# Chapter 2

# **Defining Gamification**

Alan Watts (1995), a well-known Zen philosopher, is one of the first popular scholars to ever mention the core concept behind gamification in the early 1970s. In a series of lectures entitled "Work as Play," Watts states that making everything a game, or "playing through" all aspects of life, is the key to conquering the fear of death. By "playing through" life, everyday tasks, such as love, work, and even dying become secondhand illusions to the process of obtaining enlightenment, or an awareness of one's self in the world (Watts, 1995). Life is a recurring theme in the study of play.

As noted in the introduction, Fink (1974) stated that life and the universe might be composed of play. He envisioned all life as "play life" and all actions as "playing life." Play, and its constant modulation through games, brings the focus back to the moment – because games are, by nature, a momentary pursuit. "Work-as-play" and "life-as-play" are major conceptual sticking points for gamification. In order to understand how this schema works, I take on the task of understanding the nature of play and games as cultural and philosophical entities. Gameplay and design often produce ethically ambiguous results, one of which happens to be gamification. Because of its unique place in the schema of surveillance capitalism, there are many different and contradictory definitions of gamification and its ideological roots. This chapter focuses on exploring these and interrogating the philosophies of play that bring the modern history of gamification into focus.

My first chapter focused primarily on a reconceptualization of power in digital games, and what it can bring to the study of gamification (and vice versa). Here I step back and look at the history of "play" through past scholarship on ludology. In doing so, I question the discursive roots of ludology, and why those roots have hindered the study of game design and gamification as modalities of power and control. Gamification demands a nuanced definition of gameplay as a site of control and power in games. However, gamification does not always want to produce "players," who can be a rebellious and challenging bunch. Exploring the complexities of gamification and play; we must look back to canonical ludological texts. Ludology and its discursive roots will help us understand why Game Studies dismissed gamification based on ideological assumptions about the "natural" state of play, games, and game design.

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Games in Everyday Life: For Play, 35-66

Scholars agree on the point that gamification is a design-oriented set of practices. However, not all theorists and practitioners agree on what that design is meant to do. There are two significant deviations: One holds that gamification restricts choices while the other sees gamified design as granting a choice to escape from the trappings of coercive or stressful labor. One formation views gamification as disciplinary exploitation of play and the other couches it as an exercise in freedom. The difference between both of these views is the understanding of efficiency in play. Gamification, as noted in the introduction, is often geared toward promoting more efficient forms of play. Since the play links to everyday life, this efficiency in play also has direct effects on everyday productivity – everyday life becomes more efficient *through* play. For some, the increase in efficiency required by gamified design is a sign of coercion – players are tricked into perversely playful slavery. For others, the increased efficiency is attributed to the players' enjoyment of the design – the efficiency is the result of play.

For example, Deterding (2012), one of the first scholars to directly address gamification as a concept, states that design choices are less about behaviorist control and more about motivation. The difference between the control and motivation lies in the idea of engaging out one's own volition rather than submitting to conditioned responses. While exact reactions are required for conditioning, gameplay rewards creative responses, as long as they conform to the general rules of the game. Efficient behavior – such as better times in returning e-mail, completing tasks, or navigating spaces – and individualized forms of play reward through positive conditioning in gamification (e.g., points, progression, and customization). McGonigal (2011), a scholar-practitioner, states that games and gamified applications are productive designs that simulate, pervade, and alter "reality." Gamified productivity stems from channeling the biological desire to play, which renders actions pleasurable. In other words, gamification may be a "way out" of the masterless slavery of our current labor conditions (McGonigal, 2011).

Other accounts of gamification trace gamification's roots to behaviorism and simulation theory. For example, practitioners Zicherman and Cunningham (2011) also point out that gamification's design serves to drive or inform behavior by limiting actions, not necessarily enabling them. Also, Raessens (2014) states that gamification represents a ludification of labor and culture that is more, and not less, regulated since games require exact adherence to rules.

All of these definitions are insightful in their ways, but they vacillate between gamification enhancing or curtailing choice. Perhaps the reason is that each definition only spans a few years. Gamification has a much longer history than many assume. The debate over what constitutes a "good" work–life–play balance is an old one, beginning with Aristotle, who valued play very highly, and Plato, who did not (Sutton-Smith, 1997). Examples of proto-gamification are pervasive in the history of human thought and practice (Fuchs, 2014b). Proto-gamification accounts for historical uses of games that share some similarities with modern gamification. Because modern gamification thrives on networked surveillance, examples of proto-gamification typically deal with games used as marketing

devices, behavioral modifiers, pedagogical tools, and social experiments. Most proto-gamified tactics are predigital; if they do involve digitality, they are not networked.

Music, art, business, and science have, at various points, deployed proto-gamification for learning, early marketing, and thought experimentation (Fuchs, 2014b; Raczkowski, 2014). Utilizing games, game mechanics, and game theory to drive innovation in science and philosophy has a long history in scholarship, especially in the form of collective "thought experiments," secret societies, grant/research competitions, and hacker communities that form and compete on the sidelines of "official" academic gatherings and events (Fuchs, 2014b; Huhtamo, 2012). In some cases, such as *Foldit* (a ludic protein-folding application) scientists use gamified tactics to encourage amateur and citizen science (Parslow, 2013). The examples are typically considered part of the growing trend of ludic activism and pedagogy.

This chapter conceptualizes gamification by understanding both "life" *and* "work" as forms of play, or perhaps playbor. Particularly salient to this pursuit is examining gamification from the standpoint of ludology, or the social, biological, and philosophical interrogation of play. Throughout this chapter, I cover past ludological texts that imply all culture, including labor, stems from the desire to play (Huizinga, 1950; Spariosu, 1989). Additionally, I examine texts that question play's de facto "good" intentions by comparing it with war, mechanization, catharsis, and simulation (Baudrillard, 1979, 1998b; Baudrillard, 1981a, p. 174; Mumford, 1934). I develop a critical history of gamification by exploring how the concepts of work-as-play and life-as-play align with or deviate from standard definitions of games and play.

First, I examine how gamification collides with and diverges from conventional notions of games and play as superfluous pursuits. Second, I include a general history of gamification as it stands today, utilized as a tool for management, marketing, and consumer surveillance. I also note a breakdown in the understanding of play, life, and labor brought about by location-based mobile games (LBMGs). I suggest that gamified applications are not necessarily a break from play; instead, they represent a change in the discursive formations that employ or deploy play and games. I suggest that play is ethically and ontologically elusive. It always exists between the discursive frames of *power* and progress (Sutton-Smith, 1997). Third, I explore the scholarly treatment of play itself, arguing that in order to undertake a severe examination of gamification and games, play must be repositioned as a situational pursuit fraught with ambiguity. Finally, I suggest that examining gamification must be done on the level of cultural theory. Gamification is driven by surveillance capitalism, and it is rooted in monetizing the contingencies gaming produces socially and materially.

Gamification represents a question of work-as-play, and life-as-play only as long as the concepts work life, and play remain separate and distinguishable from one another. Ironically, this separation is something that gamification seeks to obliterate. As a result, gamification brings about the terms for its obsolescence – since it relies on the boundaries between labor and play to exist, dissolving these boundaries leaves gamification with no actual use value. Gamification's discursive complexity, when framed in terms of play, contributes to the ongoing debate concerning games and labor covered in the previous chapter. This chapter considers this complexity from the standpoint of play as a discursive formation, rather than gameplay as a specific process of power and control. In this chapter, gamified design is reimagined as the "gaming of culture" (Boellstorff, 2006) – a set of ethically muddy practices that utilize playful practices, contingencies, and processes that are inevitably linked to the spread of computational networks and network protocol (Galloway, 2006). Without a set of networks to exploit, gamification would not be able to maintain its profitability as a mode of surveillance or mass behavioral technique. However, while gamification may need networks to produce a profit, it relies on playful engagement as a source of power.

## **Resituating Games and Play**

The first step in understanding how and why gamification has been considered a divisive set of practices in the last few years is examining how gaming and play have conceptually been treated in the past. Studying play is commonly referred to as "ludology," or the study of play from an anthropological standpoint. Traditional ludology has two major players: Huizinga (1950) and Caillois (1961). Both espoused definitions of games as free-standing, rulebased, ritualized systems that result in play – behaviors set apart, at least superficially, from more "serious" social pursuits (Juul, 2005; Salen & Zimmerman, 2003). Setting play "apart" is also the most common interpretation of games and put forth in early media and game studies. However, it is not the only approach. Other theorists, such as Baudrillard (1979) and Mumford (1934), viewed games as highly technical systems that support simulation, seduction, and mechanization. These lesser-known approaches were often overlooked in early media and game studies literature because they generally do not fall into the category of ludology or narratology – the primary stable of literature on which early game studies operated - and thus they were not covered as frequently. As we saw in Chapter 1, game studies are now embracing a definition of games and play that includes the possibility that they are, or can be, methods of control, instrumentality, and surveillance. However, when looking at gamification, a genealogy of past ideas needs to be excavated and read against modern and traditional ludological definitions. Doing this may clear up the dissonance between definitional accounts of gamification by providing alternate modes of examining play. So, I include accounts from a variety of disciplinary perspectives. It engages in the task of deconstructing the "magic circle" (Huizinga, 1950) that surrounds games and play. Also, I provide a multitude of perspectives that are frequently lost or overlooked in early studies of play. While I do not dismiss ludology and early game studies scholarship, I do question them as a definitive account. Doing so will unravel alternative definitions of play apart from games, definitions that do not place it on a pedestal.

## The Magic Circle and Types of Play

Johan Huizinga (1950) is mostly noted for coining the term "magic circle," something that has a mixed history in the study of games. He points out that the activities within the magic circle are directly carried over into "real life." In other words, games are a form of cultural learning and expression ritualistically partitioned from nonludic processes. He discusses play as something happening outside ordinary life. Huizinga views play, and by extension, games, as a type of ritual activity that emerges through rules that are mostly separate from everyday reality. Huizinga (1950, p. 13) states that play and games constitute a "free activity standing quite consciously outside 'ordinary' life as being 'not serious,' but at the same time absorbing the players intensely and utterly." Huizinga was also interested in understanding how play, ensconced in the ritual space of games, is both an outlet for culture and a key component in cultural circulation. Oddly, for Huizinga, games and play are also activities connected with no material interests. They entail actions that gain no *extrinsic* profits. They also proceed within their proper boundaries of time and space according to fixed rules and in an orderly manner (they are intrinsic). Huizinga's primary thesis is that play is a primogenitor of culture, and games are its vehicle. The order created in the ritual nature of games is a sort of laboratory for cultural pursuits ranging from law to sexuality to art. Huizinga's argument is not one that precludes a bounded space, but one that suggests all culture is a realm of networked spaces, of topographies, and play inhabits and influences many spaces at the same time. His primary goal is not to identify play as a set of practices existing within a culture or to define games as inhabiting their cultural milieu. He examines how all aspects of culture bears a resemblance to play and games. Games imply a cultural cycle - they are containers, or spaces of germination, for cultural possibility. Huizinga assumed that play was contained in a "magic circle" created by games. The magic circle has different temporal constraints, spatial boundaries, and sets of rules. He points out that the activities within the magic circle are directly carried over into "real life." In other words, play is learning that is only superficially separated from culture at large. In reality, society functions alongside the rules that are "tested" in a playful environment first. Huizinga can be credited with drawing attention to games as an integral part of the social realm.

Roger Caillois (1961) is most noted for categorizing the types of play that certain games produce. He analyzes different aspects of play in various cultures and then creates a "comprehensive review" of different play forms. He notes that there is considerable difficulty in defining play without first categorizing it. His conclusion is that play is characterized by six core characteristics. Play is never forced. It is separate from everyday activities. It occupies its own time and space. Its results cannot be predetermined and thus requires special initiative from the player. It is ultimately not tied to capital in that it creates no wealth and it has a definite "end" and "beginning." Play is acultural in that it revolves around rules that suspend normative laws and behaviors. Finally, play involves a process of imagination that allows players to confirm the imagined realities it produces. Caillois was primarily interested in games and play as social forces that exist alongside everyday activities while also providing a distinct, positive social influence.

Caillois (1961) was highly critical of any games that involved chance. He associated games of chance with gambling and compulsion. Games of chance are "all games that are based on a decision independent of the player, an outcome over which he has no control, and in which winning is the result of fate rather than triumphing over an adversary" (Caillois, 1961, p. 17). In games of chance, Caillois (1961, p. 17) claims, "the player is entirely passive: he does not deploy his resources, skill, muscles, intelligence. All he need do is await, in hope and trembling, the cast of the die." Chance "negates work, patience, experience, qualifications... It seems an insolent and sovereign insult to merit" (Caillois, 1961, p. 17). At the time, digital games were unheard of, and computers were in their nascent stage. Still, a computer shares a fair amount in common with cards or a slot machine – both are counting mechanisms, and their inner workings are opaque; that is, their fundamental mechanics are generated via chance, at least as the average user perceives them.

Games of chance are pitted against more honorable games (e.g., chess) where there is no agency other than human dictating rules or outcomes. In the case of Kasparov vs Deep Blue, Baudrillard (2001) maintains that even chess is reduced to agon in the advent of simulation; he states that Deep Blue "has no adversary, it moves within the scope of its own programme...The computer...is condemned to play at the height of its capabilities" (p. 117). Baudrillard, who was reliant on Caillois' definition of play, implies that genuinely playing with a machine via simulation is an "impossible exchange." Caillois' definition of play requires human actors to engage with one another. Whether engaged in solitary games that require raw imagination, cooperative games that require players to help one another, or adversarial games in which wits and strategy prevail, games are a thoroughly human pursuit. In order for "healthy" play to occur, games must bring human actors together. For Caillois, gameplay that impartially generates resources or mechanics via a nonhuman system is designed to favor chance. These are games that are naturally compulsory and lead to undesirable behaviors in which the game masters the player, as opposed to the other way around.

If we look at gamification as a design process that adds gaming mechanics to nongaming systems for "inviting" or "driving" engagement, it becomes highly suspect under both Caillois' (1961) and Huizinga's (1950) notions of ludic activity. Because gamified applications are primarily used to monitor and influence behavior within networked environments, they often involve chance, and they usually have positive reinforcement through points and rewards with real-world value. Gamified applications often reinforce "normal" or "desired" outcomes rather than disrupting them. Many of these gamified applications rely heavily on chance-based mechanics and positive reinforcement (some examples include *Farmville*, McDonalds' *Monopoly*, and *Shopkick*). Gamified design is mainly about inspiring "fun" and "playfulness" in everyday situations (Zicherman & Linder, 2010) while also providing "loyalty-oriented" tools to the organization that seeks to benefit from it (Zicherman & Cunningham, 2011). So there seem to

be some elements of gamification that fit the bill for traditional games (fun and playfulness) while also disrupting the idea that play is "free" or separate from more quotidian sectors like economics or government.

#### Games, Mechanization, and Seduction

While Huizinga (1950) and Caillois (1961) primarily link play and games with *positive* elements of cultural production, other theorists do not take the same path. Mumford (1934), in *Technics and Civilization*, links the evolution of games with the creation of a "technical society." Baudrillard (1981a, 1998c) also frequently used the metaphor of games and gaming to illuminate consumerism and simulation. Like Fink (1968, 1974) both authors were somewhat hesitant to extol ludic activity as a positive pursuit, metaphysical or otherwise. Jean Baudrillard and Lewis Mumford can both be considered "tertiary ludologists" because their interest in games is often nested in much larger social trends, pitting notions of games and play against economics, mechanization, and warfare.

Mumford (1934) felt that games operate as "agents of mechanization" that reverse his romanticized "eotechnic" age. As games become increasingly technical, they present an illusion that "fair play" is obtainable. For instance, technology is often seen as the great leveler, and advances in technology are often accompanied with the caveat that they will create an equal society (Carey, 1989). Mumford argues that in reality, "win at any cost" becomes the standard operating procedure in a fully technicized society. Winning, in this case, is obtaining more time and resources for leisure by making more powerful machines. Mumford (1934, pp. 101–102) maintains that mechanized parts such as wheels, gears, and levers, are just "buckets and shovels dressed up for adults" and that games and play are infinitely caught between "consumptive pull and productive drive." Civilization's advance toward "complete mechanization" is closely intertwined with the desire for leisure, namely the desire to save time and increase efficiency.

Leisure activities birth technologies that focus on producing more leisure. Formerly nonpractical objects, like toys and models made of moving parts, eventually become larger and more powerful. Mumford (1934) notes that the gyroscope was initially a toy before it became a stabilization device for trains, airplanes, and carriages and existed in the miniature before it became widely used. Mechanization begins with the maximization of sensual pleasure and life itself. Unfortunately, mechanization ends in a hellish arena where the brutality of real life is inseparable from the games in which it was based (Mumford, 1934). In seeking a maximal, luxurious balance between leisure, play, and work, mechanization leads to an "upthrust in barbarism, aided by the very forces and interests which originally had been directed toward the ...perfection of human nature" (Mumford, 1934, p. 154). This barbarism originates partly from the luxury of play transforming into a form of a bloodlust. Play, through "mass-sport," has degenerated into the worship of the productive "goddess" who values generativity above all else. He states: "Sport, then, in this mechanized society, is no longer a mere game empty of any rewards other than playing: it is a

profitable business..." (Mumford, 1934, p. 307). Mumford maintains that in a mechanized society, play is at the mercy of capital. There are no longer rewards from play for play's sake.

Every game must have a meaning, and play must produce calculable results. This prediction, in many ways, holds some similarities with gamification's play for-profit model. Mumford's presuppositions about the brutality of a technological society are heavy-handed. However, he envisions games as precursors to a situation where the *desire* for leisure results in leisure and labor becoming indistinguishable. Both signifiers collapse and become meaningless under the ambiguity of play. Mumford's take on games, toys, gadgets, and play is also premeditative of the later writings of Baudrillard (1981a, 1998b), who links games with simulation and the move toward hyperreality in technologized societies.

Scholars maintain that, for Baudrillard, games and play are ambivalent experiences that suffuse the modern condition of being human (Coulter, 2007; Crogan, 2007). Similar to Huizinga's (1950) space of "social possibility," Baudrillard (1981a) saw games as an exercise in the eradication of reality; perhaps more accurately, the increasing importance of games to simulation is a sign that reality is already eradicated. Play, for Baudrillard, is an act of *seduction*, or complicity with generating and living within an illusion, a world in which simulation has already triumphed (Galloway, 2007). Seduction is the ultimate metaphysical *tromp d'oeil* – a type of charade in which appearances move beyond the stable categories of production or consumption (Baudrillard, 1991a). For Baudrillard, all games represent the situational elements that allow simulation, fantasy, and seduction to infiltrate daily life at the most fundamental levels. Baudrillard holds that life, love, and work are not distinct entities separated from play. Rather, play itself is desire and desire gives rise to all manner of possible ills. One of which is the triumph of simulation over reality.

Baudrillard (1991a) states, "all appearances conspire to combat meaning, to uproot meaning, whether intentional or not, and to convert it into a game" (p. 153). He continues, "We seduce with weakness, never with strong powers and strong signs. In seduction, we enact this weakness, and through this weakness, seduction derives its power...Seduction makes use of weakness, makes a game of it, with its own rules" (p. 165). For Baudrillard, the advent of the information age is also the advent of appearances and signs - seduction is the type of force complicit with technologies of appearance and inscription (i.e., writing, visual art, screens, lenses, and mirrors). Gamified applications rely on channeling seduction through design. They are simulations that invite certain behaviors and utilize play as a form of desire to inspire actions that, in typical contexts, do not make sense. Behaviors like stopping to check in at a coffee shop, or driving to multiple store locations to collect tokens work because of a desire for rewards that often have no value outside the application. What ensues is an increasingly complex system of badges, avatars, titles, and points that form a web of objects linked to the performance of rituals in service to the gamified application's mechanics.

Baudrillard (1981a) maintains that the proliferation of technological objects and their related codes are based on the assumption that nature, as we can

perceive it is mechanistic and capable of being reproduced. In other words, technology improves upon nature on insomuch as nature itself is technological (Lane, 2008). Technology acts as a compensatory mode of being in a world that is increasingly automated. The transferal of human desire and agency to a system of replicable objects and processes fractured any naturalistic relationship between human actors and the world. In turn, the human subject no longer embodies a natural sense of "being" in the world. Rather, the world is populated by simulacra – objects, signs, and representations that human subjects actively observe. The seduced human subject is adrift in a simulative environment that replaces, or at worst obliterates, any notion of reality as a stable concept (Baudrillard, 1981a). Seduction is the active process of this obliteration, the slow and joyful transfer of agency to objects, signs, and signifiers.

Seduction and games are primarily simulative processes sustained by a myriad of technical networks; seduction serves to manipulate and direct the desires of humans. Baudrillard (1991a) maintains that seduction is essentially a mechanic embedded in "a game of simulation" that is being played. This game is not one that someone chooses to play; rather, the game of seduction "plays itself" and human actors are caught up in it. As such, Baudrillard viewed life and game as a mutated category, in which they infinitely refer to each other (Galloway, 2007). A Baudrillardian approach to games implies that "what we recognize as games (digital or otherwise) are merely old order distractions from the real game or perhaps the game of the real" (Simon, 2007b, p. 356). "The virtual is emphatically not the gamic for Baudrillard," Galloway (2007) writes, "it is this world that is the game" (p. 378). Games and play are an order of "psychic complicity" with simulation, a complicity that finds its roots in the seductive system of objects (Galloway, 2007). Games and play here are indicative of a technological imbroglio, one born of rampant computerization and the rapid diffusion of media technologies throughout the developed world: They are indicative of a technologized world, rather than being mere parts.

In Mumford (1934) and Baudrillard (1981a), we see a line of reasoning that postulates games and play as bloodthirsty, seductive forces that serve to direct and manipulate human agency. Seduction is the promise of pleasurable simulation; the idea that technologically supported leisure leads to more leisure, and that more leisure ensures more technology, which in turn ensures more pleasure. For both Baudrillard and Mumford, what ensues is a society in which all meaningful references to labor or leisure collapse, resulting in a world that resembles a game at all times. Labor and leisure become meaningless symbols, replaced by consumer-driven games of chance and luxury. From this standpoint, gamified design represents the epitome of a "game of seduction" in which seduction supplants the game. Seductive applications foreground simulated rewards and supplant free play for playbor's sake – forsaking creativity for efficiency. For Baudrillard, seduction conceptualizes games, play, consumerism, and desire as ubiquitous, directed processes in an increasingly simulated society.

A layman's definition of both games and play might situate them as fun, harmless, ebullient systems – they rise and fall in an ebb–flow cycle that dovetails

with a set of fantastical, ritual, and material spaces. Humans, rather than automated systems, determine the rules, and these rules are agreed upon through a ritualistic pact that has no bearing on reality. However, Huizinga (1950) and Caillois (1961) both noted that games, while existing in a specific categorical space, are actually conjoined to social and material processes. In the works of Mumford (1934) and Baudrillard (1981a), games are a force that can be culturally harnessed and directed toward a variety of means and ends, including social and technological control. In the case of Baudrillard and Mumford, the "pact" inherent in games is always social and technological, and it should be closely examined. Mumford's obsession with games as "mass blood sport" and toys as miniature precursors to weapons - as well as Baudrillard's (2005) assertion that economics are merely games played for the rich – identify the relations between games and dangerous or disruptive technologies as a key concern for both theorists. For Baudrillard (1994), games are complicit with simulation, consumption, and seduction. For Mumford, play objects such as toys are inherently tied to teleological mechanized processes.

Each author's approach is illuminating because it provides a background for gamification's marooned status in early game studies and ludology: The ludic was often conceptualized by scholars as a black and white gaming universe. There was an ethical fault line where a "game" stops short of control and exploitation. The alternative concept, only now being explored in depth, is that games embody a possibly dangerous expansion of control as soon as they are initiated (Dyer-Witheford & de Peuter, 2009; Galloway, 2006, 2007; Rush, 2011). After some examination, ludology's take on both play and games is largely ambiguous; play can be used as a tool for freedom or regulation, for stability or disruption, and for leisure or labor. It is important to keep this in mind when approaching gamification.

## Games and Play as Metaphysics

Philosophers have also construed play as a vital part of human experience. Two key figures in ludological philosophy are Fink (1974), mentioned earlier, and Carse (1987). Fink contends that play was unfairly devalued in metaphysical tradition, and maintained that to understand the world as an ontological concept, play must first be interrogated (Elden, 2008). For Fink, play is a cosmological force that is not necessarily human in nature; rather, is both the cosmos and a symbol of the cosmos - it produces and realizes ontological difference (Elden, 2008). As Fink (1968) states, "the mode of play is that of spontaneous act, of vital impulse...Play is, as it were, existence centered in itself. But while seeming to be unrelated to our normal life, it relates to it in every meaningful way" (pp. 20–22). Play, in an illusory manner, produces the world around us, and it also produces the objects that we interact with in everyday life. Play is like a mirror, or a shadow, of a larger concept; it allows humans the ability to don and discard a variety of social, spiritual, and material possibilities. When playing, people willingly take on new identities, perform new rules and traditions, and create new tools. For Fink, "play always has to do with play

objects. The play-thing alone is enough to assure us that play does not take place in pure subjectivity without any reference to the concrete world around us" (p. 27). Illusion and reality, the extant world and the world we perceive, are all processes of interplay and interpolation – all play produces a "play world" that mirrors and affects the real (Fink, 1968). In other words, social processes, such as language, music, and art, mirror the inherent mimicry that play requires to function – and from this mimesis flows a self-referentiality that defines existence.

Similar to Huizinga's (1950) thesis, play and games are spaces of possibility. However, Fink (1968, 1974) takes Huizinga's conceptualizations one step forward: play is not only the primary source for the social, it is also a "basic existential phenomenon" which is "just as primordial and autonomous as death, love, work, and struggle for power" (p. 22). "We play at being serious," Fink (1968) postulates, "we play truth, we play reality, we play work and struggle, we play love and death, and we even play play itself" (p. 22). For Fink (1968, 1974), play is the polarity of two extreme modes of existence – the clear "Apollonian" moment of self-determination and the "dark Dionysian" moment of panic and self-abandonment. Both are procreative of the world as humans perceive it.

Carse (1987) noted that play revolves around two different world-making technologies: finite and infinite games. Finite games are games that take place in a space – they are contests of power, ritual, and democracy. They are also voluntary and cannot be undertaken if compulsory (Carse, 1987). Infinite games, on the other hand, are games of life. They are games in which the only rules that exist are rules that ensure the continuation of play (Carse, 1987). While finite games are pursuits linked to distinct spatial and temporal boundaries, infinite games are games that transcend both space and time – infinite games play with boundaries. A finite game is a game of Marco Polo. An infinite game, hearkening back to Watts (1995), is a game played via consciousness - a game where the self's position in the context of reality is evolving. More concretely, infinite games are processes. Economics – with its emphasis on constant growth – could also be considered an infinite game - it effectively defines our place in the grand scheme of things. Carse maintains these two types of games mark the boundaries between the world of the social (finite games) and the realm of metaphysical truth (infinite games). He states

the rules of an infinite game must change in the course of play. The rules are changed when the players of an infinite game agree that the play is imperiled by a finite outcome...The rules of an infinite game are changed to prevent anyone from winning the game and to bring as many persons as possible into the play (p. 9).

Thus, finite games are interested in logistic outcomes, and infinite games involve a never-ending process. For Carse (1987), infinite games can be material or spiritual, social or solitary – but they are always productive. Games that involve destruction must inevitably end, thus making them finite.

From the standpoint of gamification, both Carse (1987) and Fink (1968, 1974) reiterate the ideal notion of work as play. Gamification, indeed, holds many resemblances to infinite games. It relies on an infinite loop of playful behavior that nobody can win. Ending a gamified application terminates intended behaviors and the data they produce. Additionally, like an infinite game, gamified applications are only useful when vast numbers of people play. However, unlike Carse's infinite and emancipatory gamespaces, gamification is mostly about the modulation of desire. Players are expected to desire finite outcomes for play, such as badges, gift cards, or avatars. These finite rewards, based in positive reinforcement, are at odds with the reality-shaking implications of Carse's infinite game. It is true that gamification's rules only exist to extend play infinitely; however, gamification's boundary play aims to conceal the compulsory rather than eradicating it. Furthermore, the aims of gamification tie to finite material and social outcomes. Thus, gamification lands squarely on the side of Fink's (1968) world of illusion and shadows. The rewards given for infinite play are decidedly finite, and often they do not "exist" at all, as in the cases of digital badges and titles. From a metaphysical standpoint, gamification's infinite game mirrors Dionysian self-abandonment: It does not replace or supersede work or life; it merely aims to persuade players to forget momentarily.

#### Ambiguous Play

Despite differences in conceptual approaches among gamification practitioners, ludologists and tertiary ludologists are interested in the power of games and play. The short history of gamification just presented brings this interest into direct focus – play is being used more than ever to observe and modulate behavior and cultural production on a large scale. However, defining just what play entails has been a messy discursive exercise. In this section, I move toward an understanding of play as an ambiguous act that does not necessarily connote a set ethical standpoint; rather, it is the discursive treatment of play *as ethical* that often creates a problem in "placing" or "defining" gamification.

Gregory Bateson (1956), a biologist, suggests that play is a paradox because it is and is not what it seems to be. The playful "nip" of an animal at play is both a bite and not a bite; it "connotes a bite but not what a bite connotes" (Sutton-Smith, 1997). Robert Fagen (1981), an animal play theorist, states: "The most irritating feature of play is not the perceptual incoherence, as such, but rather that play taunts us with its inaccessibility. We feel that something is behind it all, but we do not know, or have *forgotten how to see it*" (as cited in Sutton-Smith, 1997, p. 2, emphasis mine). Play's ambiguity seems to be couched in its curious visibility: we can only define play by what happens during its course. Culturally, play manifests in an infinite spectrum that acts as a barrier to stable definitions. Brian Sutton-Smith (1997, pp. 6–7) states:

...biologists, psychologists, educators, and sociologists tend to focus on how play is adaptive or contributes to growth, development, and socialization. Communication theorists tell us that play is a form of metacommunication far preceding language in evolution because it is also found in animals.<sup>1</sup> Sociologists say that play is an imperial social system that is typically manipulated by those with power for their own benefit. Mathematicians focus on war games and games of chance, important in turn because of the data they supply about strategy and probability...No discipline is, however, so homogeneous that all its members are funneled into only one such way of theorizing. Nevertheless, the diversity exists, and it makes reconciliation difficult.

With all of these contingencies present, play appears to be a rather useless concept – it is rhetorically vague and theoretically ungrounded. Theorists and philosophers avoid the concept of "play"; a stable definition does not exist in non-Western discourse (Malaby, 2007). Play is so diffuse that its discursive boundaries seem to infuse everything from warfare to lovemaking to religion.

Perhaps, then, it is best to focus on the ambiguity of play in the context of how it alters the discursive environments where it takes place. Play always seems to occupy a position that implies some mode of power or action is needed to activate, regulate, and direct it. The need to direct or define play as a clearly defined set of activities links to the rhetorical framing of what play entails. Sutton-Smith (1997) points out that play exists between two diametric poles: progress and chaos. Ensconced within these two polarities are several subsets of statements made about play, two of which are particularly relevant to the idea of play in the context of both gaming and gamification: *play as progress* and *play as power*.

The first discursive framework is play as progress. Sutton-Smith (1997) points out that progressive play is a biological approach, one that has, until recently, implied "the notion that animals and children, but not adults, adapt and develop through their play" (p. 9). This belief in play as progress is something of a scientific ideal, and it is often rooted in the epistemology of both biologists and educators. Play is a currency in children and animals that can be used to culturally imbue certain favorable aspects through the application of ludic rules and procedure. Sutton-Smith (1997) states that "most educators over the past two hundred years seem to have so needed to represent playful imitation as a form of children's socialization and moral, social, and cognitive growth that they have seen play as being primarily about development rather than enjoyment" (p. 10). What is interesting here is that this educational view of play is beginning to be transferred to the behavioral analysis of adults, especially in the workplace (Costea, Crump, & Holm, 2005). For example, the research enacted at the National Institute For Play (NIFP) under Stuart Brown (2009) and the psychological research of Mihaly Csikszentmihaly (1990), both approach play as a biological and psychic necessity for the continued growth and health of adult human beings.

<sup>&</sup>lt;sup>1</sup>This could be a reference to Huizinga (1950), Mead (1934), Goffman (1961) or all three.

The change in conditionalities makes play as progress applicable to nonludic subjects and spaces. Play, or at least playful behavior, is a trigger for healthy lifestyles. In the case of Csikszentmihaly (1990), play is a rabbit hole to the realm of "flow" – a timeless space where mastery is the key to joy. For Brown & Vaughn (2009), mastery and instrumentality are keys to bodily health. Both of these researchers assume that play is a golden horizon to be sought out in the drudgery of day-to-day living; it is a key to biological wellness and mindful joy. Play is truly a generative process, in these cases, and it is seen as a lifelong undertaking and part of the duty of every person to live a "good life."

*Plav as power* is the second discursive framework play inhabits. Sutton-Smith (1997) points out that play as power is inherent in games of competition. Games pitting a human player against fate, chance, destiny, and the "will of the gods" are conduits for psychic, social, and material energies. Like Baudrillard's and Mumford's concerns about play's links to seduction, simulation, warfare, and techniques of domination, power, and play focus on play's homogenizing and unifying power - the power to supplant all previous modes of existence for a time. Play as power advocates "collectively held community values rather than individual experiences," and as a rule, it denotes that play is a way to make things more real (Sutton-Smith, 1997). Sutton-Smith (1997, p. 10) states, "The rhetoric of play as power is about the use of play as the representation of conflict and as a way to fortify the status of those who control the play or are its heroes." The view of play as power has its roots in psychological literature about excess energy similar to Bataille's (1991) theory of "general economics" – play is a primitive mode of blowing off excess cultural energy when that energy can no longer be directed toward the expansion of the "economic organism." The explosion of magic, games, sacrifice, and festivals in ancient economies is a way of transmitting power as catharsis or fulfillment (Sutton-Smith, 1997). Play, then, becomes the act that makes other acts bearable.

Play as power also links back to two critical play theorists: Huizinga (1950) and Mihai Spariosu (1989). Huizinga viewed play as a catalyst for culture – the excess energy of play was redirected into spheres such as law, war, art, and even scholarship (scholars do compete with each other by "playing" with ideas and concepts). These connections between play and society are "morphological parallelisms," in which the mastery of games is a catalyst for social hierarchies through the formation of *communitas* (Sutton-Smith, 1997). Interestingly, recent thinkers in biopolitics (see Esposito, 2011) have also pointed out that the potlatch style of playful excess is vital in the formation and regulation of community – the reciprocity of play is the glue that allows communities to form (Campbell, 2011). However, Sparisou maintains that the ties that bind are also the ties that can dissolve (similar to the concept of reversibility in Baudrillard's account of seduction). He contends that play is as much about disorder as it is about order. In this manner, play and games act as disruptive agents just as much as they can be ordering principles. Sutton-Smith states, "there are two conflicting rhetorics about the play: One that says it is positive, as a mode of cultural origination, humanization, catharsis, or socialization, and another that says it is a site for power seeking, domination, and hegemony, or disorder, inversion, and resistance" (pp. 81–82). In short, gamification's definitional quandary lies in the complexity of play, and what it means in terms of individual behavior and the social.

The unifying thread between power and progress *is* the question of ambiguity. That is to say, play links to the environments in which it occurs: It directs and is directed toward a number of possibilities. However, each possibility ties to the concepts of power and progress, two contingencies linked to a host of other social and material processes. In the context of gamification, both power and progress are at stake, yet both are linked directly to the generation of capital, data, and control. A quick look at the history of gamification will confirm this.

## A (Brief) History of Gamification

American pragmatist Mead (1934) situates games and play as key processes in learning how to objectify one's self and take the perspective of others. These acts must precede economics, language, and mathematics. For Mead, play is the original mode of transmission for language, economics, and culture. Mead, another tertiary ludologist, points out a pivotal point in historicizing gamification; games and play are the producers of social systems and ideologies. This revelation leads to another critical point: as long as there are game mechanics and logics that direct outcomes for playful behavior, there exists the possibility of gamification. Gamification presents a prime opportunity to examine emergent history, and it would be impossible to construct a total history of gamification at this point.<sup>2</sup> Instead of totality, a general history that examines the material conditions through which gamification becomes visible proves more useful.

Mathias Fuchs (2014a) states that gamification operates at the level of "ideology" – one that privileges soft power and gift-based economic exchange. Fuchs cites Mauss as one of the first authors to ideologically explore gamification by situating "gift economies" as alternatives to capitalist exchange.<sup>3</sup> Fuchs also cites Georges Bataille's<sup>4</sup> theory of general economics as a

<sup>&</sup>lt;sup>2</sup>Total histories seek to define governing or formal principles to account for a cohesive or "meaningful" history in the context of age, epoch, or period. It also assumes homogenous networks of relations that imply causality. These relations are often arranged by the researcher in an arbitrarily ordered fashion that impart a cohesiveness to the subject matter (Dean, 1994). On the other hand, general histories are nontotalizing, with special interest in details and complexity. The key difference is general history's focus on "series, divisions, differences of temporality and level, forms of continuity and mutation, particular types of transitions and events" and relations of possibility (Dean, 1994, pp. 93–94).

<sup>&</sup>lt;sup>3</sup>Mauss (2000) explored the origin of potlatch style gatherings and festivals in various cultures. His analysis of gift-giving serves as a key reference point for the anthropological exploration of economic systems, which are based in symbolic, playful exchanges that are also deadly serious.

<sup>&</sup>lt;sup>4</sup>Bataille's (1991) theory of general economics explores art, magic, games, and festivals as "excess energy" burned off by the "economic organism." Similar to Mauss (2000), Bataille situates "gift economies" as a predecessor to (and a cure for) capitalism.

precursor to gamification's principle goal of seeing play supersede labor in a viable system of economics. However, Fuchs also notes that by replacing labor with leisure, gamification may bring about conditions where play itself becomes drudgery, thus bringing about its demise. In the end, Fuchs argues that the effort to combine play and labor through gamification has dire consequences. Because leisure and labor politics is where the primary conflict over gamification's legitimacy begins (deWinter & Kocurek, 2014), it is also where I begin its history.

The idea of work as play may have first been explored by Watts (1995) and his Zen philosophy during a series of television broadcasts in the 1970s. Gray (2007), a leisure studies scholar, notes that this revolution ended the idea that leisure is a matter of having more "free time" - instead, as the globalized economy became computerized, work became "24/7," inseparable from everyday life. Coonradt (2007) first proposed in 1984 that games may serve as a better framework for conducting business that follows standard business best practices. Reckoned the "grandfather of Gamification" by Forbes Magazine (Krogue, 2012), Coonradt points out that recreational games provided better motivation and feedback, stable rules of play, and efficient scorekeeping than traditional managerial methods, stating "in recreation participants feel they have a higher degree of choice...Part of the reason for liking a recreational activity is the freedom you have in doing it" (pp. 150-151). Other scholars note a ludic managerial turn. Costea et al. (2005) identify a "Dionysian turn" in the way that play is deployed in the workplace. Costea et al. point out that "play emerges as a managerial resource because it has an affinity with the increased weight placed upon 'work' as a site for the pursuit of collective and individual 'wellness' and happiness as key dimensions of self-assertion" (p. 140). The biological and cultural trajectories of play in the workplace have combined. The authors state that the social manifestation of play embodies an "entitlement to happiness" and a "duty to be happy" as a form of managerial and biological self-work (Costea et al., 2005).

Play, when trapped in the "work-as-play" conceptual webbing, is reframed as a duty in the workplace. Games, the chief modulators of playful behavior, become a form of technology that enables duty. Costea et al. (2005, pp. 143–147) state that

The link between production, consumption, play, and wellness is most clearly evident...the logic here is that effective design of the consumer experience requires moving away from the rationalized logics of the market... results are the 21st century's fully-fledged consumption cultures in which the entitlement to happiness (through choice and consumption) and the "duty to be happy" as consumers *and* as workers are the new dimensions of "citizenship."

In the Dionysian turn, the work-as-play ideal operates as a biological imperative privileging wellness and the "adult" principle of generative labor. Like Dionysus, the god of wine and forgetfulness, the Dionysian turn aims to make

workers forget they are working. What results is an ideological marketing and business ploy that exploits the boundaries between leisure, labor, and life.

Marketing via a conflation of life/work/play has been utilized frequently in predigital forms (Fuchs, 2014b). Although, without networked computing, the scope of gamified projects was usually simple. New York University's Governance Lab has noted that in 1910, Cracker Jack is cited as utilizing the "first" predigital marketing ploy to involve gamification (Verhulst, 2013). Cracker Jack was the first to give away toys in a box. Similarly, frequent flier cards, loyalty rewards and points, and even sophisticated advertising campaigns like McDonalds' *Monopoly* (Zicherman & Cunningham, 2011; Zicherman & Linder, 2010) are early examples of gamification in marketing.

McDonald's Monopoly was a marketing scheme that placed game pieces onto specific items on the McDonald's menu. Styled after the board game, players had to collect matching pieces of color-coded property to win prizes. Certain items of the menu would have game pieces attached - for example, if you matched three pieces of purple-colored property, you would win a significant prize. Also, some game pieces offered free menu items, like burgers and cokes. The game was an enormous success and drove sales up for the McDonald's franchise, leading it to become a yearly offering (Marketer, 2011). McDonald's Monopoly effectively turned the network of franchise stores across cities into a game board, inspiring consumers to change their eating and shopping habits to participate in the game (Hulsey, 2015). For example, a player might buy an abnormal amount of french fries or extra-large drinks because they have more game pieces than other items on the menu. As evidenced by *Monopoly*, early marketing-based gamification was not always simple loyalty tricks, toys, or rewards. In some cases, predigital gamification was also extremely sophisticated, playing with collective labor and social identity.

For example, the fictional character of "Betty Crocker" and her cookbook contests are examples of harnessing collective, ritualistic games that women play with themselves and each other (Horner, 2000; Rossi-Wilcox, 2006). Betty was initially envisioned as a fictional character – or perhaps a nonplayer character (NPC) – whose purpose was to answer consumer mail about home economics and domestic labor in the 1920s. Originally, "Betty Crocker" was all the women of the Home Service Department of the Washburn Crosby Company; however, in a Baudrillardian move, she was separated from her biological counterparts by General Mills to circulate as a signifier in the world of consumer objects (Marks, 2005). After appropriating the faces, voices, and talents of biological women, Betty Crocker won the title "The First Lady of Food" after being named the second most influential woman by *Fortune* magazine in 1945.<sup>5</sup> This honor was based on the (mostly free) collective labor of countless women – Betty was not even real.

Betty Crocker is one of the most sophisticated exercises in predigital, proto-gamification. Most approaches had to do with loyalty programs, punch

<sup>&</sup>lt;sup>5</sup>She "lost" to Eleanor Roosevelt.

cards, and reward programs. Gamification, in its predigital form, only had a few sets of design choices to play, and distribution was limited to the restraints of the time. The digitization of games and gamification expands the array of design practices used in addition to highlighting new modes of distribution, surveillance, and transmission (Whitson, 2013). The term gamification was not used until the implementation of networked computing.

## "Modern" Gamification Goes Viral

In an interview with game journalist Andrzej Marczewski, Richard Bartle – an early proponent of networked gaming – claims to be one of the first computer scientists to use "to gamify" as a verb in the 1980s (Marczewski & Bartle, 2012). Bartle was working on the first ever multiuser dungeon (MUD) and "to gamify" meant to turn a simple text-based "virtual room" into a game. Of course, the intent of "gamifying" the virtual room was to motivate people to use the space. As such, the term "to gamify" originated alongside the first networked game. Bartle sees gamification as a stage in the evolution of a game. Bartle states: "I am a game designer. I want all gamification to take that last extra step and become a game. From that point of view, no example of gamification is done well!" (Marczewski & Bartle, 2012). For Bartle, gamification means to turn a quotidian networked space, which is not a game, into a game (Marczewski & Bartle, 2012). Modern usages of "to gamify" focus on the act of breaking games down into their design components and then strategically distributing them into nonludic environments, an inversion of Bartle's use of the word.

The more modern take on "gamifying" is due in part to the theoretical work on play, learning, and user motivation done at Xerox's Palo Alto Research Center (Xerox PARC). "Motivation," in this case, is an attempt to understand what makes things fun to learn and why people sustain engagement with particular environments and objects as opposed to others. The work on learning and motivation through play is attributed to research done by Thomas Malone (1980). Malone noted that motivational approaches to software design and learning could be modular, a supposition that influenced distance education, where learning applications are referred to as "modules." In the 2000s, Xerox PARC and its alumni made significant leaps in the sociology of digital play and the field of game studies,<sup>6</sup> including addressing the pressing question of how to make labor "fun" (Yee, 2006b). At the same time, the research that was done at the Xerox PARC lab also highlighted the differences between gamification and games by solidifying early definitions of gameplay, gamespace, and play styles. During the first decade of the twenty-first century, relationships between games and learning were primary focuses for ludic research. Additionally, mobile and location-based games also became popular as both art and leisure (de Souza e Silva & Hjorth,

<sup>&</sup>lt;sup>6</sup>Multiple gaming studies from XPARC were published, most notably: Ducheneaut, Moore, and Nickell (2007), Williams et al. (2006), Yee (2006a).

2009). Fast forward to a few years later – "gamification" (a previously nonexistent term) has become, as Richard Bartle (2012) calls it, a "bandwagon."

Gamification went viral quickly in the first decade of the twenty-first century (Economist, 2011; Liyakasa, 2012b; Raczkowski, 2014; Scofidio, 2012; Zicherman & Cunningham, 2011). In 2002, Nick Pelling created Conundra<sup>7</sup> – a company proclaiming that Moore's law determines all devices will become a game or gamelike in the twenty-first century. Conundra was the first to publicly use the term "gamification" in a business context. Pelling's Conundra website refers to hardware alteration, as opposed to manipulating software. While Conundra was "ahead of its time," according to Pelling (2011), Bunchball, the first successful software-based gamification platform, launched in 2007. In 2010, the term "gamification" went viral. Jessie Schell's DICE Conference presentation, named "The Secret Mechanisms" described a world in which "gamification" and the "gameocolypse" conquer all (Schell, 2013). Since 2010 gamification has genuinely become a bandwagon. Three years ago, much-hyped gamification was predicted to plunge into the technological "trough of disillusionment" (Goad, 2011). In 2015, gamification drives market expansion in big data (Boyd & Crawford, 2012; Paharia, 2014), wearable health monitors and calorie counters and fitness programs like Fitbit (Walker, 2013a; Whitson, 2013), informational and business services like Bunchball (Danforth, 2011), commuting like Waze (Lopez, 2012), location-based services and advertising like Foursquare (Zicherman & Cunningham, 2011), shopping applications like Shopkick (Rao, 2012), food applications like Open Kitchen (Van de Zant, 2012), experimental surveillance "games" like Google's Ingress (Hulsey & Reeves, 2014), and social "games" like Farmville (Luscombe, 2009). The trough has, thus far, not materialized.

In 2013, the study of gamification was "standardized" with the development of Octalysis (Chou, 2013). Octalysis works as a sliding octagon, with point holding a different logic. As different mechanics work toward various outcomes, the shape (or the weight) of the octagon changes. Thus, different applications can be examined based on the game mechanics present to determine what aspects of gamification they utilize and how gamified they are on a comparative scale – gamification literally takes a shape. Octalysis solidifies gamification as a set of diverse design practices centered on intrinsic, playful and motivational game mechanics embedded into devices or applications. For Chou (2013), gamification's design is ethically fluid, and design choices separate into "Black Hat" and "White Hat" partitions (Chou, 2013). Black Hat<sup>8</sup> gamification, similar

<sup>&</sup>lt;sup>7</sup>A cached copy of the original website is available for historical research (see Pelling, 2002). <sup>8</sup>Black hat hackers seek to disrupt security protocol, often for personal gain (Moore, 2005). Black Hat gamification usually deals with scarcity, competition, and compulsion. One example of "black hat" gamification is McDonalds' *Monopoly*, which uses chance and scarcity to drive harvesting behaviors. It is important to note that black hat and white hat hacking are two sides of the same coin; they merely embody different motivations. This is also true of black and white hat gamification, where applications can have white *and* black hat mechanics embedded.

to the hacking moniker, plays with the compulsory side of game mechanics like scarcity and competition. White Hat<sup>9</sup> gamification, once again like the hacking moniker, consists of positive motivational reinforcement like achievements, digital property, customizability, and points. From Chou's (2013) methodological perspective, gamified applications represent a somewhat ambiguous set of practices playing with both motivation and compulsion.

#### Advergaming

It is the distinction between motivation and compulsion that permeates the recent history, and controversy, surrounding gamification. However, advances in computing drive gamification as a viral set of design practices. While Coonradt (2007) proposed personal solutions for increasing productivity in the workplace and mitigating stress, recent technological trends promote that game thinking can work as a collective solution to productivity and motivational issues on a truly massive scale (Byrne, 2012; Kim, 2012; Nicholson, 2012). Far from Watts' (1995) idealist conception of work as play as a way of becoming, gamification has widely been proposed as a business solution – it is this proposition that links back to gamification as a behaviorist technique altering daily practices. Although the word itself is new (Deterding, 2012; Fuchs, 2012; Liyakasa, 2012a; Mosca, 2012) the concept is at least two decades old.

The current visibility of gamification comes on the heels of advertising and motivating through networked, social videogames (Clavio, Kraft, & Pedersen, 2009). Social media games, such as *Farmville*, exposed a new brand of consumer provisionally called the "cyberfarmer," an ideal consumer whose loyalty is bought with virtual goods rather than expensive real-world loyalty rewards (Luscombe, 2009). Farmville led to the development of "advergaming," or building games that showcased a product, location, or service using persuasive elements such as avatar customization driven by a "harvesting" mechanic (Bailey, Wise, & Bolls, 2009; Choi & Lee, 2012). Advergaming also had internal uses for the workplace - by attaching points and rewards to daily tasks, employers sought new ways to manage production and consumption within the workplace (Byrne, 2012; Liyakasa, 2012c). However, advergaming had inconclusive results in promoting consumer action; it produced affective responses to products and brands, but it did not drive extended cognitive or behavioral outcomes (van Reijmersdal, Rozendaal, & Buijzen, 2012; Sukoco & Wu, 2011). For example, players' retention of brand information was not revolutionary after playing a brandrelated game (Sennott, 2005). The failure of game-based marketing to produce

<sup>&</sup>lt;sup>9</sup>White hat hackers seek to shore up and reinforce security protocol (Moore, 2005). White hat gamification seeks to reinforce behaviors with positive, rather than negative, feedback. One example of "white hat" gamification is *Foursquare*, which takes a less competitive and more collective approach to gamifying social spaces by positively reinforcing certain renditions of spatiality. However, *Foursquare* also contains competitive mechanics (e.g., the "mayor" function); most gamified applications have a variety of mechanisms that span both black and white hat mechanics.

extended engagement with a brand was because the advergames themselves were self-contained systems, that is, they produced motivational results solely within the context of the game and its rules (van Reijmersdal et al., 2012). When the game ended, so did the spike in engagement and retention. This problem harkens back to the difference between Carse's (1987) finite and infinite games – to truly make money and later behavior for an extended period, advergaming needs to be infinite.

Marketers assumed that game dynamics nested in advergames also needed to be divorced from the idea of "a game" to produce reliable results (Zicherman & Cunningham, 2011). Games are, by most standards, self-contained worlds with their timelines and sets or rules. If producing and consuming are 24/7 pursuits that rely on maintaining interest, efficiency, and overall motivation, then the idea of a single game would be insufficient to fulfill the dictum of work as play. Ideologically, marketers believed that game dynamics must be pulled from their ritualistic bubble and directly injected into everyday life. Alternate reality games (ARGs), like *Majestic*, released in 2001, had been successful in puncturing the thing divide between everyday life and gaming (Taylor & Kolko, 2003). Marketers sought the same hybridized effect. In order to drive engagement, the affective nature of gaming must become extrinsic, tied to real-time physical and economic events, and the mechanics and the logics behind the gamified application must be continuous.

The smartphone and tablet computer provided the platform to test out a mode of attaching game dynamics to everyday behaviors and locations while ensuring the gamified system was always present (Keats, 2011). Trade journals noted that the mobile revolution would usher in a new era of customer interaction and workplace management (Clavio et al., 2009; Keats, 2011; Naughton, 2003; Qin, Rau, & Salvendy, 2009; Rizzo, 2008; Sennott, 2005). Industry blogs asserted that "what yesterday's science called Human-Computer Interaction (HCI) is today's art of playing" (Gopaladesikan, 2012). The success of this venture has been confirmed, with applications like *Shopkick* – a gamified that rewards players with points for entering stores and locating products – generating millions of users, check-ins and product views (Ha, 2011; Rao, 2012). From the "cyberfarmer" to the always-on amalgamate subject of employee/consumer/player, gamification's uses are just now beginning to be explored by researchers. However, the concepts behind gamification are quite old, and the money (and data) has been flowing in for quite some time.

## Gamification and LBMGs

The increasing flows of global data, risk, information, and capital become enabled by the "collapse" or, perhaps, contraction of space and time (Harvey, 1990, 2006). The contraction is due partly to cellular infrastructure, mobile devices, and, more specifically, "smart" devices that are location-aware (Bell & Dourish, 2007; Dourish & Bell, 2007, 2011). The abilities of networked and location-aware devices have led de Souza e Silva (2006) to propose the concept of "hybrid space." Hybrid space hinges on the idea that mobile devices are not just modes of two-way communication; instead, they serve as microcomputers embedded in social space that connect data spaces to physical locations and social networks (de Souza e Silva, 2006). Hybrid spaces, then, "are mobile spaces, created by the constant movement of users who carry portable devices continuously connected to the Internet and to other users" (de Souza e Silva, 2006, p. 262). Hybrid space assumes that connected users are operating in a hybrid reality where a "mix of social practices…occur simultaneously in digital and in physical spaces, together with mobility…" (de Souza e Silva, 2006, p. 265). Because hybrid reality is co-produced through social uses of technology, spatiality, and infrastructure, removing data from space produce unalterable consequences.

In other words, hybrid realities and their associated spaces are inextricable from the data, technology, and users embedded in them. de Souza e Silva (2006) encourages a reframing of what "physical" and "digital" spaces entail through her analysis of "mobile interfaces" (p. 273). These interfaces do not just translate between data spaces and lived everyday activities. They fuse the two in an amalgamation of location awareness, smart navigation, crowd-sourced locational information, visually represented social networks distributed across space and data feeds linked across multiple global networks, including mobile, hybrid gamespaces. Advergaming, which was highly localized, began its shift toward gamification and pervasive gaming when combined with LBMGs. Mobile gaming initiated a collapse between the perceptions of "physical" and "virtual" gamespaces (Chan, 2008; Hjorth, 2011; Richardson, 2011; de Souza e Silva, 2008). LBMGs share many aspects with pervasive games, games that "expand" the magic circle (Montola, Stenros, & Waern, 2009). However, LBMGs utilize very distinct technologies, such as location-aware devices. Montola et al. (2009, p. 503) state:

A pervasive game is a game that has one or more salient features that expand the contractual magic circle of play spatially, temporally, or socially... The game no longer takes place in certain times or certain places, and the participants are no longer certain. Pervasive games pervade, bend, and blur the traditional boundaries of game, bleeding from the domain of the game to the domain of the ordinary.

Pervasive games exist in the intersection of "phenomena such as city culture, mobile technology, network communication, reality fiction, and performing arts, combining bits and pieces from various contexts to produce new play experiences" (Montola et al., 2009). Perhaps the best examples of pervasive games are those that have a diffuse "space" in which they take place, such as some LBMGs that rely on pervasive techniques.

However, pervasive games do not have to involve advanced or networked technologies. For instance, games like *Assassins*, where players stalk others with water guns over a series of days and weeks, and live-action roleplaying (LARP) are also considered pervasive even though they need not involve digital or mobile devices. Both types of games are open-ended and take place across diffuse spaces;

they appropriate quotidian spaces and convert them into gamespaces. LBMGs, on the other, utilize mobile devices that constitute as "mobile interfaces" (de Souza e Silva, 2006). Mobile interfaces, de Souza e Silva (2006) states, combine "portability, social interactivity, connectivity, individuality, and context sensitivity." These devices can network players together, enable communication, and transmit locational data.

Early LBMGs such as Can You See Me Now? and Mogi revealed that a variety of unique behaviors related to location-based gameplay (de Souza e Silva & Hjorth, 2009; Licoppe & Inada, 2010). Mogi, a Japanese LBMG demonstrated that the networked display positional data (where the player's position can be marked and commented on) also provides users with resources to recognize their co-proximity while not necessarily being co-present (Licoppe & Inada, 2010). Players used this information to simulate future encounters with other players and, as a result of gamified lateral surveillance, changed their spatial practice in a number of ways including seeking out new social encounters, avoidance, mediated pro-sociability, and, at worst, stalking-type behaviors (Licoppe & Inada, 2008, 2010). From the standpoint of play, these behaviors indicate players would, for an extended period, change their typical behaviors in favor of engaging with locations and other players via the LBMG. In Mogi, players altered their daily routines in order to meet or avoid other players in the city (Licoppe & Inada, 2010). Gordon and de Souza e Silva (2010) point out that "most LBMGs lack a predefined game structure; that is, they do not have a clear end and are always running as long as there are users connected. Most importantly, gameplay often converges with 'real' life" (p. 60). This convergence is what makes LBMGs pervasive, and it also is what gives gamified applications their ability to reach far outside of bounded-off gamespaces.

Because LBMGs usually employ networked mobile interfaces, they can transmit continuous data concerning gameplay and location. This continuous transmission is necessary for gameplay, and also creates a unique environment for embedded surveillance of the type that gamification employs. However, LBMGs are also about producing new forms of play (de Souza e Silva, 2008). LBMGs introduced a new gaming logic that extricated gameplay from a set of highly redistricted spaces: They moved play from being confined to a screen or board to constant engagement with both physical and digital spaces (de Souza e Silva & Sutko, 2008). A vital example of this move is the formation of Baudelaire's flâneur into the "phoneur" (de Souza e Silva, 2008). The flâneur reframes the city through a series of playful actions that turn the city and its flows of power into a modern, observational game; the *flâneur* both participates and observes in an unaffected manner (de Souza e Silva & Hjorth, 2009). The flâneur observes, but the phoneur experiences and *is experienced* by others who are also embedded in hybrid gamespace. The phoneur, as a player, participates alongside "intimate strangers that inevitably get caught up in the gameplay" while "the magic circle of the game automatically fades and is blurred with the order of various 'flows' - geographic, electronic, sociopolitical - of the context" (de Souza e Silva & Hjorth, 2009). LBMGs "take the phoneur away from... apanoptic mechanisms" present in many mobile media practices and "place the phoneur in the pushing and pulling of play" (de Souza e Silva & Hjorth, 2009). For example, in the game *Botfighters* players would always alter their quotidian routines to engage with other players in combat, sometimes riding through the city until they came across an enemy combatant (de Souza e Silva, 2008). However, it is also important to note that phoneurism can also be networked into larger systems of surveillance while still using hybrid gamespace as a motivational apparatus – the development of gamification provides an example of how LBMGs have been instrumentalized into larger networks of control and capital.

The development of LBMGs allowed advergaming to move beyond contained or localized gamespaces and into hybrid space. Thus, the tracking and surveillance capabilities embedded in hybrid gamespaces to advance play are also tools that can be used to collect profitable data. For gamification, this involves recording players and gauging their efficiency is performing desired behaviors. The behaviors of players, which mechanics seek to influence and harness, is key to gamespace – the players' bodies in space is the primary mode of generating data and profit. This is a crucial point in examining the history of interactions between LBMGs and gamification: the conversion of the quotidian space into the gamespace and the subsequent conversion of the player into profit.

Location-based gamification emerges at the end of a few phases in the development of LBMGs. The research phase of LBMGs consisted of experiments and art projects such as those conducted by the research and art group Blast Theory – e.g., Can You See Me Now? (2001) and Uncle Roy All Around You (2003) – both of which have been covered extensively by research on LMBGs (Gordon & de Souza e Silva, 2010; de Souza e Silva, 2006, 2008; de Souza e Silva & Hjorth, 2009; Sutko & de Souza e Silva, 2008). This phase focused on the interactions between players and technology and the feasibility of creating LBMGs. They were hampered by technological limitations, for example, players in Can You See Me Now? wore backpacks and carried GPS units. The second phase occurred as smartphones with built-in GPS began to come to market this phase is the social networking phase. Early LBMGs, such as Mogi (2003), which was played in Tokyo, made heavy use of social networking. These types of games went from localized gamespaces to international sensation with the emergence of social networking platforms such as Foursquare (2009), which is covered extensively in later chapters. Foursquare provides a transition into the current phase, which combines social networking and LBMGs with advergaming - the gamified phase. This phase is currently occurring. The gamified phase is less interested in exploring the possibilities of play and more interested in using location-based play for profit. Foursquare makes its money off selling location-based ads and customer data. Ingress (2013), another gamified LBMG covered later, also profitably generates data. Both games focus on efficiency in collecting friends and navigating/exploring the city for social capital and titles (Foursquare) or holding territory for points (Ingress). This efficiency links to the movement of the body through space, and the constant surveillance of the body in regards to gameplay efficiency - in other words, efficiency is rewarded *and* recorded. These rewards and data apply to purposes outside the

games itself – they are instrumentalized. This focus on surveilling and training the body toward efficiency in gameplay plays into discursive links between computation and behaviorism.

## Gamification, Computation, and Behaviorism

While gamification has only been "named" in the past two decades, it has its roots in the development and dispersal of networked computational devices. That is to say, gamification only exists through the networked media technologies it utilizes, technologies that began to proliferate as early as the 1970s (Leiner et al., 2009). The computer, with its hyper-logical simulative capabilities, was especially responsive to logistics derived from mathematical game theory (Halpern, 2003, 2007). Computing and simulation, much like gaming, rely almost entirely on propositional statements expressed through a specific language or code. Alan Turing's universal machine, the building block for almost all computational systems, is based on a simulated "game" played with a set of tables (Turing, Post, & Davies, 2004). His universal machine is actually a series of simulated counting machines playing a recursive logic game. In modern terminology, this is "running a program." Computers and computer programs are logic games; however, they are referred to by Turing as "simulations" because machines (currently) lack a biological predisposition toward play (Baudrillard, 2001; Turing, 2004).

As many scholars have noted, the similarities between computational code and game theory are marked, as both derive from similar mathematical principles (By, 2012; Crookall, 2010; Klabbers, 2009). As such, games and play acted and modes of transmission for computing, and specifically networked computing; as early as 1963, game theory and games (which are visual expressions of game theory calculated by a computer) were used to demonstrate the use of computers as both logic machines and artificial intelligences (Jorgensen, 2009). As computers increasingly became necessary for monitoring the growing global economy, game logics were further integrated with computational systems and are present in many aspects of basic systems design (Halpern, 2003). Game logics, software design, and simulation from a computational standpoint are mutually constructive of one another. For example, all of Turing's computational tests, which are benchmarks for modern computing and artificial intelligence, were games (Turing, 2004). At its most basic level, computation involves simulation-based devices. Because games and simulations are very close, almost all early programming designs were tested and simulated via games and game dynamics.

The mutuality of games and computation is what allows for computers to perform simulative calculations necessary for the basic functionality of software programming ranging from economics to basic locational applications like navigation services. They are also intrinsic to networking applications (Halpern, 2007). Games, from the standpoint of game theory, are built into the fabric of computational protocol. Game theory, the theory of decision-making, probability, and contingency, played an essential role in the development of simulation, computer science, and economics. The decision-making paths of economic agents can be calculated, based on contingency, as branching trees related to possible gameplay scenarios, utilities, and choices (Hulsey & Reeves, 2014). Additionally, game theory has been used to explain evolutionary outcomes (Consalvo et al., 2010). While game theory is not necessarily a game, it uses games as ways of understanding the paths and possibilities that agents may take. Thus, game theory has also been used as a basis for creating algorithms and artificial intelligence. Most important, game theory is also unique in that it can map the transmission and formation of power – the relationships between actors as they move (Fuchs, 2010). In the study of gamification, games, game studies, and mass computing are circuitously connected. In the Mobius loop of a gamified environment, the data generated by players support more simulation, more monetization and, of course, more play. Their behaviors are mapped, and the environment is altered via mechanics to account for deviation or counterplay. All decisions must conform to the logics required in producing the needed data.

Gamified design is the direct result of detaching *game logics*, game theory, and game design practices from the concept of a self-sufficient "game." Most notable is the use of *game mechanics*, which aim at influencing user motivations when they engage with a product, brand, location, or social network (Deterding, 2012; Kim, 2012). Game logics encode the outcomes of player choices through algorithmic sequences and represent the rationale for the end-state of actions produced in the game (van Benthem, 2003). Game mechanics are the specific architectural qualities of game design – the formal or structural components that constitute rule systems, constraints, and pathways (Sicart, 2008). However, despite the addition of gamelike elements, gamification does not equate "turning something into a game." Gamified design is mostly about creating an environment where certain types of behavior, namely compulsive play, are encouraged and monitored.

Humans, it turns out, are compelled to play. Downplaying behaviorism in gamified design is a result of negatively typecasting game mechanics as Pavlov-style experiments in making "fun" superficial, with play behaviors serving a much deeper purpose. Scholars often base their judgments of gamified environments on the ethical assumptions that games make things better, regardless of where and how they deploy. However, all software courts behaviorism; design, after all, is meant to facilitate behavior (Norman, 2008, 2011). Computation itself is noted as a double-edged blade by scholars, who state that the transferal of behavioral agency to computers can have lasting effects on interpersonal and macro social spheres (Levy, 1997; Turkle, 2011). In the end, operating on simplistic ethical notions of games and play is not well suited to the processes and forms of gamification.

#### Gamification of Culture

Pressing issues concerning ontologies of play, the epistemological frameworks of gaming, and ideological issues plaguing the so-called separation of leisure and labor have led to a greater awareness that games and play exist as practices embedded in material culture. Material culture, here, refers to a distinct approach to cultural activity that emphasizes culture as a practical activity (Marx, 1997). In other words, culture is not a stable history of ideas or meta-narratives but rather a

diverse collection of practices embedded in everyday activities (Lefebvre, 1991). Materialism holds that all cultural processes are, to some degree, material processes (Williams, 1989). They involve actual constraints that are the result of heterogeneous times and spaces (Massey, 1992). The ability to engage in cultural production is based on a wide array of problems and conditions: who is allowed to communicate; how are people communicating; what technologies are available to whom; how and why are these technologies available?

This short list of issues does not do justice to the vast array of approaches and problems embedded in a materialist approach to culture. However, they serve as the groundwork for examining what many would claim is the primary goal in a cultural approach: examining the relationship between power and cultural production (Couldry, 2000). So, from a cultural standpoint, gaming works "simultaneously as central nodes in the organization of contemporary leisure culture, computer-mediated interaction, visual culture, and information societies" (Simon, 2006, p. 64). When examined alongside these particular loci of concerns, gamification's version of play does not exclusively represent a black box marketing methodology aimed at behavioral modification and surveillance, but as sign and symptom of a media-saturated culture that has deep historical, cultural, and technological roots.

Gamification, like games, also represents "critical locations for understanding the role of digital technologies in mediating and constituting the social interaction and organization of subjects in late modern information societies" (Simon, 2006, p. 66). For example, Boellstorff (2006, p. 33) states, "many games, and other forms of interactive media...that are less clearly game like, are taking on cultural forms in their own right... These cultures cannot be reduced to the platform; that is, the rules and programming encoded in the game engine." Like gaming, gamification also encompasses the meanings created through individuals and groups playing from both a productive and consumptive standpoint.

Malaby (2007) suggests that games are "dynamic and recursive" in that they reproduce their form over time and space, but also encode within themselves the pattern for change. Key here is that gameplay embeds the desire for control alongside the possibility for alternate, appropriated meanings. Malaby (2006) suggests that on the surface, games are a series of processes based on *contrived* contingencies; outcomes that, theoretically, can be contained and constricted through the rules of play (or perhaps, the rules *in* play) but also rely on openendedness and subjective interpretation. "Contingencies" represent "that which could have been otherwise" (Malaby, 2006, p. 106). As Huizinga (1950) suggests, games are germination spaces for perpetual cultural recalibration that operate through a series of external relationships. Games contain, according to Malaby (2006, p. 107), the "fundamental quality of multilayered contingency that allows them both to mimic and constitute everyday experience." "Contrived" suggests that games are both ordered and disordered. Unlike bureaucratic rules and regulations, the contingencies created through ludic processes are not aimed to "reduce unpredictability across cases" (Malaby, 2006, p. 105). Rather, ludic processes "are about contriving and calibrating multiple contingencies to produce a mix of predictable and unpredictable outcomes" (Malaby, 2006, p. 106).

Malaby implies that gameplay, from the standpoint of intent, encourages exploration and pathfinding as much as they require a player to abide by rules. Gameplay embodies a fluid system of control that relies as much on innovation as it does compliance. He (2006, p. 106) claims:

...the contrivance of these sources of unpredictability is achieved through various modes of control...these modes of control additionally include the architectural (encompassing the gamut of relatively non-negotiable and concrete constraints, from physical layout and landscape to the implicit code of online games), the cultural (the set of practices and expectations that are often implicit and taken for granted), and the economic (the familiar constraints of the market in all its forms). Games are distinctive in their achievement of a generative balance between the open-endedness of contingencies and the reproducibility of conditions for action.

One key aspect of this open-ended approach to contingencies is that games promote multiple configurations across social and technological matrices. The multiplicity of outcomes and interpretations that games produce are subject to varied, culturally shared, meanings that are consistently decontextualized in the realm of practice.

Thus games are a set of practice-based contingencies that are *generative*. Psychology describes generativity as a human "need, drive, concern, task and issue" that involves socially and environmentally transferring specific traits or characteristics from one generation to the next (McAdams & de St. Aubin, 1992). Jonathan Zittrain (2008) expands this definition to technology. He defines generativity in terms of software or technology-related "generations." He states, "generativity is a system's capacity to produce unanticipated change through unfiltered contributions from broad and varied audiences" (p. 70). Under Zittrain's definition, *generativity* results when technologies enable users to generate, create, or produce new content unique to that application. One key aspect of generativity is that content appears without additional input from the designers of the apparatus in question. Critical examples of generative technologies include open-source software and hardware, most video games, and the Internet (which allows users to produce and sustain a myriad of content via the World Wide Web).

Generativity, according to Zittrain, requires both technological and social actors. For example, Molesworth and Denegri-Knott (2007) examine how gaming, and constructing meanings through play, is an act of consumption. However, rather than accumulating, hoarding, and territorializing resources, gaming operates through complex, liminal activities that occupy a culturally productive position that tethers the practical activity of using goods with a malleable digital sandbox. Meaning-making in-game culture blurs the lines between producer and consumer, occupying a liminal space that encourages change, performativity, and imagination (Molesworth & Denegri-Knott, 2007).

Players adopt a "doing with" attitude, actively embodying both regulative, ritualbased contingencies and an imaginative "acting out" attitude that links the imaginative function of possibility with the practical function of "making real" (Molesworth & Denegri-Knott, 2007). This dynamism between consumption and production, the small and grand narratives of cultural performativity, accentuate both Malaby (2006) and Boellstorff's (2006) claims that games may underline a renegotiation of the processes through which culture is coded and decoded in the digital age. Boellstorff (2006, p. 33) states that

Most persons who participate in games and other interactive media...play more than one game...We are seeing the emergence of cultures of gaming on a range of spatial scales – some local, some national or regional, some global – shaped by a range of factors from language spoken to quality of Internet connection.

Gameplay, then, is interpreted as a broader set of meaning-making practices that are conducive to the formation of a "game culture" shaping the landscape and definition of games. "Cultures of gaming" are the diverse and segmented practices embedded within an extensive cultural milieu tied to specific modes of play behaviors modulated by games and related technologies.

The decentering of gameplay as a ritual practice set apart from more "serious" social processes has resulted in a growing interest in the "gaming of culture." Boellstorff (2006) maintains that "As [gaming] gains in significance, [it] increasingly affects the whole panoply of interactive media, from television to movies to cell phones to the Internet in all its incarnations. Gaming also shapes physical-world activities in unexpected ways, including the lives of those who do not play games or participate in interactive media" (p. 33). The gaming of culture is perhaps similar to what Baudrillard (1979, 1981a) envisioned when he proposed that seduction and gaming were part and parcel to the (de)programming of reality. Gaming culture has been linked to many "nongaming" practices. Key here are military research and simulation (Allen, 2011; Veen, Fenema, & Jongejan, 2012), ludic consumer practices as they relate to the expansion of neoliberalism (Dyer-Witheford & de Peuter, 2009), and the search for play-centric education, which has seen a vast surge of interest in exploiting the "learning power" nestled in games, particularly as a subset of a so-called "participatory culture" that is driven (in part) by the expansion of computer games and playful, gamified applications (Squire, 2011). It might be said that the study of gamification contributes to the "gaming of culture."

The culture around us is beginning to resemble a "play of the machinic unconscious" (Colman, 2012) or perhaps just *machinic playgrounds*: spaces where the datafication of everyday life incorporates game mechanics to feed, direct, and influence collective and individual desires on an increasingly micro scale. The ambiguity of play leads to ambiguity in games. Ambiguity is what often results in games being boxed into a magic circle that defies inherent ethical issues such as power or progress. However, the study of gamification demands that scholars dig between the polarities of power and progress. Gamification *is* about play, albeit a strange interpretation of it, and it *is* about power and progress. In a way, it *is* about games, as well. It affirms that games/play and power/progress are just a few sides of the same cultural prism, a prism that projects no ethics, no play, and no games beyond the spaces where it resides. What our "gamified prism" reveals is a different spectrum of contingencies for each source of light, each room, and each experiment where it finds itself useful.

Gamified design is comprised of embedding game logics and mechanics into nonludic environments to create and maintain engagement with a system or groups of systems. It ties the user to the interface and greases the wheels of surveillance capitalism, keeping workers in the data mine. As such, it is a set of practices concerned with producing material and social results not inherently concerned with play or playfulness as a free or spontaneous act.

The idea that players are not necessarily in control of the system has been suggested multiple times, including by early ludologists (see Caillois, 1961 on "games of chance"). Gamification employs gamelike qualities in the form of mechanics and logics. It also does attempt to inspire playful behavior, channeling the desires of users, although it does not produce the type of play often associated with both digital and analog self-referential, or perhaps finite, games. The design choices that exist in many examples of gamification – such as points, progression, levels, customized avatars, and rewards - are gamelike elements. Gamification aims at making everyday tasks enjoyable in many cases. However, the intent behind these design choices means that gamified systems do not necessarily result in a self-contained game, nor does it exist entirely within the boundaries of game culture. Gamification distributes game logics and mechanics through systems that do not always have play in mind. Gamified environments do not focus on playfulness as a set of definite or self-referential outcomes. Playful behavior, in this manner, is similar to a human resource. However, this "resource" is a state of being that can be directed toward decidedly nonplayful ends, such as efficiency and profitability in everyday life (faster work, healthier body, better navigation).

In a gamified environment, there is rarely a prince or princess to rescue or a galaxy to save. There is no spontaneous yelling of "Tag, you're it" or "Marco Polo!" Rather, the formal qualities of gamification operate alongside a meta-narrative of consumption and production, embedding any playful aspects produced by the gamified system into much larger circulations of labor and capital not directly related to the gaming industry or the purchase and use of self-contained "games." This meta-narrative leads to two distinct possibilities. The first is the "indebted man," or players whose everyday lives depend on a system of play for data, where gamified logics economize and indebt their datafied bodies (Lazzarato, 2012). The second possibility is that gamification is a system of "machinic enslavement" that modulates "pre-individual, pre-cognitive and pre-verbal components of subjectivity" (Lazzarato, 2006). In this case, the exploited preverbal and preindividual component is play – natural urges codified into application design. Most gamified applications generate revenue not through the distribution of the app, but through the data generated by its use. Similarly, gamification in design software is aimed at increasing the user-friendliness of the interface or the simulative capabilities of system - both lead to efficiency and, by

extension, profitability. As such, the formal qualities of gamification do not produce gameplay in the sense that "players" engage with a "game." Rather, gamification creates players who engage with gamified environments in the context of everyday activity.

Gamification serves an overriding logic that does not always congeal with play as a free or open experience. Rather gamification serves the logic that pleasure is not happiness or healthiness *in situ*: pleasure *keeps* people happy and healthy no matter what their proximal or locational situation may be. Additonally, pleasure can be gained by ever-increasing efficiency, so long as that efficiency is achieved through play. As such, play is seen in a much different light when gamified – it is a force to be directed and controlled. Play, in the case of gamification, must be viewed as a form of power that affects the player's relations with the world around them and the game logics. Power through play is a series of relations that involve the game having power over the player, the player overpowering the game, and the relations between both redefining how the course of gameplay unfolds.

Because of this, gamification, in many respects, challenges some of the canonical conceptualizations of both play represented here. Gamified applications are not games, but rather collections of design practices that serve a rationale utilizing playful behavior as a power source. They do not necessarily follow genre formats, and many times are undetectable without expertise. Gamification does not necessarily present a "different" or "new" set of social or material concerns when it comes to playing; instead, it warps how play operates, and by extension destabilizes past definitions of what play actually might entail in the twenty-first century.

Gamified design is theory. It concerns itself with how networked players work together, through seduction, to produce playful sets of contingencies not typically associated with "free," "harmless," or "ritualized" games as defined by Huizinga (1950) and Caillois (1961). Gamification's form of gameplay operates closer to the murky side of play - the ambiguous, Baudrillardian contract. It is seductive as much as it is ludic. It is consumerist, connective, and controlling. The types of gameplay produced by gamified applications are closer to instrumentality, where the subject naturalizes into a networked, monitored, and generative system. Gamification entails utilizing parts of a game – the mechanics, rules, and rewards - to increase the predictive capabilities and/or efficiency of much larger systems. It promotes repeated noncoerced engagement within a set protocol for a result outside of the gameplay itself. It records player actions for the profit of the designer and the continuation of engagement with the system and taps into the business of leisure and pleasure through harnessing playful desires (Zicherman & Cunningham, 2011; Zicherman & Linder, 2010). Different combinations of design choices, technology, and modes of deployment serve to meet each of these conditions.

## Conclusion

In this chapter, I have explored past interpretations of play and their relationship with gamification. I have focused on decentralizing play and games from their current moorings by suggesting that focus on games and play should be contextual rather than monolithic; both should be treated differently in different contexts, especially in regards to power and control. I have also suggested that both games and play are ambiguous in their cultural outcomes and that gamification should be a set of cultural practices appropriating ludic activity.

The scholarly focus on gaming and gamification has been one of the definitions and outcomes. Namely, my analysis has revolved around what role games and gamification play in culture at large and how gamification is used for one end or another. Following Baudrillard (1981a) and Fink (1968, 1974), games play with ethics, history, and life itself in increasingly ambiguous ways. Gamification is now far removed from Watts' (1995) Zen idealism, and as gamification becomes prevalent, it is time to focus on how everyday tasks and occurrences begin to resemble machinic playgrounds. Gamification plays with all boundaries: it expands across tasks, times, spaces, and even species. Games, gamification, and gameplay are all around us, hiding in places previously unseen. The next two chapters analyze the historical connections between games, game theory, simulation, and computation. Developments in game theory and simulation coincide with the current flood of data and modeling, commonly called "big data." I trace the impact of game theory across multiple fields, setting up an argument for interdisciplinary approaches to gamification and paving the way for an examination of gamification links with early simulation.