model for hermeneutics, and play's expanded role in Hans-Georg Gadamer's hermeneutic philosophy.

Friedrich Schiller's treatise *On the Aesthetic Education of Man* (1794) is the earliest and most explicit reworking of Kant's free play.[66] Schiller writes to popularize a Romantic understanding of art, which he believes has the potential to shape and order human life, and he is doing so for a newly developing middle class interested in the power of education.[67] Schiller was heavily influenced by Kant's theory of aesthetics, but the complexity of Kant's view of human cognition made it unsuitable for Schiller's purposes. In the letters that compose *On the Aesthetic Education of Man*, Schiller boils down the elements of Kant's thought, including play, and reformulates them into something more basic and portable. The various faculties and their complex interactions become an oppositional binary—what Schiller calls the "sense drive" and the "form drive"—which stand in for the imagination and the understanding. Moreover, rather than human capacities, the faculties are recast as impersonal drives or powers. Form and sense operate according to mechanisms that are more akin to gravity or magnetism than experience. Schiller falls

[66] Friedrich Schiller, *On the Aesthetic Education of Man*, trans. Keith Tribe and Alexander Schmidt (New York: Penguin Classics, 2016).
[67] Hansjorg Hohr, "Does Beauty Matter in Education?: Friedrich Schiller's Neo-Humanistic Approach," *Journal of Curriculum Studies* 34.1 (2002).

short of Kant's rigor, but in the process he transforms the logic of aesthetics into something independent of the human.[68]

By conceiving of the imagination and the understanding as unconscious forces, Schiller also simplifies the relations that link the two together. In Kant, as Deleuze points out, the faculties exist in relations of domination or legislation—except where they come into free harmony within aesthetics.[69] Schiller shifts the meaning of domination from a question of legislation and qualitative interaction to the simple calculus of force. Every time the form drive and the sense drive interact, they interact as specific magnitudes and vectors that determine the outcome of an encounter. Sometimes sense will overpower form (and Schiller thinks this is the cause of working class lassitude and abandon); other times form will overpower sense (and the fixed hold of aristocratic rule will lead to degeneracy); and in still others both form and sense will lack the power to actually interact. Despite this oppositional binary, Schiller retains a place for the non-legislative and non-dominative interaction of free harmony and free play. When form and sense meet each other with precisely equal force—which is a one in a million chance, an extreme version of Kant's interlocking gears—they can harmonize. At this moment, Schiller understands the two forces as existing in free play, and together they establish a golden mean that can become a model and a goal for human activity; that meeting point becomes an ideal with a force of its own, one that Schiller calls the play drive.

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[68] This reading is in critical conversation with Paul de Man's reading of the use Schiller makes of Kant. For de Man, Schiller fails to live up to Kant's transcendental method and introduces a tropological and human-centric view of play. While I don't disagree, I have tried to show that Kant was never so free of the tropological, and Schiller is not so simply humanist. Paul de Man, "Kant and Schiller," *Aesthetic Ideology*, ed. Andrzej Warminski (Minneapolis: University of Minnesota Press, 2002).

[69] Deleuze, *Kant's Critical Philosophy*, 24-27.

As a force, the play drive operates by manipulating the random encounters between form and sense in order to bring them back into a harmonious, non-dominative relation. It attempts to enervate both forces so that they there can be an encounter, and to soften the excesses of each so that they are balanced.[70] Unlike Kant, Schiller celebrates actual, literal play, and draws attention to the way that human and animal play embodies the spirit of free harmony. The play drive circles between the other two drives, extending one, delaying the other, adjusting them until they return to that golden moment of conflict-free balance that first gave rise to the ideal of play. Schiller takes Kant's implicit and reconciliatory use of play—the metaphor of interlocking gears—and makes the logic of the encounter more explicit. Play becomes one force among other forces, a quantitative adjustment that creates harmony out of disharmony, determinate results out of indeterminacy. The relation between imagination, understanding, and play is loosened from the Kantian framework, and becomes a process that can be instantiated among any set of similarly arrayed forces.

In Schiller's revision, we can see the basic outlines of Brecht's aesthetics. Play, as a biological act, is explicitly acknowledged and celebrated for the kind of tension and movement it brings to reconcile opposites. Play, as a metaphysical force, is also separated from a particularly human standpoint, such that its harmonizing function could conceivably be exercised by an artefact like a game. As a result, Schiller helps to establish a novel and powerful way of thinking the relationship between form and content, one that is foreshadowed in Kant but generalized by his successors. Form and content meet as independent forces in this model, which is a striking departure from the mimetic logic of forms in Plato, the shaped-matter of Aristotle, or the dialectical resolutions of Hegel. This independence makes it possible, for the first time, to determine content as an event, and to determine form as a structure. Schiller, and those that follow him, make it

[70] Schiller, *On the Aesthetic Education of Man*, 44-49.

possible to apply the Kantian relation between imagination and understanding to other situations—to language and speech, myth and ritual, narration and plot. The independence of event and structure, however, is only part of what makes this logic work. Without play as a way of bringing the two back into relation, their interaction would be a mystery.

In my previous chapters I have shown how play is a crucial term for both structuralist linguistics and anthropology, and here we can begin to see the deeper logic behind those uses. While free play remains undertheorized until the mid-twentieth century, it proliferates along diverse lines in European thought. Mihai Spariosu has traced the impact of free play through the Victorian aesthetics of Matthew Arnold, John Ruskin, Oscar Wilde, and beyond. [71] In Germany, Gotthold Lessing can suggest that a painter "allows free play to the imagination" in much the same sense Matthew Arnold can argue that the proper attitude for judging works of art consists in "following the law of its own nature, which is to be a free play of the mind on all subjects which it touches."[72] Free play becomes shorthand for a relation between form and content where no one element comes to dominate, and where there is no finality, but a constant movement of adjustment and interaction.

Kant starts from a question about the paradox of aesthetic judgment, but discovers that free play underpins every interaction between the faculties. However, neither Kant nor Schiller develops a strong account of how free play affects determinative judgment. For that we must look to the discipline of hermeneutics, which takes up this challenge and develops Schiller's back and

[71] Mihai Spariosu, "Criticism as Irenic Play: The Case of the Victorian Sages," in *The Wreath of Wild Olive: Play, Liminality, and the Study of Literature* (New York: State University of New York Press, 1997).
[72] Gotthold Lessing, *Laocoon: An Essay upon the Limits of Painting and Poetry*, trans. Ellen Frothingham (Mineola, NY: Dover, 2005), 29; Matthew Arnold, "The Function of Criticism at the Present Time*," Lectures & Essays in Criticism*, ed. R.H. Super (Ann Arbor: University of Michigan Press, 1990), 270.

forth movement. Hermeneutics was, until the 19th century, a discipline primarily concerned with the proper methods for interpreting sacred texts. Kant was a major inspiration for Friedrich Schleiermacher's secular and philological development of a hermeneutics built around the finite comprehension of human reading. Like the endless adjustments of the play drive, the process of reading can only be, for Schleiermacher, an infinite and recursive approximation of a text's meaning. Whenever a reader has difficulty understanding a passage—because it makes an obscure reference, is written in a dead language, or comes from a damaged manuscript—she needs the back and forth motion of play. Her approach begins from some fragment, such as a sentence, that helps her project an imagined idea of the text's overall meaning. This overall idea is only a preliminary one, readily abandoned, but it comes in useful for clarifying the context for a subsequent passage. By cycling between fragment and whole, a reader slowly builds up an understanding of a text that is always incomplete and in process; this process is known as the 'hermeneutic circle.'

Already in this thumbnail sketch we can note some connections between Schleiermacher and Kant. The two moments in the hermeneutic circle correspond precisely to Kant's reflective and determinative judgement. When looking at an isolated fragment the interpreter finds or generates a rule to organize it; when looking at the concept of the whole the interpreter seeks out cases that confirm or disconfirm it. Schleiermacher's description of the interpreter's situation draws on the same paradox that Kant uses to explore aesthetics: like the idea of "purposiveness without purposes," the interpreter must assume that some purpose guides the production of each sentence, paragraph, or chapter, but those purposes must remain perpetually outside of her reach.[73] Similarly, like the claims of universality that aesthetic judgment makes, the interpreter aims at a reading that is valid for everyone, but can never have a guarantee that others will reach the same

[73] On this point, see Rudolf Makkreel, *Imagination and Interpretation in Kant: The Hermeneutical Import of the Critique of Judgment (*Chicago: University of Chicago Press, 1995).

conclusions. However, Schleiermacher also diverges from Kant in the same ways that Schiller does, turning understanding and imagination into the independent forces of form and content, or structure and event, which come together through an indeterminate process.

It should come as no surprise, then, that Schleiermacher also makes use of free play to figure the moment of indeterminacy within a text. His use is precise, if restricted. Free play is a component element of every author's psychology, something like a train of associative thought, and it is a component that is counterbalanced against the more rigid elements of character structure and grammar. Free play introduces an ineradicable moment of indeterminacy in any text: "[e]verywhere, even in the realm of science, there is a free play of thoughts which to a certain extent precedes artistic production in a preparatory manner. One would be very wrong to banish that free play from the literary domain."[74] To be a good interpreter, one must leave room for that free play, to allow for the chance occurrence or slip of the tongue. This uncertainty makes interpretation an infinite process and not just a tool for correcting manuscript errors.

Schleiermacher demonstrates a concrete method for dealing with Kant's claim that free play underpins any interaction between the faculties whatsoever. Free play does not just affect the interpreter dealing with a fragment (reflective judgment) but also the attempt to decide whether the imagined whole can account for a new fragment. Because the meaning of the whole is always out of reach, always infinitely deferred, its application to a case is always uncertain. Determinative judgement becomes indeterminate and in free play. Schleiermacher uses the free play of determinative judgment to understand texts, but demonstrates the method in which free play matters to the Kantian system generally. He makes it necessary to think the hermeneutic circle more generally as the condition of understanding, in a line that moves through Friedrich Nietzsche

[74] Friedrich Schleiermacher, *Hermeneutics and Criticism: and Other Writings*. Trans. Andrew Bowie (Cambridge: Cambridge University Press, 1998), 103.

and Martin Heidegger to Jacques Derrida and Gilles Deleuze.[75] These thinkers recognize the foundational role of free play, and in order to divorce it from any one isolated part of cognition or experience, they begin to talk about the play of the world.[76] This phrase recognizes that play precedes and makes possible the split between subject and object, imagination and understanding.[77] With the turn towards philosophical hermeneutics in the 1960s, there is a new and sustained engagement with the idea of free play in the work of Hans-Georg Gadamer, Paul Ricouer, Wolfgang Iser, and others. These contemporaries of George Brecht explicitly turn away from Romantic notions of human creativity, valorizing the historicity of the play metaphor, and highlighting the capacious range of its examples.

Hans-Georg Gadamer's landmark treatise on hermeneutics, *Truth and Method* (1960) confirms my interpretation of free play.[78] Developing the work of Kant, Schiller, and Schleiermacher, Gadamer understands the distinction between reflective and determinative judgment to be a relative one, where determinative judgment is always haunted by the question of

[75] On Nietzsche and play, see Alan Shrift, "Nietzsche's Psycho Geography: A Ludic Alternative to Heidegger's Reading," *Nietzsche and the Question of Interpretation* (New York: Routledge, 1990); Mihai Spariosu, "Play and Nietzsche's Will to Power," *Dionysus Reborn* (Ithaca, NY: Cornell University Press, 1989). On Heidegger, see especially Martin Heidegger, *Ontology—Or the Hermeneutics of Facticity*, trans. John van Burne (Bloomington: Indiana University Press, 1999); John Caputo, "Being, Ground and Play in Heidegger," *Man and World* 3.1 (1970); Bert Olivier, "Gadamer, Heidegger, Play, Art and the Appropriation of Tradition," South African Journal of Philosophy 21, no. 4 (2002). On Derrida, see James Hans, "Derrida and Freeplay," *MLN* 94.4 (1979); Alan Aycock, "Derrida/Fort Da: Deconstructing Play," *Postmodern Culture* 3.2 (1993).

[76] This particular formulation begins with Heidegger, see Stuart Elden, "Eugen Fink and the Question of the World," *Parrhesia* 5 (2008).

[77] For an expansive take on the idea of the world at play see, Eugen Fink, *Play as Symbol of the World*, trans. Ian Moore and Christopher Turner (Bloomington: Indiana University Press, 2016); Kostas Axelos, *Le Jeu du Monde* (Paris: Les Editions Minuit, 1969); James S. Hans, *The Play of the World* (Amherst: University of Massachusetts Press, 1981).

[78] Hans-Georg Gadamer, *Truth and Method*, trans. Joel Weinsheimer and Donald Marshall (New York: Continuum, 2004).

aesthetics.[79] For him, play is the crucial toggle that transitions between the incommunicable experience of art and the relational act of interpretation. His goal, in reconsidering play, is to "free this concept of the subjective meaning that it has in Kant and Schiller," and he specifies that play becomes shared and relational when its presentation to an audience causes a "transformation into structure."[80] Gadamer gives play an ontological priority whose logic reconciles event and structure. It has what he calls a 'medial' place that organizes the relation between subject and world.

I highlight Gadamer's account not only because it shares a view that places play at the root of aesthetic and hermeneutic thought, but because of how he understands the nature of that play. Like George Brecht, Gadamer celebrates its diverse senses:

> If we examine how the word 'play' is used and concentrate on its so-called metaphorical senses, we find talk of the play of light, the play of the waves, the play of gears or parts of machinery, the interplay of limbs, the play of forces, the play of gnats, even a play on words. In each case what is intended is to-and-fro movement that is not tied to any goal that would bring it to an end.[81]

Gadamer shifts seemingly peripheral cases of play to the center of his analysis by reframing metaphoricity as something other than the Kantian melancholy of limitation. As I have been arguing, the concreteness of play is a necessary clue. In Gadamer's hands, the focus of play continues to be on indeterminate action, on a 'to-and-fro movement' that is unpredictable, infinite, and anti-teleological. Only because the movement is uncertain, because it is never clear how far the 'to' will go, and where the 'fro' will rebound, can Gadamer speak of play as an endless refrain that never arrives at a goal. Gadamer draws the connection between this indeterminacy, and the

[79] Ibid., 34-5. Admittedly, Gadamer poses this problem in a slightly different way, giving universal scope to aesthetics rather than to free play. This point is mitigated in two ways: first, it is unclear in Gadamer's account what element of aesthetics exactly infiltrates determinative judgment, and second, he turns to play without a strong account of why that feature of aesthetic experience should be the clue. My account only fills in the blank between these two points.
[80] Gadamer, 102.
[81] Ibid., 104.

feeling of uncertainty as freedom: "[t]he attraction that the game exercises on the player lies in this *risk*. One enjoys a freedom of decision which at the same time is endangered and irrevocably limited. One only has to think of jig-saw puzzles, games of patience, etc."[82] Here the theme of riddles re-appears, for what else is a riddle but an overdetermined set of rules in search of an example? Riddles expose the free play of the understanding, which aspires to hermeticism where art aspires to universality. But riddles are unable to achieve that insularity, and always produce a belief in the possibility of shared experience.

Gadamer explores the variegated senses of uncertainty that Brecht's toys highlight. He recognizes an internal difference within play's freedom that depends on the formal features of the game but is irreducible to those forms. "Games differ from one another in their spirit," he writes, because "the to-and-fro movement that constitutes the game is patterned in various ways."[83] Gadamer goes on to say that this patterning is occasioned by the rules and regulations of the game—but he simultaneously separates out analytically the freedom of uncertain movement they give rise to. Not only the rules, but the specific feeling of free play changes.

For Gadamer, play functions as a hinge between aesthetics and interpretation because of its "medial" nature, which both absorbs players utterly into a world of their own, and simultaneously makes available a spectacle that is "repeatable and hence permanent." In this dual directedness, play provides Gadamer with a model for the work of art more generally—which is both absorbed into its own rules, and open to a reader's interpretation. In this reading, free play not only makes possible any harmony between the faculties whatsoever—and thus the world as such—but each metaphorical valence of free play makes possible a specific game world. We should understand these worlds in a strong sense of the term, because the to-and-fro movement

[82] Gadamer, 106. My emphasis.
[83] Ibid., 107

specific to each game also determines the scope of possibility within it—the indeterminate range of events that might or might not happen. By shifting from the metaphoricity of free play as an epistemological limit, to the range of metaphors as a productive constraint, Gadamer shows that those metaphors are themselves conditions of possibility for micro-worlds. Play worlds are not like the worlds of theater, film or novels—or rather these arts can only have their own worlds on the basis of play as the condition of worldhood as such. Following upon Gadamer's work, some important work in hermeneutics has been built upon this connection between worldhood and play by people such as Paul Ricouer and Wolfgang Iser.[84]

My engagement with free play in Kant, Schiller, Schleiermacher, and Gadamer had two goals. First, to demonstrate that play is an inseparable part of interpretation, at least within the modern tradition of hermeneutics. Second, to show how play metaphors actively shape our sense of freedom through particular experiences of uncertainty. Gadamer's concept of worldhood allows us to glimpse one way that the metaphor of play might be cashed out as something other than mere limitation. With these two points in hand, and all that they teach us about George Brecht's aesthetic choices, we can also glimpse a new kind of contradiction or aporia that underpins trickiness.

THE UNIVERSAL WIT OF ADVENTURE GAMES

Here are the two sides of the aporia: (1) for the act of interpretation to reconcile the part and whole, event and structure, it requires a model of free play based on a particular game; however, (2) playing a particular game requires the player to negotiate that uncertainty (she must make

[84] Paul Ricœur, "Appropriation," in *Hermeneutics and the Human Sciences: Essays on Language, Action, and Interpretation*, trans. John B Thompson (Cambridge: Cambridge University Press, 2016); Wolfgang Iser, *The Fictive and the Imaginary: Charting Literary Anthropology* (Baltimore: John Hopkins University Press, 1996).

decisions about which way to move, how to win, and so on) which means that the player needs to have a method of interpreting the game already available to her. Interpretation requires play, and play requires interpretation; each implicates the other in circular fashion. Say, for instance, (1) I attempt to interpret a work of art by thinking its freedom on the model of a ball game. For whatever reason, I associate the paint splatter of this Jackson Pollock painting with the moment of excitement before a baseball flies off in an unpredictable direction. The uncertainty of a particular game informs my model of aesthetic experience. In turn, (2) playing baseball requires me to make choices—to decide which balls are flying into the part of the outfield that I am responsible for, and thus requires an interpretive framework that is historically prior to the one I use to think about the work of art. Perhaps I choose not to catch a ball because secondary school has led me to believe I am not athletic. Circling again (1) my secondary school framework needs a concept of freedom, but this will certainly not come from baseball. Perhaps it will draw its model of freedom from a forbidden act of playing marbles. (2) How I choose which marbles to shoot will depend on an interpretation of physical interaction and hand-eye coordination that I have built up over my childhood. The circle keeps turning. Yet, this is not the same as the hermeneutic circle itself, because it involves that circle as a component part of playing a particular game. We might call this the ludic epicycle in order to differentiate the two.

These two circles ordinarily operate over long periods and in quiet tandem, but they can also become the explicit theme of a game. When George Brecht deploys his unsolvable puzzles and games without rules, he forces play to depend on the hermeneutic context that the player brings to bear and vice versa. Brecht's trickiness ultimately rests on turning circularity into a theme of his art, creating a *mise en abyme* through the playful tilt of the ludic epicycle. In this section I argue that this thematization of the interdependence of free play and interpretation, an avant-garde strategy in the 1960s, helped to popularize video games and provided one of their central pleasures.

To make this case I turn to the genre of the adventure game, and particularly *King's Quest VI* (1992).

Adventure games, as I use the term here, are an early genre of computer game that includes the text adventure games prominent in the 1970s and 80s, graphic adventure games from the 1990s, casual room escape games, episodically released adventures, and certain kinds of puzzle game. The genre traces its origin back to Will Crowther's text-based *Colossal Cave Adventure* (1976), where the player goes spelunking in a version of Kentucky's Mammoth Caves. In other early entries of the genre, a player would read a description of her surroundings and interact by typing commands into a parser, such as "Go east," or "Pick up hammer." Over time the descriptive text was replaced with 2D and 3D visual environments, and the command parser was replaced by a more limited set of general purpose equivalents. Most graphic adventure games included icons signifying 'walk,' 'look,' 'talk,' and 'use,' though a few included more idiosyncratic commands such as 'smell' or 'push' (Fig. 3.3).

Figure 3.3. Inventory screen of *King's Quest VI.*

The gameplay of the genre is organized around the exploration of a complex environment full of small details that may or may not matter. Many of the objects can be collected, saved in an inventory, and used to solve puzzles at other locations. In an adventure game, it is rarely the player's reflexes or fine motor skills that are put to the test. Rather, a player walks slowly through an elaborate landscape and takes in its details, she picks up everything that is not nailed down, and tests how the most disparate objects might combine or interact in novel ways. Though these games are often set in expansive worlds, they can be conceived as a series of locked doors where each key only opens onto more locks. The way to proceed past any given puzzle is predetermined by the game's designer, and the puzzles are typically laid out in a linear order. This is a structure that lends itself to telling a robust story, which can be planned and parceled out, but it is also a structure that seems to reduce the freedom of play.

Such linearity has been much maligned because it seems to undermine the medium specific qualities of video games.[85] As a consequence, graphical adventure games have fallen out of fashion as objects of study—especially insofar as they are studied for their mechanics, rather than their narratives. At the same time, the genre is undergoing something of a renaissance among players. Independent development tools, such as *Adventure Game Studio,* have lowered the barrier to entry for creating adventure games, opening the way for a wider variety of stories. A serialized model of production has made it profitable for studios to produce long stories with the same characters and environments.[86] Games such as *The Shivah* (2006), *Machinarium* (2009), *The Walking Dead* (2012), *Kentucky Route Zero* (2013), and *The Blackwell Epiphany* (2014) have all received important critical acclaim. In light of this resurgence, the distinctive playfulness of adventure games seems to happen at a tangent to the desire for emergent forms of play.

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[85] This judgment is a result of the historical situation I outlined in Chapter One, when the hypertext model of choice gave way to a systemic and emergent one. There are two influential formulations of this aesthetic: first, Chris Crawford's argument that the "process intensity" of a program was a mark of merit in contrast to its "data intensity." Second, Sid Meier's definition of a game as a "series of interesting decisions." The emphasis falls in a slightly different way with each, but both push against adventure games. See Chris Crawford, "Process Intensity," *Journal of Computer Game Design* 1, no. 5 (1987), accessed April 13, 2018, http://www.erasmatazz.com/library/the-journal-of-computer/jcgd-volume-1/process-intensity.html; Chris Crawford, "Flawed Methods for Interactive Storytelling," *Journal of Computer Game Design* 7 (1993), accessed April 13, 2018, http://www.erasmatazz.com/library/the-journal-of-computer/jcgd-volume-7/flawed-methods-for-interact.htmlSid Meier, "Interesting Decisions," filmed March 2012 at Game Developer's Conference, San Francisco, Calif., video, 1:00:40, https://www.gdcvault.com/play/1015756/Interesting; Noah Wardrip-Fruin, *Expressive Processing: Digital Fictions, Computer Games, and Software Studies* (Cambridge, MA: MIT Press, 2012); Ian Bogost, "Process Intensity and Social Experimentation," *Gamasutra,* May 23, 2012, accessed April 13, 2018, https://www.gamasutra.com/view/feature/170806/persuasive_games_process_.php. For a version of this argument applied specifically to King's Quest VI, see Ted Friedman, "Making Sense of Software: Computer Games and Interactive Textuality," in *CyberSociety: Computer Mediated Communication and Community,* ed. Steve Jones (London: Sage Publications, 1995).

[86] Anastasia Salter, *What Is Your Quest?: From Adventure Games to Interactive Books* (Iowa City: University Of Iowa Press, 2014), 92-108.

I turn to *King's Quest VI* because it is a classic of the genre, produced by one of the most prominent game studios of its time, Sierra On-Line. *King's Quest VI* was one of the best-selling PC games of that year and of the franchise's lifetime, and it represents the creative energies of the designers Roberta Williams and Jane Jensen at their height.[87] The game tells the story of Prince Alexander, who has fallen in love with a foreign princess, and sets sail to visit her. A tempest leaves him shipwrecked in the "Land of the Green Isles" where Princess Cassima has been imprisoned by a devious vizier with the aid of a genie. As a stranger to this insular land, and with all his worldly possessions lost to the sea, Alexander sets out to meander, barter, and trick his way into the arms of Cassima. He is aided by a magic map that allows him to teleport between the four central islands that make up the kingdom.

I also turn to *King's Quest VI* because it makes a point of highlighting how uncertainty operates in ways other than simple choice, and in the process gives the lie to the theories that focus only on the agency of a player. Playing an adventure game is only halfway like solving a puzzle. At times, it is true, one encounters an impassible moment in a game that clearly demands some kind of response from the player. To find one's way to the heart of the "Island of the Beast" for instance, *King's Quest VI* requires the player to pass three gates: a boiling spring, a statue of cupid that shoots arrows, and a magic hedge that grows to block her path. Each of these gates presents itself as a puzzle in need of a solution, part of what game theorist Espen Aarseth calls the cycle of "aporia and epiphany" that ties together diverse challenges into a single game.[88] However, most of a player's time in an adventure game is not spent solving puzzles but *looking* for them. The

[87] For a critical history of Sierra Online, and Roberta Williams in particular, see Laine Nooney, "A Pedestal, a Table, a Love Letter: Archaeologies of Gender in Videogame History," *Game Studies* 13, no. 2 (2013).

[88] Espen Aarseth, "Aporia and Epiphany in 'Doom' and 'The Speaking Clock': The Temporality of Ergodic Art," in *Cyberspace Textuality: Computer Technology and Literary Theory*, ed. Marie Ryan (Bloomington: Indiana University Press, 1999).

player must hold the state of the game in her head: what are the motive forces in the plot, what kind of changes have taken place recently, what objects she has collected, what properties those objects have, and what implicit hints the narrator has dropped. With all these things in mind, the player goes in search of challenges. To take another example: early in *King's Quest VI* the player is able to take a mint from a store counter, but the owner lets her know that it is his last one. He mentions that he has no more mint leaves to make the candy. Much later, crawling through a cave, the player sees a mint plant and can pick its leaves. Without recalling the earlier conversation the leaves become an inert and obscure object in the player's inventory. Holding onto all the seemingly relevant variables simultaneously in order to spot a puzzle defines the frustrations and pleasures of adventure games as much as solving one.

In line with what I called the ludic epicycle above, *King's Quest VI* gives rise to moments of play that refer the player to a much larger interpretive frame. When the player encounters the boiling spring, her mind might play with various possible ways of crossing it before she lands on the idea of using a head of iceberg lettuce that she picked up earlier. The lettuce itself is only recognizable as a possible solution within the game's punning logic that literalizes 'iceberg' to make the lettuce freezing cold. Once I move across the spring, I have lost the lettuce but am able to collect a lamp, and moreover have access to a new area. The lamp forces me to ponder all the previous scenes and interactions in the game in order to imagine a use for it, and the new area makes me turn over all the possible objects I have collected to see how I might step past its arrow-wielding guardian. The operative circle, however, is not a hermeneutic one. The solution to a puzzle in an adventure game helps the narrative progress, but typically contributes nothing to a larger understanding of either the game's narrative or its mechanics—which is why replaying adventure games can drag so heavily. In *King's Quest VI*, each puzzle is singular and offers no

component skills to build on. The pun of 'iceberg' does not lead the player to develop puns out of other inventory objects in any systematic way.

Nevertheless, each puzzle does make use of an interpretative context that it creates for itself. Nick Montfort, writing about text adventure games, argues that the strange literality of the "the riddle offers what can be understood as a 'world' in which things relate to each other and are endowed with special abilities or attributes systematically. This world has its own nomenclature that reflects a different sort of ordering and a different conception of the world we live in."[89] Riddles, and other kinds of puzzles, produce a moment of uncertainty with a built-in conception of how a player will attempt to strive against that uncertainty. A good riddle has a good theory of how people will attempt to solve it, and it will skirt around the edges of that theory. By imagining the player's response and leading her through the process of solving its riddles, the free play of *King's Quest VI* does not give the player a model of future puzzles, but does highlight the interpretive framework she brings to bear. Rather than advancing the *results* of interpretation into some meaningful way of reading the game, these puzzles and riddles highlight the *process* of interpreting, and the way it depends on the sense freedom specific to a world other than our own. More specifically, a player's ability to solve a riddle depends on the game's prior activation of relevant interpretive frameworks. This occurs, for instance, on the Isle of Wonder, where references to Lewis Carroll's *Through the Looking Glass* signal that puns are important. After solving the iceberg lettuce puzzle, the solution establishes that the player should pay more attention to the names of objects, to the 'touch' prompt, and to temperature. Though none of these are skills that can be used again in a direct way, they become part of an activated attention. Each puzzle deploys a model of interpretation to deal with uncertainty, and then uses a model of play to develop

[89] Montfort, *Twisty Little Passages*, 44

an interpretation. In this way, adventure games speed up the process of the ludic epicycle and build a genre around the specific tensions and pleasures that it generates.

Let me introduce a more detailed version of how this account works in *King's Quest VI*. To make sense of either play or interpretation we have to look at their context. The conceit of *King's Quest VI* is that prince Alexander ends up shipwrecked and alone in the "Land of the Green Isles." There are four central islands, and each one is inspired by and follows the logic of a different literary genre. The Isle of the Crown, on which Alexander starts, is inspired by the tales of *One Thousand and One Nights*: it has a genie, a dark sorcerer, adobe markets, and orientalist caricatures. The Isle of the Sacred Mountain is an extrapolation out of the Greek Daedalus myth, complete with a race of winged humans and a labyrinth inhabited by a Minotaur. The Isle of the Beast takes its inspiration from one of the older iterations of *Beauty and the Beast* tale. Finally, the Isle of Wonder is a world out of Lewis Carrol, filled with puns, talking plants, and a chessboard kingdom. These intertexts are not primarily elements of the game's plot, but frameworks for creating an expectation among players. The puzzles on each island demand that the player adopt the particular logic of their literary genre in order to progress.

As an example of how literary tropes change the meaning of puzzles, consider the various ways that each primes the player to interact with characters. Puzzles on the Isle of the Crown are largely about talking with people, and character motivations are determined by their archetypal role: pawn shop owner, street hawker, book seller, ferryman, guard. Solving puzzles on this island involves recognizing role-based desires. The Isle of the Beast is the opposite, seemingly devoid of people. Instead one learns to read the simple oppositions that determine the island's magic: hot is countered with cold, an arrow with a shield, a hedge with a sharp blade. On the Isle of the Sacred Mountain the player encounters people with wings, but as befits their Olympian model, they are reclusive; the player never initiates an encounter, but is always swept away against her will. The

player must learn to interpret the remnants and cast-offs of this civilization, solving their riddles and avoiding their traps. Finally, on the Isle of Wonder, the characters are objects that have come to life: the player talks with an oyster that cannot sleep, a bookworm, a dangling participle, a black widow spider that tries to seduce Alexander, and so on. On the Isle of Wonder, understanding a character's motivation means thinking through analogy, such as with the comic trio "Stick in the Mud," "Bump on a Log," and "Rotten Tomato," whose feud the player must exacerbate for her own ends.

Each of these modes of storytelling, furthermore, creates a unique web of universal connections that allows objects to impact the world. In the parable structure of the *One Thousand and One Nights*, this relation is one of mercantile exchange—a relationship that a lamp vendor makes explicit in the opening moments of the game. With the mythic structure of the Isle of the Sacred Mountain we are in the realm of metonymy and sympathetic magic—resemblances connect. On the Isle of the Beast, by contrast, fairy tale magic can come to imbue any object with a power of its own, but one that obeys rigid rules. Finally, nonsense dismisses the order of causality and value to institute its own counter world, where any object is as important as the jokes it enables. None of these intertexts provides a direct solution—reading "Beauty and the Beast" or the Icarus myth do not in themselves tell the player what to do. Rather, each genre projects a set of virtual connections for any object that the player finds, an open framework to which the player can be more or less attuned, a new ontology to learn and explore. As objects accumulate in her inventory over the course of the game, nothing assures the player that a particular thing is going to obey a particular logic. Something from the Isle of Wonder might be deployed on the Isle of Crown in a more straightforwardly transactional way, inspired by the market theme. Like Brecht's *Deck* and like the white space of the encyclopedia diagram, the objects in *King's Quest VI* take on a universal

connectability where anything might pair with anything else according to one of several frames of reference.

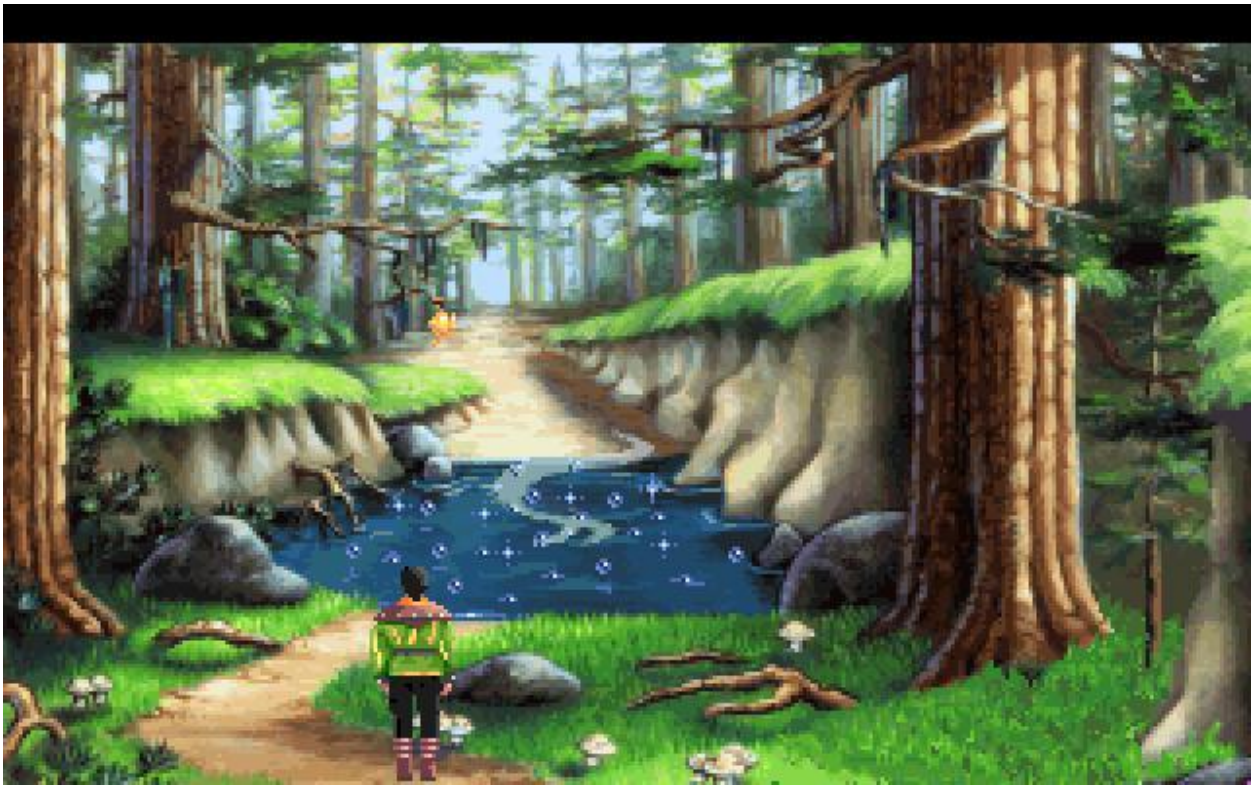

Figure 3.4. Alexander, the avatar of *King's Quest VI,* reaches a boiling pool.

To return to a previous example, when the player uses the head of iceberg lettuce (from the Isle of Wonder) to cool the boiling spring (on the Isle of the Beast), she is bringing together two different ontological worlds (Fig. 3.4). In one, an object interacts with things based on its name, in the other it interacts with the world through the rules of magical inversions. The solution requires a moment of free play between these frameworks. Up to this moment the nonsense equivalence between names and behavior has been restricted to interactions with characters—playing music to calm snap dragons, taunting the stick in the mud, etc., and the effects of nonsense have been contained to the Isle of Wonder. Making the leap between the icy-ness of the lettuce and the hot water is a new invention of a mind at play. Yet it tells us little about the world of the game. It says little to nothing about Alexander, about the witch who created the boiling pool, or about how

iceberg lettuce is commonly used on the islands. Nor does it prepare the player for any specific future puzzles, such as using the lettuce to cool other things. An object's name matters in a handful of other puzzles, but the iceberg lettuce does not prepare the player to recognize the how, when, or why of such cases. All that it contributes is an example, a possible freedom that the game is willing to use. The moment of free play occurs in the lightning flash that reveals the possibility of using iceberg lettuce as ice, and this play enriches the realm of possible connections that can be forged without forecasting any future answers. In other words, the example of play becomes a model for interpretation as it tries to recognize what puzzles can exist in the first place. Back and forth, the ludic epicycle plays and uses play.

Adventure games in general, and the *King's Quest* series in particular, demand many different kinds of competencies from their players. The lead writer and designer of the series, Roberta Williams, is known and admired for her literate intertextuality. As we have seen, the ideal player of *King's Quest VI* needs to be familiar with the conventions of several literary genres, among which we have to add the quest structure of medieval romance. An ideal player also needs familiarity with video game conventions generally, and adventure game conventions in particular. It helps to have played previous *King's Quest* games, and to read the paratextual "Guide to the Green Isles" that doubles as the game's instruction booklet.[90] When the game was released in 1992, the internet was still in its infancy, and using outside sources to solve puzzles was its own set of competencies.[91] In addition to recognizing genre conventions, the game also asks the players to be

[90] Salter, *What Is Your Quest?, 56-7.*

[91] In order to help supplement the skills of players, there were several long guides to the game. One, for instance, retold the game's narrative as though it were being recounted in letters by the main character, with the solutions to puzzles integrated into this second order story. Donald B Trivette, *The Official Book of King's Quest* (Greensboro, NC: Compute Books, 1993), 189-229. Another offers hand drawn images of important game elements, "Traveler's Tips" and "Points of Interest" on each of the islands. These intertexts are important sources for supplementing the competencies that the game demands. Internet guides and wikis have changed this dynamic in a

good close readers and narrative theorists. Often the player will attempt an action only to have the narrator comment satirically on Alexander's refusal to follow through. Alexander will not pick a rose from someone else's rosebush, will not yell across a yard, and will not fight his way past palace guards. The player must recognize the limits that Alexander's mannered blandness place on the possible solutions to a puzzle.

The proliferation of frames is both a persistent cause of frustration in the genre, and the source of its pleasure. A puzzle can receive its determination from so many sources that, lacking any one of them, a player easily feels lost among merely arbitrary connections. As we have seen, however, play arises in the indeterminacy of these frames—without which the puzzles themselves would be simplistic to the point of banality. Badly designed adventure games vacillate rapidly between these two poles of impossibility and simplicity. To play an adventure game is to trust that the game understands the strange trails of your mind because riddles are not solved through active work, but activation of interpretive frameworks. A player trusts that in the process of stumbling through the game world she will find a path forward. It is to trust that the game will model the free play of interpretation on a specific act of play, and that close attention to the world will lead you deeper into its puzzles.

In adventure games we reencounter the five elements that make up trickiness. Though adventure games are not absent rules, the moments of play that they occasion are. In an important sense, each puzzle has no precedent and requires an act of invention from the player. Even more than Brecht's games, these puzzles develop their play in moments of powerful uncertainty, precisely because the game's other elements are so fixed and linear. Like the singularity of the puzzle, each of these uncertainties has its own character or quality of play. All of these elements

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way that makes the pleasures of earlier adventure games more difficult to understand. Peter Spear, *The King's Quest Companion* (Berkeley: Osborne McGraw-Hill, 1997), 229-237.

depend upon the game creating conditions of universal interrelation, but without explaining the rules or operations by which such relations happen. Playing the game depends upon a thin line where the puzzles neither ask too much of you, nor give up the ghost too easily. This structure is produced by the back and forth movement in the ludic epicycle between play as a model for interpretation, and interpretation as a model for play. Adventure games self-reflexively thematize that relation as their own brand of uncertainty, turning the player in on her own process of interpreting play. In this account we can recognize the type of playfulness that links Brecht to *King's Quest VI*. It is a playfulness of trust in the world, one that accepts uncertainty as an inescapable fact that cannot and need not be mastered. Such trust can take any number of forms. It can be the defeat of one who has no other option, the existential commitment of one who rejects certainty, or the Zen acceptance of the wheel of fate. All these attitudes, and more, allow the game to present moments of coincidence as if they were divine decisions. By accepting that failure is inevitable, this form of playfulness allows for miraculous gain and makes it possible to snatch victory from the jaws of defeat. Trickiness makes the impossible possible.

CHAPTER FOUR
Fairness: Play without End

One eye closed in a squint of concentration, you look down the blade of the knife to make sure that the cake is cut into two perfectly equal pieces. Your sister does not care whether her piece is a little smaller, and stares at you impatiently. Knowing the hour-long drive home is going to make everyone cramped and cranky, you run outside and shout 'shotgun' before anyone else. At the end of the trip you not only feel comfortable, but satisfyingly guilt-free about that comfort. You have played violin all your life, and in imitation your young niece has taken it up recently. The two of you are practicing together, and rather than getting down to work, you misalign your fingers and play the same awkward notes as her. Ordinarily, you walk along the same route every day, but as a new year's resolution you have decided to vary it a little each time. Half way through the year you have exhausted the small changes and detours, and your path starts becoming serpentine and ridiculous. Nevertheless, you decide that to give up now would be cheating yourself. These are a handful of the ways that fairness appears in our lives as an everyday style of playfulness.

Of the four kinds of playfulness that I examine in this dissertation, fairness is the most closely associated with games and particularly the popular understanding of games as competitions. In that context, the meaning of fairness is a kind of equality that simultaneously takes differences into account. For instance, if I were to visit two friends, one who loves video games and another who loves books, and I brought them both the same book as a gift, they could rightfully complain that the choice was unfair. Or, if I was playing chess against an inexperienced player and gave them a two pawn handicap, we might both agree that this was, in fact, fair. In these examples fairness is a mediated equality, one that tries to produce an equivalent situation out of diverse and unequal starting conditions. Games are good at this kind of manipulation because arbitrary rules and means can limit or shape the influence of extraneous factors.

In this chapter I argue that fairness is not actually grounded in equality at all. Rather, I will make the case that there is another more fundamental sense of fairness that comes from using one's capacities.[1] Capacity here means both the phenomenological sense of agency as a set of things-I-can-do, and the ways that a body is subject to the world. The avatar of Mario has the capacity to run and jump, but also to be hit and run out of time. The sense of fairness-as-capacity is the active one, for instance, when a child knows it can stay awake but is unfairly sent to bed; or when a promised road trip is revoked. In these cases, it does not matter whether or not the same rule applies to other people, but whether an expectation is met or shattered. Fairness as equality, in my view, is a special case of the fit between an imagined capacity and its actual use. Mediated equality only ever plays catch-up to actual inequality. To take the central example of inequality that this chapter explores, fairness as it is typically understood cannot anticipate how structural forms of racism will develop, but only draw rules for negating those inequalities after the fact. Fairness-as-capacity, I argue, comes before fairness-as-equality in how children develop a sense of fairness, in the philosophical concept of fairness, and in the ethical and political application of fairness.

In the previous chapters I have been exploring a model of playfulness that is anti-mimetic, where play shares its uncertainty with other parts of the world. Fairness is another case where uncertainty is a major question for politics and ethics.[2] Fairness is a particularly good case to think

[1] I use the concept of capacity throughout this discussion for three reasons. First, it is the term used by both Rawls and Patterson, and provides an important link in this history of ideas. Second, it opens onto a philosophical discourse of capacity that I think is relevant for thinking about bodies in games. My touchstone here is Brian Massumi, *Parables for the Virtual: Movement, Affect, Sensation* (Durham, NC: Duke University Press, 2002). Third, it helps to expand the ethics of fairness beyond the norm of a physically and mentally able body, in order to think about the capacity as a construct. In the background here is Jasbir K. Puar, *The Right to Maim: Debility, Capacity, Disability.* (Durham, NC: Duke University Press, 2017).

[2] Building an account of fairness extends the analysis of the faculty of judgment conditioned by play from the previous chapter to include what Kant calls the practical sphere. On this point see, Thomas W. Pogge, "The Kantian Interpretation of Justice as Fairness," *Zeitschrift Für*

through the relation between play and the world, in part because it is divided between an ethical and political dimension (unfair situations are unjust) and an aesthetic one (unfair situations are not fun). Moreover, discourses of fairness use of the concept of simulation to split off and contrast an ideal fair world from an unfair one. The relation of a simulation to the real can help us think about the boundaries of games in a general form.[3]

I begin exploring fairness by looking at four prominent discourses through which it commonly appears. As I mentioned above, there are two main claims for recognizing fairness: an ethical/political one and an aesthetic one, and both apply to the world and games. This breaks down into four categories: 1) a political discourse where fairness is a way of judging the democratic value of institutions and customs according to an ethical norm; 2) a discourse about fairness as an attribute of beauty, one that connotes symmetry, balance, and whiteness (as in a fair complexion); 3) a discourse of sports ethics, where the individual actions that a player takes are judged according to an implicit or explicit code of conduct; 4) a practice of game design, where the organization of a system is judged fair or unfair depending on the enjoyment of a player. I read these discourses together to show how they all draw on a shared logic, one that seems to be about equality, but which needs an idea of capacity and simulation to get off the ground. The political discourse makes the strongest argument for a version of fairness based in equality, from which sports, games, and art all draw support.

Philosophische Forschung 35, no. 1 (1981); Robert S. Taylor, *Reconstructing Rawls: The Kantian Foundations of Justice as Fairness* (University Park: Penn State Press, 2011), 3-57.

[3] The literature on simulation is quite expansive, and ranges from postmodern theories of the simulacra, to histories of computation, to the specific way games take up simulations. For an influential game studies framework see, Gonzalo Frasca, "Simulation Versus Narrative: Introduction to Ludology," in *Video Game Theory Reader*, ed. Mark JP Wolf and Bernard Perron (New York: Routledge, 2003).

With the standard vision of fairness laid out, I turn to the Fluxus artist Benjamin Patterson for a subtle but far reaching critique of that vision. I read Patterson as deeply engaged with the political theory of social contracts, which he interrogates through event scores that simulate and disrupt the small norms and customs of politeness that structure everyday life in America. Patterson, I argue, shows that fairness-as-equality cannot keep up with racism's insidious use of seemingly neutral rules. Rather than assuming a singular set of capacities that everyone shares as the basis of equality, Patterson uses the model of games to disperse endless possible capacities that each give rise to a sense of fairness. I turn then, in a third section, to look more closely at how the discourse of game design understands fairness, and bring out the latent theory of capacity that exists within it. While formal equality is the starting point for game design manuals, they usually have rather little to say about it. It is actually the asymmetrical examples that spark a real discussion about fairness, and by tracing the dialectic that leads away from equality, an alternative becomes visible. In my final section I put my theory of fairness to the test in a reading of *SimCity 2000* (1993). This game has been the target of a wide range of criticisms that broadly hold it to be unfair in its representation of city dynamics, especially as that representation is enjoyable to play with and incredibly popular. As a single-player game, without any explicit conditions for winning or losing, the claim that fairness is relevant at all should be a striking one. I argue that capacity provides a clear and unified explanation for *SimCity 2000*'s strengths and weaknesses. More importantly, *SimCity 2000* clearly raises the question of how simulation relates to capacity, and how the bounded world that constitutes a game relates to its outside. Does *SimCity 2000* mimic a real city and simulate real processes? Or should we understand its relation to cities in a different way? The framework of playfulness that I develop points towards the latter, and it offers a different way of practicing game criticism.

Four Discourses of Fairness

Fairness, as an ethical ideal, is closely related to justice, equality, and equity, especially in the political distribution of resources. Its ethical side is also emphasized in the world of sport for players who dope, cheat, or throw a game. We can understand fairness aesthetically because it originates as an adjective connoting the beauty of symmetrical images and the fittingness of complementary elements.[4] Along these lines Elaine Scarry has made the case that an aesthetic feeling for fairness provides a model of balance and proportion, and that it is beauty which motivates a fair and just distribution of resources in the political realm.[5] Finally, we also talk about fairness as an aesthetic quality of games, which create situations where a game feels evenly matched, tense, and exciting.

In order to get ahold of playful fairness, I want to analyze these four discourses for what they have in common. In particular, I will spend some time unpacking John Rawls' theory political theory of fairness. His work provides the baseline for three of the four traditions I examine, all except for game design. Later I will come back to some criticisms of Rawls' formulation, but in the first place I want to put forward a straightforward exegesis of it. Rawls was a philosopher of liberalism, who renewed social contract theory in the 1970s with an account of how justice is constructed through shared norms. In *A Theory of Justice* (1971), Rawls gives his most thorough treatment of the social contract, and extends it to include civil disobedience as an important form of protest against possible violations.[6] Rawls' argument for understanding "justice as fairness," which he articulates in several articles and books from 1958 onwards, is largely responsible for

[4] Elaine Scarry, *On Beauty and Being Just* (London: Duckworth, 2011), 62.
[5] Ibid., 76.
[6] John Rawls, *A Theory of Justice* (Cambridge: Harvard University Press, 1971).

the role of fairness as an important concept in the present.[7] Rawls defines fairness as the "symmetry of everyone's relation to each other," though this definition requires a bit of unpacking.[8] Central to the notion of "symmetry" is a technique for producing relationships between people that Rawls calls the "veil of ignorance." It is a thought experiment designed to reveal a group's shared assumptions about justice.[9] For this experiment, citizens are asked to come up with rules that everyone must follow, but to do so under a particular constraint: each person is ignorant of their social standing and personal traits within the hypothetical society. By making laws and designing institutions before knowing whether one will be rich or poor, healthy or sick, free or enslaved, Rawls believes that each person would propose practices that benefit everyone without impinging on individual freedom. In other words, these negotiations in ignorance would lead to a system based on fairness.

Fairness, for Rawls, is therefore a form of equality arrived at after reflection and argumentation, and which is specific to the public that seeks to adjudicate it. Rather than distributing benefits and responsibilities based on an equality of people's present status, wealth, or natural talents and aptitudes, fairness mediates equality through rationality. While formal equality might be simpler than fairness, it does not and cannot take into account the accidents of birth, and so we need fairness as a mediator. Rawls does not stipulate that this kind of negotiation ever took

[7] While many essentials of Rawls' position remain across these texts, there is also a significant change in how he frames his argument. Whereas the early Rawls defends a broader sense of who can participate in a discourse of fairness, the later texts find ways to embed the relevant assumptions about participants into the actors themselves. See, John Rawls, "Justice as Fairness," *Philosophical Review* 67, no. 2 (1958): 164–194; Rawls, *A Theory of Justice*; John Rawls, "Justice as Fairness: Political Not Metaphysical," *Philosophy and Public Affairs* 14, no. 3 (1985); John Rawls, *Justice as Fairness a Restatement, ed.* Erin Kelly (Cambridge: Harvard University Press, 2001).
[8] Rawls, *A Theory of Justice*, 12.
[9] Ibid., 136-142.

place in actual history, but only that the veil of ignorance can be a technique for representing and clarifying the commitments to justice that people always already bring to a collective social and democratic project.[10]

Not every political project is capable of arriving at the notion of justice as fairness; for the veil of ignorance to have a meaning, every member of a social body must already hold several beliefs about the nature of citizenship. Rawls frames these as *capacities* that we must recognize in one another. First, we must imagine every member of a society as having a capacity for a sense of justice, and a capacity for a conception of the good—the two basic attributes of ethical behavior.[11] The mutual recognition of these powers is the basic precondition for any equality within a social body. Once these capacities are accepted, the veil of ignorance can represent people freely coming together to build a mutually beneficial social world (the good) that is beneficial to all involved (justice). The sense of freedom involved in this coming-together adds a third set of capacities to Rawls' picture: citizens must be capable of treating themselves and each other as the source of claims for justice, and must be capable of taking on responsibility for any commitments they make.[12] Any society where the population does not recognize these powers among some part of

[10] Rawls, "Political not Metaphysical," 236-7.
[11] Ibid., 233-4. Rawls gives the following definitions of the capacities: "Since persons can be full participants in a fair system of social cooperation, we ascribe to them the two moral powers connected with the elements in the idea of social cooperation noted above: namely, a capacity for a sense of justice and a capacity for a conception of the good. A sense of justice is the capacity to understand, to apply, and to act from the public conception of justice which characterizes the fair terms of social cooperation. The capacity for a conception of the good is the capacity to form, to revise, and rationally to pursue a conception of one's rational advantage, or good."
[12] Ibid., 240-3. Rawls defines the capacities involved in freedom as follows: 1) "As citizens, they are regarded as capable of revising and changing this conception on reasonable and rational grounds, and they may do this if they so desire;" 2) "They regard themselves as self-originating sources of valid claims…for slaves are not counted as capable of having duties or obligations;" 3) "They are regarded as capable of taking responsibility for their ends and this affects how their various claims are assessed."

their community, as is the case under slavery, does not meet the basic pre-requisites for a discussion of fairness.

A final argument is important for clarifying Rawls' sense of fairness. One might think that the veil of ignorance requires some conception of an essential human nature to abstract from our social condition. To try to write laws without knowing our race, gender, sexuality, and so on, seems to imply a disembodied and ahistorical subject position. Against such abstraction, Rawls argues that we do not need any essential idea of humanness, but only the capacity to imagine a plurality of fully embodied positions. He spells this out by way of analogy: "When…we *simulate* being in this position, our reasoning no more commits us to a metaphysical doctrine about the nature of the self than our playing a game like Monopoly commits us to thinking that we are landlords engaged in a desperate rivalry, winner take all."[13] There are two things that I want to take note of in this passage. The first point is the importance of such game metaphors in all of Rawls' elaborations of fairness. Again and again, he makes use of games: in the discussion of social norms as game-like rules, the use of games as simulations, or as a place where we commonly experience and practice fairness.[14]

The second point to highlight is that the *Monopoly* metaphor adds a crucial component to Rawls account of fairness, because it stands in for a fourth capacity that he does not explicitly demand of his liberal subjects. His thought experiment requires the capacity to simulate, imagine,

[13] Ibid., 239, my emphasis.

[14] Rawls earliest formulation is particularly telling about the connection to play. See, for instance, the following points: "Players in a game do not protest against there being different positions…"; "the concept of fairness which relates to right dealing between persons…as when one speaks of fair games, fair competition, and fair bargains"; "It is for this reason that one speaks of a sense of fair play: acting fairly requires more than simply being able to follow rules; what is fair must often be felt." Rawls, "Justice as Fairness," 167, 178, 179. On the relation between games and rules more generally, see John Rawls, "Two Concepts of Rules," *Philosophical Review* 64, no. 1 (1955).

and make-believe; more specifically, to simulate the interactions of capacities. Now, all thought experiments require the capacity for imagination in a reader, but Rawls is demanding that capacity for the whole of the social body. He shares this assumption, and the game metaphors it draws from, with a generation of constructivist sociologists and political scientists.[15] For the veil of ignorance to clarify the arguments about fairness, we not only need to hold an abstract sympathy or empathy for our fellow person, but more importantly we need to be able to simulate the consequences of some set of social rules given a variety of different social positions and bodily capacities. The capacity for simulation takes on a meta-ethical role in relation to the capacities to be simulated. For Rawls and the broader political and ethical tradition he founds, fairness needs to be understood not only as a result, but as a process. Fairness requires a group of people, who start off in unequal situations, to simulate a set of capacities that they are all assumed to share. I want to highlight this point because we will see it repeated several times throughout this chapter. Simulation is taken broadly here, as playing out the consequences of an initial set of assumptions. In this sense all structured games are simulations, though many simulations are not games.

With this foundational account on the table we can start to draw some comparisons to the other three discourses of fairness and map out their shared features. Elaine Scarry's aesthetic theory is a direct translation of Rawls' account into visual, acoustic, and literary terms. In particular, she focusses on the concept of symmetry in Rawls' definition of fairness as "symmetry of everyone's relation to each other," and extrapolates that our aesthetic appreciation of symmetry precedes and makes possible our abstract desire for it. Though Scarry sees the motive force differently, she agrees with Rawls about the nature of fairness itself.

[15] Clifford Geertz, for instance, argues that the sociology of Erving Goffman rest "almost entirely on the game analogy." Clifford Geertz, *Local Knowledge: Further Essays in Interpretive Anthropology* (New York: Basic Books, 1983), 24.

The philosophy of sports ethics is a hybrid case, in which the Rawlsian social contract meets a mélange norms from disparate sports, and an inherited 19th century ideal of aristocratic 'fair play' that is somewhat at odds with the democratic spirit of fairness.[16] Philosophers have approached the task of grounding our everyday intuitions about sports ethics in two main ways. They understand fairness as either respect towards one's competition or respect towards the spirit of the game.[17] Philosophers of the first category tend to concern themselves with the question of unfair advantages over other players, as when athletes take steroids or use new and advanced equipment.[18] Fairness becomes a question of outcomes, and how these can be manipulated in ways that disrupt a game's results by creating an unequal playing field.[19] The justification for restricting the means of play vary. For instance, some of the criteria used to measure fairness are based on the idea that that sports should test the natural human body, the idea that some kinds of enhancement should be banned for the harm they cause to players' bodies, or the idea that enhancements reduce the element of skill involved in a game.[20] An important element of this set of problems is that it attributes fair behavior to the athlete's cultural framework outside the game, and/or to a sense of community shared by those within the sport. From this perspective, players

[16] The ideal of 'fair play' can be traced back to 19th century Victorian ideals of sportsmanship in aristocratic leisure, and the pedagogical use that muscular Christianity made of public sports. See, Peter McIntosh, *Fair Play: Ethics in Sport and Education* (London: Heinemann, 1980).
[17] Robert Butcher and Angela Schneider, "Fair Play as Respect for the Game," *Journal of the Philosophy of Sport* 25, no. 1 (1998).
[18] David L. Fairchild, "Sport Abjection: Steroids and the Uglification of the Athlete," *Journal of the Philosophy of Sport* 16, no. 1 (1989); T. Douglas, "Enhancement in Sport, and Enhancement outside Sport," *Studies in Ethics, Law and Technology* 1, no. 1 (2007).
[19] Roger Gardner, "On Performance-Enhancing Substances and the Unfair Advantage Argument," *Journal of the Philosophy of Sport* 16, no. 1 (1989).
[20] Craig L. Carr, "Fairness and Performance Enhancement in Sport," *Journal of the Philosophy of Sport* 35, no. 2 (2008); Brad Partridge, "Fairness and Performance-Enhancing Swimsuits at the 2009 Swimming World Championships: The 'Asterisk' Championships," *Sport, Ethics and Philosophy* 5, no. 1 (2011).

come together on a level playing field in order to test and differentiate their skill, and the cheater takes away economic or symbolic rewards from other players.[21]

The second major tradition around fairness in sport sees the ethical commitment as fidelity to the rules and spirit of the game.[22] Insofar as players join in a game, they are pledging themselves to these rules, and moreover signaling that these rules deserve their respect, in the form of intense and regular training. When players cheat they violate a set of ethical principles particular to the game itself, and one of the strengths of this account is that it differentiates what fairness in baseball from fairness in hockey, and each other game.[23] These codes are embodied by referees (as well as commissioners and governing bodies) who not only know and apply the rules, but actually create the norms of fairness through their application. Fairness matters because it is a fundamental condition of games, part of the basic situation they construct among players.

In both cases, we can note some overall similarities and differences with Rawls. The philosophies of sport ethics, like Rawls, assume that fairness is a process that involves an understanding of equality, one that works by selecting among a limited set of capacities that the players share, and simulating the interaction of these capacities through artificial competition. Where Rawls starts with inequality in order to arrive at a mediated equality, sport starts with an assumed equality in order to mediate the subtle differences in skill, speed, strategy, or deception. These two senses of fairness share the same methods, but use those methods in diametrically

[21] Christian Lenk, "Is Enhancement in Sport Really Unfair? Arguments on the Concept of Competition and Equality of Opportunities," *Sport, Ethics and Philosophy* 1, no. 2 (2007).
[22] Robert Butcher and Angela Schneider, "Fair Play as Respect for the Game," *Journal of the Philosophy of Sport* 25 (1998).
[23] Sigmund Loland and Mike McNamee, "Fair Play and the Ethos of Sports: An Eclectic Philosophical Framework," *Journal of the Philosophy of Sport* 27, no. 1 (2000); Graham McFee, "Fairness, Epistemology, and Rules: A Prolegomenon to a Philosophy of Officiating?," *Journal of the Philosophy of Sport* 38, no. 2 (2011).

opposed ways. There are some ways to bring the two trajectories closer together. In Rawls, after all, the discussion over the social contract is only a precursor to an actual distribution of social goods that is bound to produce some inequality. Likewise, sports have scouts, qualifying rounds, or moments of team selection that work to produce a level playing field in advance of the formal assumption that each competitor is equal. However, the contrast between these two poles is a useful one for showing the direction in which game design differs from both.

Game designers often talk about the importance of fairness, but what they have in mind is not an ethic that players bring to the game so much as a set of design decisions that create the playing field itself. Fairness in design depends on the balance of symmetrical versus asymmetrical games, of direct competition versus indirect competition, of perceived chance of success versus actual chance, and other concepts which I will examine later in this chapter. Fairness becomes a quality for the game to embody, with the player acting as referee. Players choose among a market of games and use fairness as one criteria for their commercial consumption. In this ludic sense, fairness becomes a property of the game system and as a consequence loses its primarily intersubjective character.[24] While multiplayer games are the most common object for discussions of fairness, it is also a crucial quality of single player games. If a game is too difficult, or too easy, if the game advertises different odds than it delivers, or if a poor interface conceals some of the player's options, a single player game might be considered unfair. Note that this judgement is not only reserved for video games, but can apply to solitary play at slot machines in casinos, pinball machines, or the games of carnival barkers. Slot machines, for instance, may seem fair at first but knowing that the spinning wheels are rigged to a computerized algorithm that has no relation to

[24] An relational sense of fairness can, of course, still be important for video games—but in the tradition founded by Rawls there is no sense of talking about fairness except as a relation among people.

the number of images on the dials makes them unfair. Instead of a measure of equity, fairness becomes a felt property that expresses deep relations and interactions within a system.

Fairness in games also has a different relation to the capacities that players bring to bear. In both the political and sporting conceptions of fairness, every participant is assumed to bring the same set of capacities. In fact, that assumption makes an ethics of fairness possible. Sometimes that is also true of gaming, but just as often designers decide that fairness depends on players having unequal capacities. For example, the design concept of 'rubber banding' refers to the practice of helping players who are behind—giving them special power-ups, special combos, or a burst of speed—so that an early advantage does not determine the outcome of a game.[25] As a second example, we might look to the various difficulty modes in modern games. These not only shift the balance of a game, but can provide fundamentally different play experiences, as when the game automatically aims for the player in easy mode, while hard mode makes the player responsible for aiming. Both of these examples might have a superficial similarity with fairness-as-equality, but rather than assuming a shared set of capacities among players and simulating the outcome, these games individualize capacity and intervene in the simulation.

We have several conceptions of fairness in the air: 1) a political form that arises from a social contract, 2) a general aesthetic of balance and fit, 3) an ethics of sport that asks for fidelity to the game and its players, and 4) a game-based aesthetic that creates a complex mediation between capacity and system. Besides subject matter, the major contrast is between Rawls' account of fairness as a process of mediating equality among a community, and game design's approach

[25] Ernest Adams and Joris Dormans, *Game Mechanics: Advanced Game Design* (Berkeley: New Riders, 2012): 133-4; Dave Mark, "Rubber-Banding as a Design Requirement," *Gamasutra*, June 2, 2010, accessed April 14, 2018, https://www.gamasutra.com/blogs/DaveMark/20100602/87445/RubberBanding_as_a_Design_Requirement.php.

to heightening individual enjoyment. At a glance, Rawls seems to present the more comprehensive claims, and the one that accords with our intuitions. However, his account also contains some blind spots. His concern with a shared set of basic capacities excludes those with "physical disabilities or mental disorders so severe as to prevent persons from being normal and fully cooperating members of society in the usual sense."[26] For fairness to generate a mediated form of equality, there needs to already be a minimal formal equality among human powers.[27] Equally systemic racism is a blind spot in Rawls' work. As several scholars have noted, for an American writing about social justice in the 1960s and 1970s, he is oddly quiet about race.[28] As Ai-Thu Dang writes, the account of justice-as-fairness can deal well with "legal racial discrimination or institutional racism…[but] fails to address the problem of systemic racial discrimination."[29] The social contract made behind the veil of ignorance can only address already existing discrimination, not the systemic causes that produce new forms of it.

These two concerns—non-universal of capacities and systemic causes—come together in the work of Fluxus artist Benjamin Patterson that I examine in the next section. I read his body of

[26] Rawls, "Political not Metaphysical," 234.
[27] Interestingly, one of the responses to Rawls is what is called a capability approach. It argues that Rawls' account fails to do justice to those with disabilities, to international relations, or to animal rights because it cannot get to the specificity of individual needs and opportunities. Martha Craven Nussbaum, *Creating Capabilities: The Human Development Approach* (Cambridge: Harvard University Press, 2013), 85-90.
[28] Anita L. Allen, "Race, Face, and Rawls," *Fordham Law Review* 72, no. 5 (2003); Sheila Foster, "Race and Ethnicity, Rawls, Race, and Reason," *Fordham Law Review* 72, no. 5 (2004); Thomas McCarthy, "Political Philosophy and Racial Injustice: From Normative to Critical Theory," in *Pragmatism, Critique, Judgment*, ed. S. Benhabib and N. Fraser (Cambridge: MIT Press, 2004); Charles W. Mills, "Rawls on Race/Race in Rawls," *Southern Journal of Philosophy* 47 (2009).
[29] Ai-Thu Dang, "Eyes Wide Shut: John Rawls's Silence on Racial Justice," *Documents de travail du Centre d'Economie de la Sorbonne* (Paris: Université Panthéon-Sorbonne (Paris 1), Centre d'Economie de la Sorbonne, April 2015), 4, https://econpapers.repec.org/paper/msecesdoc/15030.htm.

work as a sustained questioning of how the smallest and most ordinary social customs produce fair or unfair results. In one work in particular, *A Game: Three Capacities and One Inhibition* (c.1963), Patterson creates his own disrupted version of the veil of ignorance thought experiment.[30] It is unclear whether Patterson ever read Rawls, but he was certainly familiar with the philosophical tradition of social contract theory.[31] Patterson, I argue, sets about recreating a general model of fairness without the assumption that the participants share the capacities of rational creatures. By removing rationality in favor of animality, Patterson fractures the universal character of fairness. This is possible because Patterson makes use of play and games as a framing device for fairness. Patterson presents a direct challenge to Rawls and to our intuitions about the ethics of fairness., The result is a ludic version of the thought experiment, one that can account for the wider range of effects by making political fairness a special case.

BENJAMIN PATTERSON'S SOCIAL ENGINEERING

Benjamin Patterson's early life is story of things that do not quite align. He grew up in Pittsburgh, and trained for a career in classical music as a bassist, where he hoped to be "the first black to 'break the color-barrier' in an American symphony orchestra."[32] After a series of discriminatory auditions, Patterson auditioned for the conductor of the Houston Symphony, who

[30] Benjamin Patterson et al., *Benjamin Patterson: Born in the State of FLUX/Us* (Houston: Contemporary Arts Museum, 2012), 53.
[31] Patterson describes some of his influences in an interview: "If you considered yourself a thinking person you had to have read Hegel, and Kant, and Nietzsche and Wittgenstein… Heidegger, Adorno, Walter Benjamin, that was television, that was what we went to bed with." Gerhard Westerrath, Sabine Felker, and Benjamin Patterson, *Benjamin Patterson Tells Fluxus Stories (From 1962-2002)*, recorded March 14, 2002, *? Records*, 2002, compact disc.
[32] Benjamin Patterson, "I'm Glad You Asked Me That Question," in *Benjamin Patterson: Born in the State of FLUX/Us*, ed. Valerie Cassel Oliver (Houston: Contemporary Arts Museum, 2012), 110.

fought its board members over Patterson's inclusion for several months before eventually losing. Escaping the US, Patterson became principle bassist and assistant conductor for the Halifax Symphony Orchestra and later took up a similar position in Ottawa.[33] There Patterson collaborated with "that quasi-musician scientist" Hugh Le Caine on early experiments in electronic music at the National Research Laboratories.[34]

Patterson became interested in the work of Karl Stockhausen, and through a coincidental series of connections, obtained a letter of introduction to Stockhausen from the German ambassador to Canada. With a desire to expand his work, Patterson went to meet Stockhausen in Wiesbaden. The encounter was ill-fated, Stockhausen's ostentatious seriousness rubbed Patterson the wrong way, and he left disappointed after listening to an underwhelming new work that required hundreds of hours of practice. He recognized the rigor of Stockhausen's music as part of the ethos of the classical tradition that he needed to escape.[35] In a twist of historical kismet, Patterson saw a flier on the street for a Fluxus event while walking through Wiesbaden, and found his way to one of their first public performances. There, he introduced himself to John Cage, who invited him to perform the following night in what would be the start of a long collaboration. Several of Patterson's scores, such as "Variations for Double Bass" and "Paper Piece" became

[33] Benjamin Patterson, interview by Kathy Goncharov, Archives of American Art, Smithsonian Institution, May 22, 2009 audio, 180:05, accessed April 14, 2018, https://www.aaa.si.edu/collections/interviews/oral-history-interview-benjamin-patterson-15685#overview.
[34] Ibid.
[35] Patterson recounts it as follows: "I just couldn't believe that something had to be rehearsed that much and would leave me sort of, let's say, so underwhelmed. I literally was very disturbed…there must be some other way to create a work that could have a certain amount of acoustic complexity, but could be performed by practically anyone." Quoted in George Lewis, "Benjamin Patterson's Spiritual Exercises," in *Tomorrow Is the Question: New Directions in Experimental Music Studies*, ed. Benjamin Piekut (Ann Arbor: University of Michigan Press, 2014), 93.

staples of Fluxus practice, and Patterson formed a lasting friendship with many of the other Fluxus members that would continue and thrive when they returned stateside.

Patterson's training and temperament provided many immediate connections to the work of other Fluxus performers. At a basic level, he was approaching the question through the discipline of music, a perspective that he shared with John Cage, La Monte Young, Nam June Paik, and many other Fluxus figures. He found in Fluxus a form of music where anyone could take part, but which simultaneously allowed him to experiment and push the boundaries of musical practice. Patterson shared with his Fluxus compatriots the belief that humor was a valuable tool for art, one that could perhaps do more work than theoretical rigor. In the same way that his music blends strict training with a democratizing impulse, his humor combines a voracious reading of philosophy and literature with revelry in the crudest puns and driest wit.

Patterson's early trajectory into Fluxus is helpful for thinking about the ethics and politics of play because it demonstrates his investment in precisely the kinds of fairness that Rawls' thought experiment leaves out. His simultaneous recognition of the symphonic color barrier and desire to break it, speaks to his belief that talent should guarantee recognition. An audition is itself much like the constructed situation of a sport, meant to provide an equalizing simulation in which talents can be compared impartially. The injustice of his auditions was not violent, designed to humiliate, or encoded in laws, but practiced through a systemic discrimination that can only be described as unfair. One result was that Patterson had a more active sense of politics than the other members of Fluxus and he was the only one who participated in civil rights protests. Equally important to his sense of fairness, his encounter with Stockhausen revealed the elitism of traditional instruments. Patterson does not assume that his performers or audience members have a virtuosic capacity, or even a single capacity that they all share. One of his more famous works,

"Paper Piece," involves making noises by crumpling, tearing, and flapping paper, and Patterson says about it that: "[y]ou didn't have to study an instrument for 20 years before you could realize this score. Anybody could, with a *fair* amount of sensitivity, get some interesting sounds and activity out of paper."[36] While Patterson's use of "fair" here is rather incidental, it is also appropriate. His democratic sense of "anybody" seems to be an experiment in breaking from any specific skills and capacities to find a way of performing that feels fair.

These points of convergence with Fluxus can help us pinpoint the innovations that were peculiarly Benjamin Patterson's, and grasp the style behind his works. Drawing a contrast between Patterson's event scores, and those of George Brecht, the music historian George Lewis writes: "unlike Brecht's work, Patterson's scores do not necessarily valorize the everyday, nor do they situate events at the threshold point between performance and its environment…Patterson's emphasis on intentionality and improvisation differentiates his work from that of a Cage-New School graduate like Brecht."[37] Lewis frames Patterson's practice as a series of "spiritual exercises" in a gesture that implicitly connects him to John Coltrane's contemporaneous *A Love Divine* (1965).[38] I agree, but would add that Patterson's scores—especially his non-musical ones—also differ from other Fluxus artists along other lines. He does not, for instance, draw on the optative grammar of the wish or hope that I analyzed in Yoko Ono's *Grapefruit*. His instructions lack the personal exhortation of a writer like Alison Knowles, and the minimalism of La Monte Young.

If I were to try and characterize the energy in Benjamin Patterson's instructions, I would say that they draw their imperative force from the same wellspring as school lessons, sociological

[36] Misa Jeffereis, "A Radical Presence: Remembering Benjamin Patterson (1934–2016)," *Sightlines*, July 26, 2016.
[37] Ibid., 96.
[38] See Scott Saul, *Freedom Is, Freedom Ain't: Jazz and the Making of the Sixties* (Cambridge: Harvard University Press, 2005), 223, 249-253.

questionnaires, street signs, and truisms. Patterson works with the material of impersonal rules that govern our social customs. He borrows from the truth of platitudes and ethics of politeness. As these customs pass through his hands, they are transformed in subtle ways to become parodies of themselves that subvert of the system that gave rise to them. Patterson makes use of the same materials, the same discourses of rights and capabilities, the same thought experiments as the liberal democratic discourse of fairness. However, he slowly shades these ideas into realms where they are no longer quite recognizable. Often this transition lands in a realm of violence, sexuality, or play in a way that ruptures the façade of decorum.

Let us examine a couple of examples to see what Patterson's style looks like in practice. A piece titled "A Very Lawful Dance," for instance, describes the following situation:

> a traffic light, with or without special pedestrian signals is found or positioned on street corner or at stage center.
> performer(s) waits at real or imaginary curb on red signal, alerts self on yellow signal, crosses street or stage on green signal. achieving opposite side, performer(s) turns, repeats sequence. a performance may consist of an infinite, indeterminate, or predetermined number of repetitions.[39]

The instruction splits at several points, offering possible effects that range from an individual walking back and forth across a stage a few times, to an ungainly mass crossing and re-crossing a public road forever. In either case, the work borrows its driving force from the stop-light itself—which determines not just the motion of the performer(s), but also their attitude of alertness. Through a small grammatical twist, the yellow light seems to condition the performer's automatic reactions: it does not directly alert her, but produces a neutral signal that translates into *self*-alerting. As the lawfulness of the title suggests, the event score stays entirely within the small systematic world established by the traffic light.

[39] Patterson et al., *Benjamin Patterson*, 156

Despite this seeming order, the piece carries with it a threat of disruption. Traffic lights allow pedestrians to avoid cars and continue walking along the sidewalk. Patterson turns those rules into a miniature game, where crossing becomes a goal in its own right, with the result that the body of the performer begins to throw off the balance of the city planner. If the ordinary situation at a stoplight had previously been zero pedestrians, or n pedestrians, now it is one, or n+1 each time. This is a small threat that grows exponentially with more performers and infinite repetitions, but without breaking any laws. Imagine Patterson's instruction attracting five, then fifteen, then fifty people, crossing at each green light. Everyone starts out at the same time, but not everyone can get across before the light changes. Traffic is delayed. Then the process is repeated in the other direction, which blocks a driver who wants to turn left, and so on. The subversive potential of the performance happens through the second of what Gilles Deleuze describes as the,

> two known ways to overturn a moral law. One is by ascending to principles: challenging the law as secondary, derived, borrowed…The other, by contrast, is to overturn the law by descending to consequences, to which one submits with a too-perfect attention to detail. By adopting the law, a falsely submissive soul manages to evade it and to taste pleasures it was supposed to forbid.[40]

In effect, Patterson invents a new possibility for civil disobedience, evoking the civil rights strategies of marches and sit-ins without replicating either. Patterson's "too-perfect attention to detail" turns protest into a kind of game. This possibility, however, only hovers in the implications of the score, which keeps it innocuously framed by the idea of simply crossing the street—or even more benignly crossing a represented street. Patterson takes a law that seems almost banal in its attempt to fairly mediate between traffic and pedestrians, and shows how that law is always secondary to the capacities that people use in practice.

[40] Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (London: Bloomsbury, 1994), 5.

In other works the subversive possibility of performance in relation to a liberal sense of fairness comes from questions of racialized address. Take "Tour," another piece concerned with public space.[41] The piece invites participants to meet for a tour. However, the tourists are to be "fitted with blindfolds, or similar devices and led through any area or areas of guides' choice(s)." There is certainly some irony in taking a blindfolded tour of the city, though the sensory emphasis on hearing a cityscape is within the range Fluxus themes. In addition to being ironic or highlighting sensation, however, the blindfold creates a feeling of vulnerability in the midst of the cityscape. Where the score ends with the excessive reassurance that "sufficient and responsible guides are provided," we need to read an anxiety that the guides could be otherwise. In New York, that anxiety might be because the guides could take them through racially segregated parts of the city. As a likely tour guide himself, Patterson seems to be delicately playing with his audience's unarticulated fear of black men and with the unarticulated rules a white audience uses to navigate public space. His score violates those prejudices by flipping the power dynamic of slum tourism, refusing the pleasures of spectacle and offering only bodily vulnerability. Again, the questions at stake here are: who has the capacity to 'Tour' and what kind of systemic unfairness do those capacities depend on.

In a third example, Patterson demonstrates the way that unfairness can be baked into the very form of a seemingly fair social custom. In *Instruction No. 2*, a decorated brown paper towel is stamped with the four emphatic words "PLEASE WASH YOUR FACE," and the towel is folded around a piece of lemon-shaped soap.[42] Here Patterson seems as close as possible to the rules of politeness as everyday activity, echoing an instruction to wash your hands commonly found in

[41] Patterson et al., *Benjamin Patterson*, 158.
[42] Ibid., 60.

restrooms. Isolated from that context, however, the instruction takes on a more aggressive tone, one more in line with a parental injunction directed at a child. Because it addresses the reader without a reason for washing, it suggests that the reader will never be clean enough. By locating the dirt in the reader's face, rather than hands, it makes that dirt more personal and paranoid, invisible without a mirror. In this sense, *Instruction No. 2* can be read in relation to the history of racist soap advertisements, and the more general construction of a binary where whiteness is associated with cleanness, and blackness with waste.[43] Moreover, the soap and towel do not let the reader remain passive, but apply pressure by removing any excuses for not performing the score. The work seems to say 'So, you would wash your face, except you do not have soap? Well, here is some soap; you would wash your hands, except you forgot? Well, here is a reminder.' Patterson thus calls out, and redistributes some of the hostility of American hygiene.

Patterson's approach is expansive and varied, and with these readings I do not want to try and reduce everything in his work to a discussion of customs and mores. I do, however, want to draw attention to his sustained engagement with social niceties, and how the force of seemingly free agreements made by a society of equals can return in uncanny ways. Patterson describes his interest in social rules in "Notes on PETs [Perception Education Tools]," the only programmatic statement he makes about his event scores, especially those collected in *Methods & Processes* (1962).[44] Patterson frames his scores as experiments in behaviorist psychology, feedback loops,

[43] Anne McClintock, "Soft Soaping Empire," in *Imperial Leather: Race, Gender, and Sexuality in the Colonial Conquest* (New York: Routledge, 1995), 207–31; Carl A Zimring, *Clean and White: A History of Environmental Racism in the United States*, (New York: NYU Press 2017), 79-108.

[44] Benjamin Patterson, *Methods & Processes* (Paris: self-published, 1962); Benjamin Patterson, "Notes on PETs," in *The Four Suits: Benjamin Patterson, Philip Corner, Alison Knowles [and] Tomas Schmit* (New York: Something Else Press, 1965).

and operant conditioning. He describes a work like "Tour" as a form of "psychological conditioning" that,

> involve[s] structuring an environment in such a way that the inhabitant of the environment finds it desirable to make certain adjustments in his patterns of behavior to maintain or improve his well-being. Pavlov presents the classic example. Others are the 'brainwashing techniques of the Red Chinese, therapy groups…and the recent Edison Responsive Environment.[45]

"Tour" is a thought experiment with the fabric of the social. Like Rawls, Patterson is interested in the 'methods and processes' of adjustment to our social contract that such experiments can create. As in the veil of ignorance experiment, each participant is trying to maximize her own happiness, while constrained by nonsensical rules that effectively make her unaware of her position. In "Tour," the metaphor of the veil of ignorance is literalized by the blindfold that Patterson places over the tourist's eyes. The key difference is that Patterson does not determine the process as rational debate, but opens it up to the sorts of animal reflexes that interest Pavlov. If we understand fairness as a process of mediating equality, Patterson suggests that mediation has a much broader foundation.

One work in particular can help us think about the relationship between the ludic and political senses of fairness that I left unresolved at the end of the last section. Like many members of Fluxus, Patterson shared a deep interest in toys and games—making use of puzzles, dolls, children's alphabets, and board games in his work.[46] Of these, *A Game: Three Capacities and One*

[45] Patterson, "Notes on PETs," 52. Patterson goes on anticipate that we might doubt the seriousness of such a worldview for an artist such as himself, and counters that his experiment is untaken without "any sense of parody, satire, etc."

[46] Patterson comments on this strain of his work: "I talked about toys as the first learning tools that we have. You learn to relate to the world through your toys as a child and before you start school, before you start to talk, the toy becomes, next to Mama and poppa, the most important thing in your life….[It] has something to do with the African-American that I am…the standard Amos and Andy situation of getting through difficult situations with humor with more smile on your face is one of the things you learned as a survival technique. And I assume that that still carries on, when you have a message hard to deliver it goes down easier when it is sugar-

Inhibition stands as one of the richest, original, and most economical inventions of Fluxus play.[47] *A Game* consists of four 3 x 5 inch index cards, collected in an envelope that bears its title (Fig. 4.1). Three of the cards are numbered, one to three, with a line of orange marker setting off the number from a short phrase that presumably delineates each of the three capacities. The letters have been stamped onto the cardstock, and several of them have been replaced by stamps of animals, so that they read: "1 | FIND YOU[rhinoceros] PR[Kangaroo]DE," "2 | SL[monkey][monkey]P AND REPE[elephant]T," "3 | W[cow]S IT HOME." The fourth inhibitory card consists of a piece of photocopied text glued to the cardstock, with the orange marker crossing it vertically. It is stamped with letters that read "COME DRAGON." The photocopied text is a short section from Gustave Le Bon's *The Crowd* (1895) in quotation marks.[48] These cards, and the organizing frame of the title, compose the whole game, which lacks rules, goals, pieces, a board, or any other elements.

coated." Judith Hoffberg, "Ben Patterson in Los Angeles: A Flux Interview," *Umbrella* 24, no. 3–4 (2001): 81.

[47] Patterson, *Benjamin Patterson*, 53.

[48] Gustave Le Bon, *The Crowd: A Study of the Popular Mind* (Kitchener, ON: Batoche Books, 2001), 15.

Figure 4.1. Benjamin Patterson, *A Game: Three Capacities and One Inhibition* (c. 1963) [49]

[49] Benjamin Patterson (b. 1934) © Copyright. A Game: Three Capacities and One Inhibition. C. 1963. Four index cards with handwritten and stamped ink additions, one with collage; all in

Patterson exposes playfulness in this work by reducing the game to its bare mechanics: those things that a player can do, or is barred from doing. This 'is barred from doing' is something of a special case, akin to the kinds of ethical commitment to a sport. We could interpret the bar as a rule that determines what counts as cheating in this game, but the word inhibition connotes something slightly less formalized and public, something that might break forth at any moment except for a strength of will. Inhibition, etymologically 'to hold in,' also seems like a kind of capacity, though a virtual one that should not be exhibited. In this sense violating an inhibition seems closer to a violation of fairness or sportsmanship: it may follows the rules of the game, but not its spirit. By isolating the mechanics Patterson gets at a free-form sense of bodily play, caught midway through the process of being formulated and formalized into rules. As a consequence, the cards take on meaning as possible actions for a player. As such, my interpretation of the cards does not aim at a single watertight meaning, but instead explores a variety of possible ways capacities might be taken up and used.

Even before examining the cards in detail, I think this game has something to say about fairness. In part, this is because its obscurity is provoking, it seems unfair to ask us to play such a game. To play it we have to interpret the cards, invent rules for ourselves, and organize goals. It also relates to fairness because the contrast between capacity and inhibition suggests that the player may be barred from doing something she wants to. This is the other sense of fairness that I mentioned at the outset, where a child feels the cruelty of having to go to bed early and miss out on the chance to prove itself capable. *A Game* suggests that this dynamic of an inhibited capacity

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envelope with stamped ink and typewritten additions, (envelope): 3 5/8 x 6 7/16" (9.2 x 16.4 cm); (index cards): 3 x 5" (7.6 x 12.7 cm). The Gilbert and Lisa Silverman Fluxus Collection Gift. The Museum of Modern Art. Digital Image © The Museum of Modern Art / Licensed by SCALA / Art Resource, NY.

will be central to how it is played. I will argue that these intuitions only become sharper as we examine *A Game*, because it repeats the Rawlsian veil of ignorance. It is a thought experiment about inventing mutually agreed upon rules for using our capacities fairly.

The three capacities themselves are quite odd, and hard to understand as things-I-can-do. Granted that 'find your pride,' and 'sleep and repent' are possible if difficult acts to willingly perform; the capacity 'was it home' seems to operate in a different valence of questioning and reflection. So let us reflect. The first card gives the most straightforward, not to say easy, instruction. There are two broad senses in which we might understand the word 'pride,' either as a feeling of self-satisfaction, or—given the presence of African animals—as a pride of lions. In the first sense the card would instruct a player to find something they are proud of. In the second sense, finding your pride would mean finding your family or in-group. The second sense loops back to pride in the first sense by a route that would surely register for Patterson's contemporaries: through racial pride as group identity—whether black or white. Pride hangs on a double ambivalence here, racially, but also in terms of its valence, whether it should be understood as a biblical sin or a revolutionary force.

Our second capacity, as players of this game, is to "sleep and repent," which suggests that the initial act of finding pride is a sin. Here our sense of capacity as agency starts to stutter—sleep is at best only peripherally within our control and at worst escapes us entirely. The phrase also inverts certain biblical passages commanding sinners to awake and repent; and while we can read it as 'sleep, wake up, then repent' the biblical contrast makes the grammar stand out—so that 'repent while asleep' becomes a possible reading. Needless to say, this removes the choice of contrition from conscious control. In contrast to the first capacity, sleeping is always something one does alone, even when it is done together. However, sleep also distorts the boundary between

individual and collective, producing the whole world as a reflection of the dreamer's wishes and desires. Repenting in such a state would have to be a desire, a response to some kind of injury that the unconscious seeks to symbolically reverse and undo.[50]

As with the second capacity, our third capacity extends and comments upon the first two, without which the referent of 'was it home' remains undefined. The past tense suggests that we have lost something, perhaps the thing that we repented. The fact that our home is in question pushes 'home' into a more abstract register, closer to 'did you feel at home.' The cow that replaces the 'a' in 'was' suggests a conceptual rhyme between herd and home, especially because the cow is the only domesticated animal represented on the cards. Through these clues, the feeling that home relates back to the repented pride of the first capacity gets reinforcement. When we start to look, all of the animals on the cards are ones that move in packs or herds, while the cow—which is a Holstein-Friesian cow—is the only one native to Europe or North America. Again, this raises a subtle racial dynamic in the connection between 'home' (associated with domesticated European animals) and 'pride' (associated with wild African animals) through the kinds of symbolic animality on display. Animality is itself a category of racialized imagination, and one that I think Patterson is directly working through and reclaiming. His strategy is not to resist the association of black folks with animals, which designed to discount the capacity for rationality (among other things). Rather than protest in favor of a liberal humanist universality, Patterson seems to accept the terms of animality and explore what other resources it might open up.

[50] The suggestion of dreaming and guilt also serves as a possible intertextual connection to Sigmund Freud, who quotes the same passage of Gustav Le Bon. Note that the passage in *A Game* is within quotation marks. Sigmund Freud, *Group Psychology and the Analysis of the Ego* (London: W. W. Norton & Company, 1975), 7.

With the themes of group mentality, biblical sin, racial pride, and animality on the table, we can begin to approach the one inhibition, which brings all of these together. The long quote in the photocopied text reads:

> 'Whoever be the individuals that compose it, however like or unlike be their mode of life, their occupations, their character, or their intelligence, the fact that they have been transformed into a group puts them in possession of a sort of collective mind which makes them feel, think, and act in a manner quite different from that in which each individual of them would feel, think, and act were he in a state of isolation.'

As I mentioned, an orange line strikes through the card and text, in what I take to be a visual representation of the inhibition, akin to the strike across a no-smoking sign. What the mark bars access to, however, is a more ambiguous question: does it apply to the quote of Le Bon, or the printed letters 'COME DRAGON'? Does it apply to both at once, or are the stamped letters part of the bar that acts as a second form of cancelation? In what sense should we see the two fragments of texts as equivalent, contrasting, or related?

Le Bon's long quote connects to the question of pack mentality that we saw in the first capacity, specifically the sense that being part of a group might fundamentally alter how one thinks or perceives. If the card is meant to inhibit this group mentality, then that might be the danger towards which the first capacity draws near in pride, and the cause for repenting. The dragon, by contrast, seems to represent individuality—it alone among the animals lives in isolation, just as it is the only fictional animal, and the only animal whose name is spelled out (suggesting a capacity for rational speech). In conjunction with the overall biblical overtones, we can also hear a specific resonance to the passage "And I saw three unclean spirits like frogs come out of the mouth of the dragon," from the Book of Revelation.[51] Equally, we might hear 'dragon' not as an ordinary noun, but as a title—i.e. as a reference to the leading figure of the Ku Klux Klan. From this angle, the

[51] *The Bible: Authorized King James Version* (Oxford: Oxford University Press, 1998), 313.

inhibition against mob mentality would find its ultimate symbol of danger in the invitation for the dragon to come. Finally, we can, comically and violently, hear 'come' as a sexual invitation, which nicely wraps all of these taboos up in the questions of unconscious desire that Patterson implies through the term inhibition.

So far, I have been discussing these cards in relative isolation in order to get a sense of what their enigmatic phrases might signify. The whole point of calling this work a game, however, rests in the interaction between the three capacities and one inhibition, and the simultaneous exclusion from the game of whatever is left unnamed. The structure is a relatively simple one—the player or players have three things they might do. They might do them one after the other or simultaneously, though the cards strongly suggest a sequence. The inhibition stands in the background over against all of them, simultaneously naming and excluding desires for mob mentality, iconoclastic individualism, and racial superiority. Thus, the double sense of pride as-a-feeling and pride as-a-group is checked in its more extreme impulses. Equally, the act of sleeping gains a content for which the player must repent, they must scour that initial pride for signs of the dragon. Measured against the inhibition, the moment of reflection in 'was it home,' becomes a kind of test to see whether the player discovered something or somewhere free of the mob's violence. Put together, the three capacities seem to create a loop where the player joins, critiques, and measures the value of a group—only to find it wanting and start all over. Better still, in light of Patterson's broader interest in the rules and norms of group behavior—we might think of the repentance and reflection as a process of generating rules for what the herd or pride should look like. The game would consist in this process of discovery and refinement.

By playing the game this way—which is a compelling one, if not the only one—Patterson produces something that looks very similar to John Rawls' veil of ignorance thought experiment.[52] Both are concerned with finding a minimal set of capacities from which one can create a social bond: whether democratic justice or 'pride.' Both make use of a mechanism where proposed ways of organizing that group are put up for criticism, measured, and iteratively revamped. Both propose a kind of injunction under which these capacities must be exercised—the veil that hides one's identity in Rawls brackets more or less the same set of responses as Patterson's inhibition. Both, finally, use games as a frame for simulating the interaction of capacities in order to construct their experimental situations. Patterson's interest in the force of social convention puts him in the same lineage of thinkers as Rawls, exploring the basic elements that compose the social contract. Moreover, both Patterson and Rawls were working in a culture where it was increasingly commonplace to think that social life could be reconstructed by simulating the interaction of a few key axioms. Economic game theory, in particular, was making a similar case based on modelling the interactions of rationally self-interested players.[53] The idea that democracy might be simulated as a game is a direct extension of this modelling, and similar to work in behavioral psychology and cybernetics.[54]

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[52] A telling detail, for this interpretation, can be found in Patterson's "Seminar II." It contains a very similar instruction to *A Game* that reads "You! Find your pride." Among many other widely varied instructions, it also contains "which verbal interaction process leads to consensual validation." This latter instruction shows, I think, that the question of social contracts was on Patterson's mind at the time. Benjamin Patterson et al., *The Four Suits*, 81, 89.

[53] For a historiographic account of game theory that unpacks its epistemology of modelling, see Paul Erickson, *The World the Game Theorists Made* (Chicago: University of Chicago Press, 2015).

[54] Rawls makes a case that his account of fairness would provide the preliminary framework for game theory, "Justice as Fairness," 174. Patterson, as we have already seen, draws from behaviorism.

What separates the accounts of fairness in Rawls and Patterson, though, is the difference in the kinds of capacities they use to generate a social collective. For Rawls, the capacities involved draw on a baseline of rationality. Patterson, on the other hand, generates a similar set of principles from a pared down set of capacities, one that might well include animals. Lions, after all, find their pride, sleep, recognize home, and possibly repent of some acts. They even play, though not with cards. Unlike Rawls' humanist pre-conditions, what it means to be a player in *A Game* is not given beforehand, and can only be deduced from the arrangement of capacities themselves. Moreover, where Rawls gets to his set of capacities by deriving the simplest preconditions for democratic agreement, Patterson's capacities are capricious and additive. We get the sense that there might well be others that would produce similar, if subtly different, collectives. Rawls feels constrained to reproduce something close to how he thinks people ordinarily come to agreement, even as his mechanism reinvents that process. Patterson understands his experiment as a new invention where the veil of ignorance is only a special case among others.

Here we can begin to see some consequences for fairness, which I argued had to be understood as a process of mediating equality. If fairness is still relevant in Patterson's game, and his interest in justice and social action suggests that it is, then its sense will vary along with the capacities that are used to arrive at it. Insofar as these capacities determine the kinds of beings and bodies that can be involved, each 'social contract game' will develop a different understanding of what it means to distribute means and ends.

I am suggesting that our starting assumptions about human capacities lead to different versions of fairness, and that these do not need to have a minimum element in common. Patterson's version of the thought experiment demonstrates that rational conversation is not the pivot that Rawls believes, rationality is not the glue that holds together the different capacities. Instead it is

the game-form that does this work. That form is just the capacity to play and simulate the connection between capacities that Rawls also needed to assume. Patterson demonstrates this conclusively by eliminating every other element from the game except capacities and the pure form of the game. Precisely those features that make Patterson's game so strange and difficult to interpret are what demonstrates that fairness exists beyond a universalist account of capacity. Once the sieve of rationality is exchanged for the ad hoc simulation of capacities through games, then we are left with multiple senses of fairness.

If the mere form of game—the interaction of capacities in play—is the basis for fairness, however, that leaves us a little in the lurch about the precise means by which fairness comes about. With Rawls, rationality provided a test against which unfair outcomes could be measured. In Patterson, that test was replaced and replicated through an inhibition. Both are only examples, not models, in a much broader set of possibilities. At the same time, simply putting a set of capacities together is no guarantee that they will generate a sense of fairness. So, having moved to games as a new foundation, we are still missing a critical piece of the puzzle. The next section looks more carefully at how game designers discuss fairness to try and recover that missing criteria that generates an aesthetic and ethical norm out of repeated acts of play.

DIALECTICAL BALANCE IN GAME DESIGN

Game designers often appeal to an innate or gut sense of fairness when describing the act of balancing games.[55] Much of what fairness is, and why it is valuable, remains unspoken in these accounts as part of the presumed taste that everyone will share. Here I want to trouble these

[55] Tracy Fullerton, *Game Design Workshop: A Playcentric Approach to Creating Innovative Games*, 3rd ed. (Boca Raton, FL: CRC Press, 2014), 155.

assumptions, and expand upon the earlier sketch I gave of fairness in game design. Initially I approach the question of balance from within its established perspective and vocabulary. There is a dialectic to the design process, one that starts with simple equality and subsequently makes it more complex. With each layer of added complexity, game designers are forced to invent new definition of fairness, a fact that reveals the need for a more encompassing interpretation. At the end of this process game designers end up with a concept of capacity. By treating that endpoint as nascent throughout, I arrive at some general criteria by which the arrangement of capacities in a game are deemed fair or unfair.

Game designers, as in other discourses of fairness we have seen, tend to start from an ideal of equality and turn to fairness when equality is no longer a tenable frame. A game that displays formal equality between players is called a symmetrical game. In such games both players have the same starting conditions, have the same resources, follow the same rules, and are trying to achieve the same goals.[56] Chess, *Monopoly*, and backgammon are examples of such games, as are *Warcraft: Orcs and Humans (1994)*, *Quake (1996),* and *Minecraft (2009)*—to choose some examples from popular video game genres. While these games all include some minor asymmetries, such as who plays first in chess, or where on a map a player spawns in *Quake*, these conditions are usually subject to randomization in a way that evens out over time.[57] Because these games make use of formal equality, game designers tend to understand them as inherently fair, and have little to say about how fairness factors into the process of playtesting and balancing.

[56] Ernest Adams, "Designer's Notebook: A Symmetry Lesson," *Gamasutra*, October 16, 1998, accessed April 14, 2018, https://www.gamasutra.com/view/feature/131699/designers_notebook_a_symmetry_.php; Fullerton, *Game Design Workshop,* 319.
[57] Jesse Schell, *The Art of Game Design: A Book of Lenses*, 2nd ed. (Boca Raton, FL: CRC Press, 2015), 203

Fairness becomes more fraught when players interact across some form of asymmetry, of which there are many varieties. My avatar might be stronger but slower than yours, or my avatar might be able to perform actions that yours cannot; I might start out with a different distribution of resources than you, or with a strategic advantage from the layout of a map; I might be trying to collect 10 victory points while you only need 8, or we might have entirely different goals from one another; I may be barred from certain roads that you can travel, or the rules that govern our choices might be about completely different game elements.[58] Moreover, when a designer is trying to make a game fair by balancing these different variables, she can weigh a change along one axis against any of the others. Asymmetric games thus span a spectrum from the small difference between who goes first to games where players share nothing in common.[59]

Designers adjust and tweak these asymmetries to a point that approximates an equal playing field, often building complex spreadsheets of variables and equations that describe the rough value of each trait.[60] However, strict calculation only goes so far. Games are complex dynamic systems where a change to one variable can have compounded consequences as it interacts across a number of parts. For instance, who has access to a road might not have an immediate impact, but when coupled with a particular strategy or card it might transform the game. Moreover, the sense of how these changes affect the game is itself a subjective aesthetic judgment

[58] Fullerton, *Workshop*, 320-22.
[59] Jesse Schell gives the example of Bhag-Chal, where "one player controls five tigers, while the other controls twenty goats. The tiger player wins by eating five goats, and the goat player wins by positioning the goats so that no tiger can move." *Art of Game Design*, 204. On the spectrum of asymmetry see George Skaff Elias, Richard Garfield, and Karl Robert Gutschera, *Characteristics of Games* (Cambridge: MIT Press, 2012), 93-94.
[60] Fullerton, *Workshop*, 334.

about fairness—on which calculations get based.[61] Thus, designers understand fairness as a feeling of balance between ultimately incomparable player positions.

A similar principle applies when game designers work on single player games. Rather than balancing across different positions that a player might occupy, such as the different jumps of the avatars in *Super Mario Bros. 2* (1988), however, the game designer is tasked with giving the player a good chance of beating the system of the game. In this new frame, the forces that the game brings to bear must be balanced so that they never overwhelm the player to the point of impossibility.[62] A rigged carnival game is unfair in this sense, because it removes the player's chance at success. Switching from the metric of equal chances, to the metric of some chance to win, provides a more comprehensive frame. It still applies to multiplayer games in asymmetrical and symmetrical form, but can be extended to cover a much wider set of single-player games.

As game designers, however, we need to qualify the idea that 'chance to win' is equivalent with fairness, because it is not exactly how players judge a game. Rather, it is a player's perceived chance to win that comes in for scrutiny, and this can diverge from her actual chance.[63] As a game comes nearer its end, a player who has been counting the cards might know that winning is impossible, while a less savvy player may still feel that there is a fair shot. Similarly, the carnival game only appears unfair after repeated failures make us suspicious that we are being swindled. On the other hand, a player who fails to notice a route to victory may underestimate her chance of success, and feel that the game is unfair. When framed as the player's perceived chance to win,

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[61] Paul Peterson, "Thinking Exponentially," in *The Kobold Guide to Board Game Design*, ed. Mike Selinker (Kirkland, WA: Open Design LLC, 2012), 80–83.
[62] Richard Rouse, *Game Design Theory and Practice* (Plano, TX: Wordware Pub., 2001), 14-15; Brian Upton, *The Aesthetic of Play* (Cambridge: MIT Press, 2015), 66-7.
[63] Dave Howell, "Stealing the Fun," in *The Kobold Guide to Board Game Design*, ed. Mike Selinker (Kirkland, WA: Open Design LLC, 2012), 84–85; Andrew Rollings and Ernest Adams, *Andrew Rollings and Ernest Adams on Game Design* (Indianapolis: New Riders, 2003), 275.

fairness starts to move away from an ideal of balance, towards something more dependent on the situation. To feel that a game is fair, it is no longer necessary that the chances of succeeding or failing are equal, only that they reach a certain degree of possibility. It feels fair when a punishingly difficult platforming game, like *Super Meat Boy* (2010), kills the player dozens of times as she tries to navigate the level, but makes the path to success precise and clear.[64] From this angle, we can also incorporate some multiplayer games that are outliers from the perspective of balance. So long as a player has a perceived shot at winning, unbalanced mechanics can be compensated in other ways outside the game—through bragging rights or betting odds.[65]

We also need to qualify 'chance to win' in a second sense, because fairness is judged by objectives that a player sets moment to moment.[66] A game is not only fair if I have an equal chance to win once everything is tallied up, though this is an important consideration. Fairness also depends on whether a game supports the strategy I am pursuing, whether I am stymied by some single puzzle, whether I have to repeatedly die to understand how the game functions, and even whether a game rewards my attempts to subvert it. In the same way that fairness depends on the player's capricious perception, it also relies on the player to set the terms in which success will be measured. Of course a given game will only support a certain range of goals, but a player might even feel this limitation as unfair—as when I judge that all sports are unfair because they depend on physical skills that I do not enjoy. That such judgments are clearly subjective, while claiming a universal applicability, is exactly what makes them aesthetic.

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[64] Douglas Wilson and Miguel Sicart, "Now It's Personal: On Abusive Game Design," *Future Play 2010: Research, Play, Share - International Academic Conference on the Future of Game Design and Technology*, May 6, 2010, https://doi.org/10.1145/1920778.1920785.
[65] Schell, *Art of Game Design*, 207.
[66] Rollings and Adams, *On Game Design*, 275; Fullerton, *Workshop*, 325; Michael Sellers, *Advanced Game Design: A Systems Approach* (Boston: Addison-Wesley Professional, 2017), 309-10.

Opening fairness up to the player's perceptions of success and what success means, while a necessary step, also brings more complications for the game designer. Consider, for instance, a nearly symmetrical game like chess. Once we have extended the notion of fairness to single player games, we need not assume that our chess opponent is human. Imagine we are playing against the impressive artificial intelligence Deep Blue, which was designed specifically to play chess. While the formal equality between the two sides of the board remains, the computer can quickly search an array of moves that dwarfs my ability, and as a result the match may feel entirely unfair.[67] Or, perhaps you suggest we play Tic-Tac-Toe, and I have never heard of the game. After beating me several times, you reveal that there is a trick to winning, and the past games suddenly seems unfair. Or, we decide to play tennis this summer, but I have been taking lessons every day over the winter. After losing several matches you call this unfair, and ask for a handicap.

These kinds of examples could be multiplied indefinitely, but they all point to a connection between fairness and the capacities a game brings into play. In a straightforward way, my understanding of my own capacity and my opponent's capacity directs my perceived chance to win. If things are too unevenly matched, the aesthetic fault does not lie with the other player, but with the game, which has failed to equalize our capacities. In a more circuitous way, capacity also directs a player's sense of what local goals to set. A game that only involves running and jumping will only direct a player to attempt things that make use of these means—to require some other capacity without preparing the player for it would seem patently unfair.

Game design manuals and classes move through these dialectical steps to teach fairness. Starting from the simplest case of symmetry, they introduce the variety of possible asymmetries,

[67] Elias, Garfield, and Gutschera, *Characteristics of Games*, 93; Brian Upton, *The Aesthetic of Play* (Cambridge: MIT Press, 2015), 106.

shift to balancing the chances a player has to win, contextualize that chance in the player's perception, and show how that perception is grounded in a range of capacities. For game designers these discussions are practically oriented, and aim to outline a sense of the variables they need to take into account when adjusting a particular game. For instance, thinking about the capacity of a player becomes important when designing a game for 3-6 year-olds. This age group brings different skills from older players, which causes the meaning of fairness to vary. As a result, thinking from capacity becomes a special case, at the limits of a more general approach based in balance. For an aesthetics of playfulness the case is exactly the reverse, with capacity providing the broadest and most inclusive basis on which to theorize the various senses of fairness in play. If we start thinking from capacity, the lessons we can learn from game designers hold a different import. Let us briefly work back through the various determinations and recast them in terms of capacity.

As I have already noted, there is a relationship between capacity and setting local goals. Seen from the endpoint of the dialectic, however, setting a local goal is itself part of a capacity that a player brings to the game. Rather than starting from an ideal of equality and diverging, we now start with a comparison that takes place between how a game makes use of a capacity, and how it *might* make use of that same capacity. Fairness, in this smallest form, is a question of the adequate connection that a player feels between the virtual skill and its actual realization. Similarly, perception and self-perception are other capacities that a player brings to the game, which are subject to the same measurement against a possible use. A player's misperception of fairness no longer appears to be a deviation from the ideal, but rather perception itself can be adequate or inadequate to some local goals of the player, generating a feeling of fairness.

The actual chance a player has of winning now becomes a special case, where the goals that a player sets for herself align with the game's demands. Asymmetrical balance is another special case, where several players can simultaneously find an adequate use for their capacities, even when those capacities differ in small or significant ways. Unlike Rawls' veil of ignorance, this reading of asymmetry argues that it is possible to have a collective formed of unlike beings and bodies, who each bring a very different set of capacities to the table. Finally, symmetrical games become the most restricted form of fairness, where both sides must deploy the same capacities and find it satisfying to do so. Like a special branch of mathematics, such symmetrical games are a fascinating topic for close study, but they provide a bad ideal for the wider array of fair games. In its stead, we should put the ideal of a well-used capacity.

I have briefly recast the terms of game design literature in a new idiom. At the same time, the framework of capacity also reveals an important aspect of fairness that has gone unremarked. In the above account, I argued that fairness is a measure of the fit between a capacity to set a goal and the capacity to achieve that goal, and if fairness were only ever recognized retroactively, that definition might make some sense. As many of the examples demonstrate, however, fairness is often a judgment made in advance, before the game is over, as one struggles to achieve a particular strategy, or without complete information about one's actual chances. In other words, the relation between capacity and achievement is one about which the player guesses. In order to guess, the player must be able to think about her capacities, their range and limits, their mutual interactions, their possible development over time, and compare all of this to what she hopes to accomplish. This involves a capacity that is not itself among the ones that are brought into play by the game, a capacity to simulate all of these interactions. We saw this same meta-capacity in Rawls as simulation, and in Patterson as the game-form itself. By following the arguments around fairness

in game design, it has become possible to state the relationship between fairness, capacity, and simulation more clearly: *the aesthetic judgment of fairness depends on a capacity to simulate capacities*. Often it will have to take in other elements—such as the rules of a game, the amount of money each player has, and so on—but these are not ultimately necessary to fairness. The question on which the aesthetic judgment turns is whether the goals I feel capable of meeting within a game are ones that are possible to meet.

Two models of fairness, as equality and as capacity, can now be clearly distinguished and compared. Fairness-as-equality works to discover a means for distributing goods and opportunities among people who are presumed to have some formal equality. Fairness-as-capacity starts from the factual difference between capacities and asks what a fair expression of those capacities would be. To summarize the steps that brought us here, I initially examined the logic of mediation behind Rawls' thought experiment and pointed to a few of the blind spots that other scholars have recognized. From there, I worked through Benjamin Patterson's counter-experiment, which demonstrated that there are other ways of organizing capacity through games to produce equivalent senses of fairness. Taking the clue from Patterson, I re-read the dialectic of game design in order to show how its rich thought on fairness and balance are best understood as an engagement with capacity. However, comparing these two kinds of fairness shows that there are still open questions that the next question must address.

THE ETHICS AND AESTHETICS OF *SIMCITY 2000*

I have been pursuing fairness in order to understand how an aesthetic of playfulness opens onto an ethical and political world. For fairness-as-capacity to do that job, there are three major questions that it still needs to answer. I have primarily been concerned with demonstrating that

capacity can account for all the formal elements of fairness-as-equality, that it can do an equivalent job as it were. If it were simply the same, however, it would not be of much interest. The first open question, then, is what difference does this conception make in practice? How does it allow us to read games differently? At the same time, by focusing on the form of the relation and foregrounding the incommensurability of capacities, I have perhaps lost track of the political and ethical stakes of equality. A second question should be raised about that force: how does fairness-as-capacity give rise to relational ethical claims? Finally, there has been an ongoing tension within my account of fairness between the capacities that it brings into play, and the meta-capacity of simulation. Simulation seems necessary to fairness, because it sets up the expectations of what capacities will be used, but the deeper necessity for this dynamic has escaped my analysis. A third question would be: why do simulations and games produce an aspirational dimension for capacities, a dimension in which their use might be unfairly limited? The argument of this section is that all three questions share a single answer, and one that was presaged at the limits of game design. Namely, that by placing a capacity within the framework of a game or simulation, an immanent split opens up between an expected and actual use.

In order to arrive at that answer, I will look closely at the *SimCity* (1989-2013) series of simulation games, and particularly *SimCity 2000* (1993).[68] *SimCity 2000* is an interesting case because it balances between the two conceptions of fairness. On the one hand, it is a single player game without any explicit win or loss conditions, which is useful for thinking about how fairness is designed around capacities rather than victory. On the other hand, when critics discuss whether *SimCity 2000* is fair—and I will argue that this is almost the sole subject of commentary about the

[68] Maxis, *SimCity 2000*, Designed by Will Wright (Redwood Shores, CA: Maxis, 1993) Microsoft Windows.

game—it is from the perspective of ethical and political obligations. *SimCity 2000* should do this, or ought to do that. By paying attention to the demands that players make upon *SimCity 2000* and the capacities it makes possible, I will show how the one gives rise to the other. Moreover, as a simulation game, *SimCity 2000* speaks directly to the relation between simulation, capacity, and fairness I want to account for.

Figure 4.2. A generic *SimCity 2000* town.

When the first *SimCity* game appeared in 1989, it offered a new image of what video games might be. It eschews science-fiction and fantasy genres for a realist aesthetic (insofar as it claims to model the real world), it trades in violence and twitchy hand-eye coordination for languid decision making, and it refuses the goal-driven logic of so many games. Will Wright, the designer behind the game, likens it to a software toy—the city can languish, burn, sprawl, or develop

depending on one's inclination (Fig. 4.2).[69] In the most common game mode of *SimCity 2000*, a player begins by establishing a city from scratch. The software generates a few square miles of random terrain—mountains and rivers—and the player decides what year to start the simulation and how much money the town begins with. She must then establish the basics of life: for anyone to live in her city there must be a power plant connected by power lines, there must be areas zoned for commercial, industrial, or residential use, and there must be roads to transport people to and from their homes. As the city grows, the player will begin to reap tax revenue, install public services like police stations, elementary schools, or small parks, and decide on regulatory policies. Whatever a player does to her city, the simulation will chug along, showing the results of neglect and care equally. To motivate her actions, a player attaches goals to this situation. She tells little stories about how a bedroom community has gotten rid of its pollution, or how crime is running amuck on the riverfront. *SimCity 2000* does put constraints on that imagination. The player contends with budgetary concerns, buildings that can only be developed after reaching preset population levels, and biases in the simulation.

Through careful programming, the original *SimCity* encoded a quite complex simulation of cities. Wright modelled the basic interplay of its parts on Jay Wright Forrester's *Urban Dynamics* (1969).[70] Forrester was an engineer who pioneered an approach to modelling complex interactions between pools of resources called system dynamics. While Forrester's models received substantive criticism from urban planners by the mid-80s, Wright found the work

[69] Greg Costikyan, "I Have No Words & I Must Design," in *The Game Design Reader: A Rules of Play Anthology*, ed. Eric Zimmerman and Katie Salen-Tekinbaş (Cambridge: MIT Press, 2006); Will Wright, "Interview with Will Wright," interview by William Wiles, *Icon Eye*, February (2008), accessed April 14, 2018, https://www.iconeye.com/magazine#backissues.
[70] Jay Wright Forrester, *Urban Dynamics* (Cambridge: MIT Press, 1969); Kenneth Kolson, "The Politics of SimCity," *PS: Political Science & Politics* 29, no. 1 (March 1996): 43.

fascinating, and blended it with the architectural theories of Christopher Alexander's *A Pattern Language* (1977).[71] However, these dynamic models were primarily based on temporal flows between distinct but spatially unrelated environments, and Wright was interested in a complex map where spatially continues interactions mattered. Borrowing from another hobby, the gridded moves of cellular automata, Wright produced a novel and powerful mixture of simulation techniques from the two different traditions. While *SimCity* is certainly a simplified model, it manages to integrate interactions between a surprising number of variables—immigration, birth, and death, pollution, traffic, electricity grids, property values, crime, taxation, and much more.[72] These variables expanded with the release of each sequel, achieving an incredibly successful balance between the system's usability and scope.

In what sense does *SimCity 2000* deal with fairness? A decade after its release, Will Wright reflects on the expectations and hopes that players invest in the game:

> A lot of people have talked to me over the years about community modeling. But not so much as a modeling tool, but more as a communication tool, using something like *SimCity* where people get involved in a planning process and get a sense of their community or the environment or whatever….When people disagree over what policy we should be following, the disagreement flows out of a disagreement about their model of the world. The idea was that if people could come to a shared understanding or at least agree toward the model of the world, then they would be much more in agreement about the policy we should take.[73]

Wright frames *SimCity* here as a thought experiment in exactly the same way as Rawls' veil of ignorance. It is not primarily a tool for accurately reflecting city dynamics, but a tool for communicating our imagination of civic life to other people and reconciling the differences. The

[71] Maaike Lauwaert, *The Place of Play: Toys and Digital Culture* (Amsterdam: Amsterdam University Press, 2009), 80.
[72] Chaim Ophir Gingold, "Play Design," (PhD diss., UC Santa Cruz, 2016), 309-351.
[73] Will Wright, "Sims, BattleBots, Cellular Automata God and Go: A Conversation with Will Wright by Celia Pearce," interview with Celia Pearce, *Game Studies* 2, no. 1 (2002), n.p.

player does not take on any particular place within the community—she is blind to her avatar's race, gender, class, and so on—but proposes rules for governing that community. Players set up a thought experiment and watch its consequences on thousands of anonymous citizens, any one of which might be the player herself. Wright suggests that the game offers a place to create a fair public sphere that can be shared among all the players. This analysis is not based on game design, but on the experience of players who have talked with him about *SimCity* and critics who have written about it. Over and over, players want *SimCity* to be more and better than it actually is because they want it to provide an ideal model. As a result, fairness is at stake.

There are a few ways that the recognition of, or demand for, fairness plays out in the discourses surrounding *SimCity 2000*. I will summarize these claims, because they both set the bar for what my reading of capacity has to explain and provide the groundwork for that reading. First, there are players that find the model of civic life in *SimCity 2000* to be a fair one, and who argue that it should form the basis of a pedagogical practice. For these players, the problem is that *SimCity 2000* is not yet communicative enough, and ought to be easier to incorporate into lesson plans, evaluations, and new curricula. Second, there are players who reject all or part of the simulation as either unrealistic or as politically objectionable. These players want the opportunity to change the model, to look underneath the user-interface and alter the code itself to produce a better model. For them, *SimCity 2000* is unfair and ought to be fairer. Finally, there are players who find the simulation ambiguous, because *SimCity 2000* seems to naturalize its claims about the world. By this light, the process of discussing and arguing over the rules is blocked, and *SimCity 2000* ought to make such discussion possible. Each of these positions takes something like Rawls' veil of ignorance thought experiment to be at stake in *SimCity 2000*, but locates its breakdown differently. Let us look briefly at the kinds of demands each group makes on the game.

Educators form the main body of people who see *SimCity 2000* as a communicative model, though they range from primary school teachers, to graduate instructors in urban planning. From this perspective, the fact that the game is non-competitive, self-directed, and grows in difficulty over time all make it a well-designed tool for learning.[74] At the same time, it is difficult for players to reflect on and share their experiences or for teachers to comprehend overall trends. Nathan Bos, for instance, suggests that "SimCity should have flexible data reporting tools that can export various data from the city as data charts… [and] should be designed with group data reporting tools that can be assembled by teachers."[75] Some of the authors who are interested in this use of *SimCity 2000* recognize its ideological commitments, but understand those as limitations that accompany any text, and which should be supplemented by a curricular frame. As John Gaber writes: "the educational benefits of computer simulations are only as significant as the effort the instructor puts into preparing the students, integrating the simulation with teaching outcomes, and active instructor involvement with the class and the simulation."[76] Others note that the GIS software of urban planners is becoming increasingly *SimCity*-like, and the game can provide a useful tool for reflecting on the constructed nature of more naturalized software interfaces.[77] While

[74] Nathan Bos, "What Do Game Designers Know about Scaffolding? Borrowing SimCity Design Principles for Education," in *Playspace Project* (Ann Arbor: University of Michigan, 2001); Kurt D. Squire, "Video Games and Education: Designing Learning Systems for an Interactive Age," *Educational Technology* 48, no. 2 (2008); Kurt D. Squire and Levi Giovanetto, "The Higher Education of Gaming," *E-Learning and Digital Media* 5, no. 1 (2008).
[75] Bos, "What Do Game Designers Know about Scaffolding?," 6-7.
[76] Bradley Bereitschaft, "Gods of the City? Reflecting on City Building Games as an Early Introduction to Urban Systems," *Journal of Geography* 115, no. 2 (2016): 48; John Gaber, "Simulating Planning," *Journal of Planning Education & Research* 27, no. 2 (2007): 117; Paul Starr, "Seductions of Sim: Policy as a Simulation Game," *American Prospect*, no. 17 (1994).
[77] Oswold Devisch, "Should Planners Start Playing Computer Games? Arguments from SimCity and Second Life," *Planning Theory & Practice* 9, no. 2 (2008); Daniel Lobo, "Playing with Urban Life: How SimCity Influences Planning Culture," in *Space Time Play: Computer Games, Architecture and Urbanism: The next Level*, ed. Friedrich von Borries, Matthias Böttger, and Steffen P Walz (Basel: Birkhäuser, 2007), 206–9; John Minnery and Glen Searle, "Toying with

these writers address the political or ethical demand in different forms, their shared goal is to develop a broader conversation about the game.

When things shift, and the limitations of the simulation outweighs its benefits, we start to see demands that *SimCity 2000* should model civic life differently. From the moment of its release, players and cultural critics wanted to be able to alter the simulation to either better match the world, or at least test alternate hypotheses about city dynamics. Kenneth Kolson, for instance, suggests that the simulation would be more realistic if players were allowed borrow money for deficit spending, and if the relation between cars, pedestrians, and public transit was reorganized. Other problems, like the "exaggeration of the role of planning in urban development" seem baked into the perspective of the game.[78] One of the most widespread criticisms is that, like Rawls, the simulation fails to address the racial dynamics of its cities.[79] By treating the Sim citizens as race-less, the game naturalizes city dynamics such as suburban flight, urban blight, and over-policing.[80] This is especially problematic in some of the problem-city scenarios that the game comes with, which take place in cities that are heavily segregated—such as Atlanta and Chicago. These limitations spark a desire for other simulations of city life. Some writers only want the game to be improved, but others argue that players should have the right to alter the rules of the simulation to accord with their own ideology of urban development.[81] For these critics, *SimCity 2000* presents a

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the City? Using the Computer Game *SimCity™ 4* in Planning Education," *Planning Practice & Research* 29, no. 1 (2014).

[78] Kolson, "The Politics of SimCity," 11

[79] Julian Bleecker, "Urban Crisis: Past, Present, and Virtual," *Socialist Review* 24, no. 1/2 (1995): 200-2, 207-9; McKenzie Wark, "Capture All: SimCity, Gamespace, and Play," *The Avery Review*, no. 6 (2015), accessed April 14, 2018, http://averyreview.com/issues/6/capture-all-i-simcity-i-gamespace-and-play.

[80] Kenneth Kolson, "The Politics of SimCity," 44; Samuel Collins, "Imagined Cities, Real Futures: SimCity and the Co-Production of Urban Dystopias," *Reconstruction* 6, no. 1 (2006): n.p.

[81] Mark Schone, "Building Rome in a Day," *Village Voice*, May 31, 1994, 50–51.

bad argument that needs to be countered with a better one. It is also a fairer one insofar as it presumes that a wider community would agree to that representation.

SimCity 2000 is particularly vulnerable to the previous criticisms because it does not present itself as one argument among many others about how cities work. It claims to be just a game, while suggesting it is also an accurate model. In this regard, *SimCity 2000* seems politically unfair because it refuses to open up discussion in the first place. For some players, the solution would be to make the simulation's commitments clearer—to show that Forrester made such-and-such an assumption about population movement.[82] For others, the simulation is already clear enough if only we had the tools to understand it. Ian Bogost, for instance, argues that the ideological commitments of simulations games like *SimCity 2000* are a form of rhetoric based in processes rather than words or images.[83] However, Bogost's central examples use an explicitly political frame and disruptive mechanics to force players to reflect. Games like Gonzalo Frasca's *September 12th* (2010), which simulates an endless cycle between US bombings in Afghanistan and the radicalization of terrorists, make their political point hard to ignore. In contrast, Noah Wardrip-Fruin argues that there is a transparent relation between interface and system in *SimCity*, which teaches how the simulation operates rather than how to criticize it.[84] This kind of criticism suggests that the problem resides with a population without the literacy to read simulations.[85]

[82] Sherry Turkle, *Life on the Screen Identity in the Age of the Internet* (New York: Simon & Schuster, 1995), 71-3.
[83] Ian Bogost, *Unit Operations: An Approach to Videogame Criticism* (Cambridge: MIT Press, 2006), 102-4; Ian Bogost, *Persuasive Games: Videogames and Procedural Rhetoric* (Cambridge: MIT, 2007), 63, 237-241.
[84] Noah Wardrip-Fruin, *Expressive Processing Digital Fictions, Computer Games, and Software Studies* (Cambridge: MIT Press, 2009), 299-308.
[85] Though the reliance on a vaguely Marxist aesthetic of alienation suggests that there is an unresolved tension in this account.

Whether one identifies the problem with the game or the player, there is something that blocks the forthright discussion of *SimCity 2000*'s commitments, and makes it seem unfair.

As these three perspectives show, people do feel the political and ethical demands of fairness in *SimCity 2000.* Why they do so is more mystifying. The game, after all, is a single player experience, and as Bogost and Wardrip-Fruin demonstrate, it does not aspire to a shared debate at all, but tries to make its commitments invisible. We might even say that the game rejects the ideal of debate by letting each player invent her own goals and her own private Utopian city. *SimCity 2000*'s critics point to simulation as an inherently relational project, but Wright's other simulation games—*SimAnt* (1991) or *SimEarth* (1990) for example—do not provoke the same interest in fairness. How people get from the game to questions of fairness-as-equality is a bit of a puzzle. In the next few pages, I will argue that fairness-as-capacity provides the missing step. I will show that each of the political and ethical claims on the game are subtended by an unfairly unfulfilled capacity. Like the child who wants to stay up late, the game leads players to imagine possible actions that they are unable to explore. I will examine five places where *SimCity 2000* raises the possibility of using a capacity, but leaves it unfulfilled: (1) the capacity of the player to set global goals for her play; (2) the capacity to create things that need the cooperation of simulated people; (3) the capacity to check on the feelings and reactions of these simulated people; (4) the capacity to intervene after the simulation has started running and adjust its development; (5) the capacity to destroy the world. *SimCity 2000* opens up expectations it cannot meet with each of these capacities.

I have already touched on the first point, which stems from the fact that *SimCity 2000* does not have win or loss conditions, and allows the player to set her own goals. This is not just a negative condition, but like a good toy, *SimCity 2000* suggests many different kinds of goals that

a player might pursue in its framework.[86] Many of these possibilities are determined by the elements of a city it models and those that have interesting effects. A player might be want to reduce crime or pollution, or might wish to create an enclave of public transit and free schooling—these are all goals suggested by the range of building options. Alternately, the player might choose to play for the numbers, building a city that has a large population—either by spreading out to the edges of the map or by increasing the density of urban centers. The game rewards this kind of play by offering decorative buildings such as a mansion or a city hall once a town reaches certain population thresholds. Players might simply be interested in playing for a long duration, watching various technologies get invented and become available as the years pass—such as wind turbines or nuclear power. Or a player might want to mimic the layout of her real-life city, creating waterfronts and industrial wastelands that are familiar. This goal is suggested by the pre-designed maps of several major cities that come with the game. These are only a smattering of the possible goals, but they are the ones that the game explicitly rewards.

SimCity 2000 simultaneously undermines the player's capacity to set goals. For instance, it bounds the city limits to a grid of 124x124 tiles, putting a cap on the sprawling player's expansionary imagination. Alternately, the impact of crime on property value has a disproportionate effect that makes it difficult to sustain a livable city that is not simultaneously over-policed. The simulation's rules interrupt what it suggests as a possible utopia. Similarly, the game's incremental rewards create another of unachievable limit. At a population of 120,000, a player reaches the final reward: massive 'arcologies' modelled after the self-contained micro-

[86] For a critique of the idea that *SimCity* is like a toy, and one that lines up with the limitations *SimCity* places on a player's goals that I outline here, see Maaike Lauwaert, "Challenge Everything? Construction Play in Will Wright's SimCity," *Games and Culture* 2, no. 3 (2007): 194–212.

worlds of Italian architect Paolo Soleri.[87] After the slow drip of small upgrades, these towering structures make many ordinary buildings obsolete, and reduce the complex urban sprawl to a monoculture. The gulf between this last reward and a 'complete' game is visible in Vincent Ocasla's monstrous and totalitarian city 'Magnasanti,' which took four years of planning and mapping to increase the population of Sims to six million.[88] 'Magnasanti' marks a limit where the game fails to sustain our capacity to set goals. Many of the complaints about the accuracy of the simulation might better be understood as disappointments with the promise of play within the system itself. *SimCity 2000* depends on our commitment to imagining a goal, and unfairly limits what we are allowed to imagine.

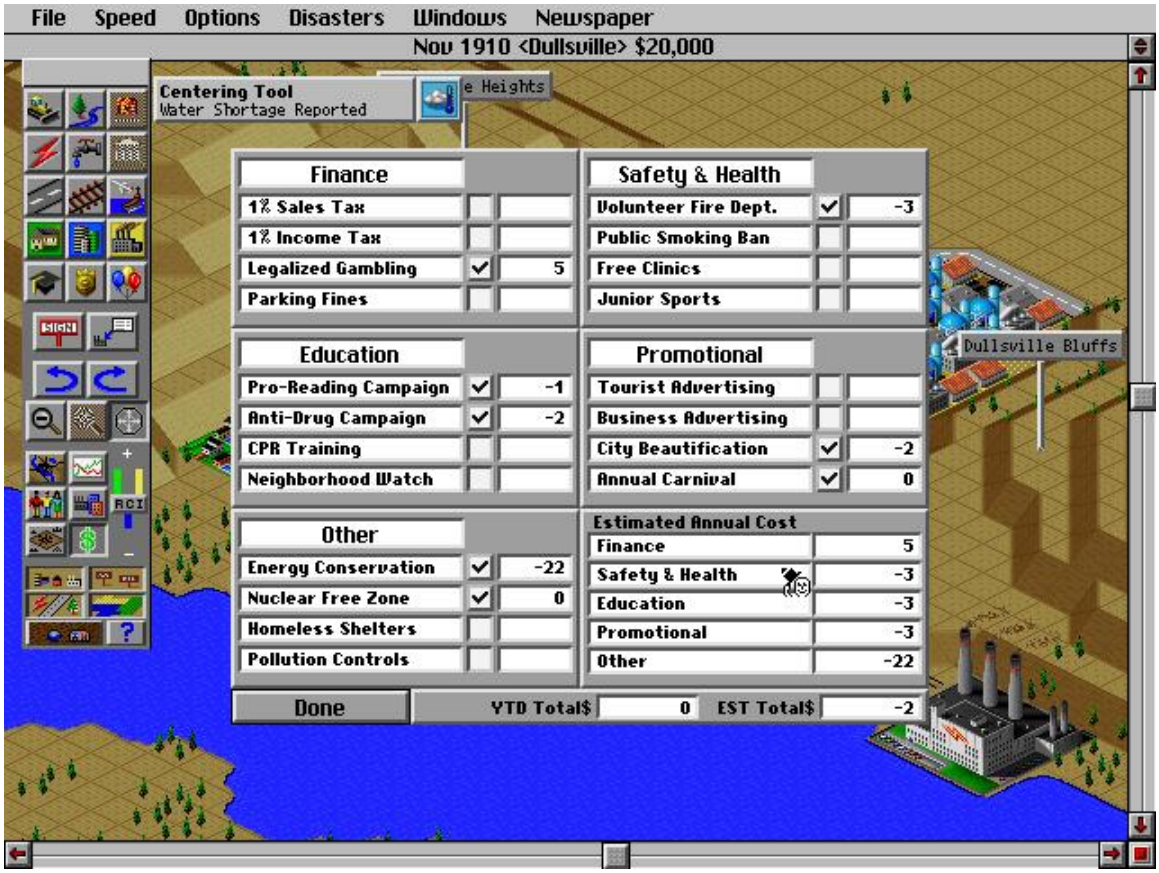

Figure 4.3. A choice of city ordinances in *SimCity 2000*

[87] Kolson "The Politics of SimCity," 43.
[88] Wark, "Capture All," NP.

A second capacity resides in the agency that a player actually has in the game. As the mayor / city planner / regional board / god, the player is able to zone property for various uses, impose taxes, terraform the terrain, instantaneously erect buildings with certain functions, and stretch grids of road, powerlines, and pipes. Conversely, the player cannot use any of these constructions herself. She cannot cause people to move into a neighborhood, build a skyscraper, make use of a school, or fly a plane. She is entirely dependent on the Sim citizens to take every action within the infrastructure she provides.[89] Rarely does Wright set up this same divergence in other simulation games. In *SimAnt* you take control of an avatar that directs the colony, in *SimLife* (1992) you intervene directly on the organisms, in *The Sims* (2000) you can indirectly push and pull certain characters so that they crave things. *SimCity 2000* is, in that regard, much clearer conceptually about the kind of capacity it affords. At the same time, these diverse infrastructural options are obfuscated by a complex toolbar, several menu options, and an overwhelming array of policy checkboxes (Fig. 4.3). The combination of clarity of purpose and opacity of user interface means that a player might assume something is possible—such as mixed use zoning—and hunt for the operation before realizing it is not among her capacities. Indeed, before playing I might not know anything about mixed use zoning, but hypothesize its existence and go searching for it. The desire that critics voice for such assumed, but nonexistent, options might stem from the promising nooks and crannies of the game's interface. *SimCity 2000* delineates planning as the domain of the player, but unfairly limits the kinds of planning she can perform.

[89] Matteo Bittanti, "All Too Urban: To Live and Die in SimCity," in *Videogame, Player, Text* (Manchester: Manchester University Press, 2007), 43-6.

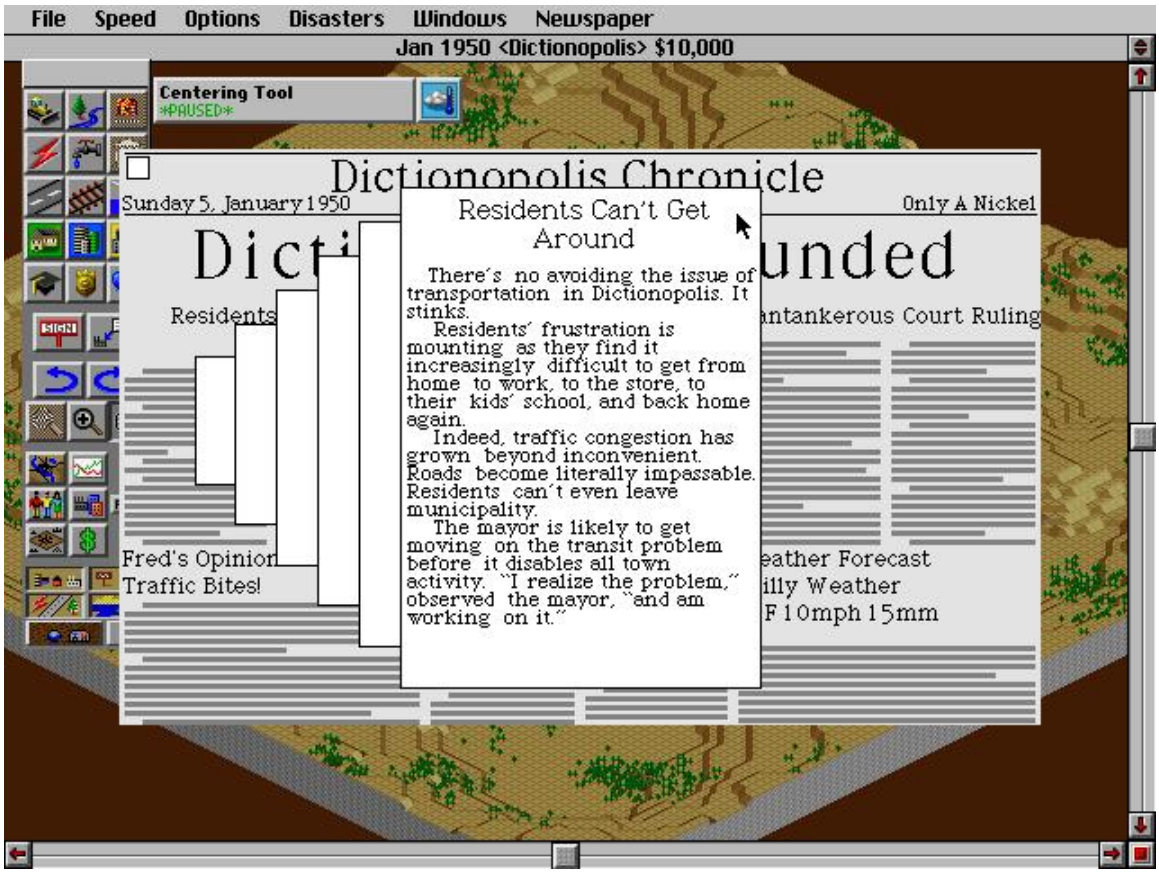

Figure 4.4. An example newspaper reporting on the state of the world from *SimCity 2000*

The clear split in agency between planner and Sim citizen also lends itself to a third capacity: the player's ability to gauge her Sims reactions to her policies. Without any direct control over the city, this is an important indicator of a city's direction. The reactions of Sim citizens are communicated through computer generated newspaper articles, the advice of a panel of advisers, a graphical interface element that updates the most important issue, and the occasional Sim riot (Fig. 4.4). The comments are often ambiguous, the product of many unseen variables that might flip at a moment's notice, and the player generally cannot respond to them except slowly and systematically. The citizens, however, do not recognize the player's inability to act directly. When the player clicks to ask their advice, they speak in exclamations and demands. In a wonderful example of their paradoxical temporal disjuncture—a player who starts her city on an empty and unpopulated wilderness is instantly greeted with demands from non-existent citizens. The contrast

between the capacity to listen and what listening suggests is possible, generates an odd mixture of exasperation, embattlement, and responsibility. Here, I would pin the sense of stewardship that critics feel towards other players of the game, a sense that is displaced from a care for simulated citizens. *SimCity 2000* generates a dissatisfied ethical affect that turns around and suggests a dissatisfaction with how the game listens to its players. It unfairly suggests that responses should come quicker than they possibly can.

The fourth capacity is a subtle one. The player is able to intervene after the simulation has started, and can control the speed at which the consequences of an action are played out. This capacity to pause or speed up the game gives the player's actions an oddly double temporality.[90] On the one hand, each interruption ends the pure simulation of city dynamics by introducing a capricious variable that could not be calculated beforehand.[91] This shifts *SimCity 2000* from the realm of scientific model into that of a game. On the other hand, once an intervention has been made, the changes become part of a new set of starting conditions from which the simulation can proceed, taking it back into the realm of model. The push and pull at work between game and model makes the capacity to intervene ambivalent. It creates a desire to witness the mathematical results of a given simulation—a desire that acknowledges that such results are artificial, constructed, and must be measured against reality. Simultaneously, it instills a doubt about the consistency of a simulation that can be so easily manipulated—and understands the results as intentionally skewed towards some kinds of reality effects by the hand of the player. I think many

[90] Gingold, "Play Design," 354-6.

[91] For a simulation to be a valid scientific tool, its results have to be repeatable. If I load a city and start the simulation, the results will be the same (or fall within a limited random distribution) each time. The interruption of a capricious element, whether it is a cheat code that adds hundreds of thousands of dollars to my city's budget or simply an additional block of zoning, makes the simulation incomparable. Only by regularizing that interruption so that it happens each time can the game become a model again.

of the epistemological questions that *SimCity 2000* raises, and which get attributed to simulation in general, belong to the control that players are given over the structure of temporality, and do not arise in simulation games where the player is unable to pause time. *SimCity 2000* unfairly allows the player to intervene in a partial manner that leads to inconsistent results.

Figure 4.5. An alien descends to destroy the city in *SimCity 2000*

The fifth and final capacity that I want to discuss comes through one of the odd joys of playing *SimCity 2000*, the act of destroying your own creations.[92] Often a player will place a road in an awkward place, or will need to build a police station in an overcrowded street. For these situations the game allows players to use a bulldozer. Wright has described the joy that players experience when they first attempt to remove a building, and are greeted by a large explosion as

[92] Bittanti, "All too Urban," 47-8.

the rubble of the newly fallen wreckage litters the ground.[93] Bulldozing is one of the few places the player has any direct agency on the lives of the Sims. Even more iconic are the disasters that the player can let loose on her small city: earthquakes, bombings, floods, nuclear explosions, mass riots, toxic spills, and UFO attacks, among a dozen others (Fig. 4.5). Though the player has no control over these disasters after she summons them, they are available for a god-like perusal from the 'disaster menu.' By destroying her patient creations the player turns the tables on the ethical demands that her citizens make. They do not, cannot, blame her for acts of nature that ravage their Sim lives. With disasters the player escapes her role as caretaker, and is free to treat the world once again as a toy for her delight. Yet the capacity for destruction is limited. The bulldozer only operates on one square at a time, rather than the satisfying rectangles that construction lays out, and it does not delete the zoning ordinances beneath the rubble. Disasters interrupt life in city, but they also leave large swaths untouched, or alive without water and power. Life, and responsibility, resumes. There is an unmet want for apocalypse that, I think, energizes the dystopian imagination around *SimCity 2000*.[94] It unfairly limits the player's capacity for destruction.

At this point, the pattern should be clear: *SimCity 2000* sets up a capacity for play, but simultaneously restricts the capacity in ways that leave players wanting more. There is a lingering sense that the game *ought* to be doing something differently, a judgment that is simultaneously aesthetic (when seen within the game system) and ethical (when seen as part of the game's relation to its players). It is this misalignment between a capacity and its available uses that I am arguing constitutes a sense of unfairness in *SimCity 2000*. That sense of unfairness gets reinterpreted by critics as an inequality—that some players do not learn as much, take away a misleading idea, or

[93] Will Wright, "Interview: Will Wright," interview with Richard Rouse, in *Game Design Theory and Practice* (Plano, TX: Wordware Publishing, 2001), 415.
[94] Bleecker, "Urban Crisis," 191-2.

are confused by the game's message. The game's theme helps with this reinterpretation, allowing the political valences to take center stage. From the vantage point of capacity, however, we can see that these kinds of readings are motivated by something internal to the play experience. *SimCity 2000* offers a model for how we might understand fairness differently.

It is now possible to answer the three questions that remained at the beginning of this section. *SimCity 2000* teaches us that the sense of discrepancy between things as they are and things as they ought to be in fairness—the political or ethical gap that separates the world from its ideal—is immanent to capacities themselves. An ideal does not have to come from the outside, like the precondition of Rawls' rationality or even the explicit bar of Patterson's inhibition, capacities can themselves be split. However, that internal split is not a natural feature of capacities. Being-able-to-run does not in and of itself give me the criteria for how much I must run. Even for capacities that are guaranteed political rights—like bodily integrity or free association—the threshold at which they are fairly satisfied is not a given part of those capacities.[95] Rather it is the form of the game itself, the meta-capacity to play, to simulate the possible uses of my capacities and their possible consequences on the world that produces the split. As a player I imagine how I will respond to an uncertainty that the game presents—how to answer citizens' demands, what my city will eventually look like, what a satisfying end to it might look like—and that imagination sets a threshold within my capacity where the game will feel fair or unfair. What a simulation adds is an immanent split within my capacities, one that gives rise to an 'ought' which can become aesthetic or ethical as it interacts with other parts of the game.

[95] Again I am thinking about Nussbaum here, and the concept of threshold in the capability approach. For Nussbaum, there are minimum thresholds for such capacities that inhere in human dignity or that are part of Rawlsian collective agreements. I disagree, and believe that such thresholds need to be generated immanently. Nussbaum, *Creating Capabilities*, 40-44.

That dynamic holds for games in general, but the genre of simulation games does something peculiar with the player's style of response. Rather than simply trying to maximize the feeling of fairness, to allow a player to do the things she imagines she can or should do, simulations bring the player up against a sense of the world as outside her grasp. Simulations do not want to simply make the player feel powerful, like a god of the city, but to comment on the world through the limitations on those powers. Uncertainty here is not just about whether a game will meet my expectations about using a capacity, but whether and where a game even wants to match those expectations. Simulation games make capacity into a self-reflexive form of uncertainty. As *SimCity 2000* demonstrates, unfairness becomes a source of pleasure in its own right: a reason to argue about how the games might be better, a reason to learn about city planning, a reason to share your experiences with others, and a reason to keep playing.

Ludic Self-Reflexivity

My investigation of fairness began as a way of posing a problem that playfulness opens when it is no longer understood to be mimetic. If the difference between playful interpretations and non-playful ones is only produced through our responses to an initially undifferentiated uncertainty, then how can we characterize the resultant difference between play and the world? Fairness does not answer that question, but internalizes it and makes it into a topic of play. By examining the aesthetic fact of playful fairness, the dynamics of its aporetic uncertainty have started to become clear. It is defined by two countervailing impulses. The first, and more recognizable, trend is towards fairness-as-equality. That impulse works to reduce the differences between player capacities so that each may be allowed to operate in an unlimited way. Each player pushes the other to perform at her peak so that the back-and-forth competition is uncertain and fair.

The second impulse, visible in fairness-as-capacity, operates by fracturing capacity and assuming its unequal distribution. Rather than producing uncertainty by balancing unlimited forces, it imposes artificial limits on capacity that are themselves a source of uncertainty. Neither can reach a limit of pure equality or absolute dispersion, and the one cycles into the other. This aproia has underpinned and animated each of the cases in this chapter, from Rawls' thought experiment, to Patterson's *A Game*, to the pedagogy of game design, and the criticism of *SimCity 2000*.

That aporia, however, represents an involution where games take their own relation to the world as a source of uncertainty. Fairness-as-equality aims at equalizing capacities in order to make its results as valid as possible. By equalizing the situations of competitors, the Olympics claims to produce a result generalizable beyond the game: who is strongest, fastest, or most intelligent. Rawls' thought experiment demands equality as the condition for general acceptance of the social order generated by the game. On the other hand, the fracture of capacity produces exactly the opposite sense. By interacting with the arbitrary constraint of capacity, we are confronted with a place where the results of a system cannot be generalized. In *SimCity 2000* I encounter and play with my own desire for unlimited capacity and the ways a simulation depends on satisfying and rejecting those impulses. Fairness marks the aporetic movement between games as entirely applicable to life, and games as entirely separate. It explores the space in between and makes the conceptual insolubility a source of aesthetic pleasure.

As we saw with secrecy, playfulness comes about from a simultaneous negotiation of both these aporetic elements, where one is developed as a style of play and the other as the rules of a game. When fairness-as-equality becomes a genre, we get games of competition. In response, the player must manage the uncertainty as to uniqueness and internal limits of her own abilities. It is from this perspective that pushing one's limits can take on a playful cast. When fairness-as-

capacity becomes a genre, we find games of simulation. Players then take on the responsibility for forging connections between themselves. *SimCity 2000*'s critics practice this style of play as a supplementary element that the game itself does not demand.

We have seen this pattern in each chapter. An aesthetic fact of playfulness reveals an aporetic dynamic, to which that playfulness is a response. The aporia internalizes a conceptual question about play as something to play with. By splitting the aporia, we end up with genres managed by rules and responses managed by a player's style. These responses form the basic elements from which an interpretive community develops its response to play.

In chapter one the question was about the motivation and meaning that draws players repeatedly back to games. The aporia was split between an abstraction away from metaphorical meaning that made the interactions within a system complex, and an expansion of contextual connections that allowed a game to allegorize beyond a responsibility to true links. It produced games of strategy and arcade style puzzle games as two genres. Ludology and narratology might then be re-conceptualized as the play styles corresponding to each. The aporia of chapter two received the most explicit formulation, for the player caught between an obscure fascination that draws her into play and a pious commitment to the rules that uses up the energy of play. There the question was not about the internal system of the game, but about the process of entering and leaving play: how does it happen and how do we know when we are playing? It gave rise to games of mimicry or make-believe and genre sometimes called 'collectathons' or metroidvania games where the player seeks out endless secrets. Finally, chapter three asked about the uncertainty of play: why do games need it, how do they maintain it, what makes it exciting? Here the aporia was split between two elements of interpretation. On the one hand, games can reduce the available frameworks to create uncertainty through a lack of interpretation, as in games of chance. On the

other, they can extend the available frameworks to the point of overloading a player, as in the adventure game genre.

If I have often spent more time unpacking the wending path of the aporia than summarizing the results, it is because the aporia seem like the more elusive quarry. These aporia can be sliced in several ways, and give rise to all sorts of practical heuristics of playfulness. By grasping their fundamental dynamics, it becomes possible to treat playfulness as a set of generative problems, and not just as a haphazard group of tricks and tactics that will elicit a laugh or a smile. These aporia give us the tools to see much subtler elements of playfulness, and elements that might initially seem unplayfully violent, serious, or repetitive. Nor are these the only possible aporia. By focusing on the questions of method and working patiently through readings of playful experience, I hope I have demonstrated the path by which other scholars might discover new kinds of ludic self-reflexivity. Indeed, it seems to me like that the games that the avant-garde is designing today take some fundamentally different questions to be at stake. They provoke other kinds of uncertainty and new ways of playfully responding. As a moment of conclusion, then, I want to point to a wide variety of work that needs to be done if we are to finally begin being playful.

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