
Beyond Play

A New Approach to Games

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Games have intruded into popular, academic, and policy-maker awareness to an unprecedented level, and this creates new opportunities for advancing our understanding of the relationship of games to society. The author offers a new approach to games that stresses them as characterized by process. Games, the author argues, are domains of contrived contingency, capable of generating emergent practices and interpretations, and are intimately connected with everyday life to a degree heretofore poorly understood. This approach is both consistent with a range of existing social theory and avoids many of the limitations that have characterized much games scholarship to date, in particular its tendency toward unsustainable formalism and exceptionalism. Rather than seeing gaming as a subset of play, and therefore as an activity that is inherently separable, safe, and pleasurable, the author offers a pragmatic rethinking of games as social artifacts in their own right that are always in the process of becoming. This view both better accords with the experience of games by participants cross-culturally and bears the weight of the new questions being asked about games and about society.

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With games' vastly increased prominence, game scholars are now (finally, many might say) being asked to illuminate policy makers, interested media, and the public at large on what games mean. The range of uses to which online games are put by their users, the development of games as spaces for learning, and the sheer growth of the computer game industry cannot but prompt these new questions. This is an important opportunity for game scholarship to make a contribution at a scope that exceeds its previous ambitions. Whereas until recently the study of games

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contented itself with the limited purview suggested by the play concept, we are now at a point where a reconceptualization of what games are reveals a whole new vista for social theory and research. In what follows, after briefly discussing the play issue in more detail, I offer a framework for understanding games that sees games as grounded in human practice and as fundamentally processual. I then point to the important recent developments in what games are that have furthered their potential to approach the texture of everyday experience. The contingent nature of human experience was recognized by the phenomenologists, and the pragmatists before them, but its connection to the major institutional projects of modernity, such as those charted by Max Weber (1946), has not been elaborated. Seeing games as, fundamentally, socially legitimate arenas for contingency directs us to the processes that games contrive and contain and illuminates how they are both constantly amenable to transformation and how they resonate with other domains of experience.

Games have a long-running, deep, and habitual association with “play,” itself a shallowly examined term, historically and culturally specific to Western modernity. *Play*, as it is used in both game scholarship and often more widely, commonly signifies a form of activity with three intrinsic features. It is *separable* from everyday life (especially as against “work”; it exists within a “magic circle”), *safe* (“consequence free” or nonproductive), and *pleasurable* or “fun” (normatively positive). None of these features holds as an intrinsic, universal feature of games when they are examined empirically, however (and play itself may be more usefully treated not as a form of activity but as a mode of experience; see below). Ironically, it is how we have sought to account for what is remarkable about games by setting them apart (as play-spaces, as stories) that is the largest roadblock to understanding what is powerful about them. As an alternative, I propose the following definition:

A game is a semibounded and socially legitimate domain of contrived contingency that generates interpretable outcomes.

The remainder of this article is a discussion of this conceptualization and how it is an improvement on our inherited ideas about games.

To avoid potential misreadings, however, I stress at the outset that I am *not* claiming that games have, in practice, no elements of separability, reduced consequences, or pleasure. All of these features can be involved in what games are on the ground. But the essential point is that they are not *inherent* features of games—they are always *cultural accomplishments* specific to a given context. Games are semi-bounded arenas that are relatively separable from everyday life, and what is at stake in them can range from very little to the entirety of one’s material, social, and cultural capital. They are certainly, at times, productive of pleasure, but they can also be productive of many other emotional states. People may, in any specific context, imbue them with deep, normatively charged meanings. The challenge, therefore, is to rethink games from the ground up, leaving these a priori associations behind.

Then researchers will be free to pursue the more interesting questions of how people socially construct games to achieve these features (when they do); that is, how, in specific circumstances, games become seen as separable or inseparable, as low stakes or high stakes, as “good” or “bad.” What is more, we will be in a better position to explore the relationships between the various processes that comprise different games and the social formations that surround them.

Games Without Frontiers

The issue of “play” and its limitations as a metacategory for games merits further comment because at root here is a conceptual habit that has become pernicious not only in scholarship on games but in the social sciences more broadly and in more popular treatments of games (currently exploding in number). This habit undergirds the dismissiveness with which the study of games is still sometimes treated within the academy and which contrasts markedly with the increased interest from policy makers and the public at large. What we must realize is that the older and still extant marginalization of games and its contemporary, almost utopian treatments are actually two sides of the same coin; they both follow from an exceptionalist position: that games are play and therefore set apart. This perspective allows some to hold games at arm’s length from what matters, from where “real” things happen, whereas others cast them as potential utopias promising new transformative possibilities for society but ultimately just as removed from everyday experience.

Moving beyond this habit will not be easy. Exacerbating the problem is the fact that games today are often thoroughly digitized and inhabit the global communications networks of the Internet and related technologies. Here, there is another form of exceptionalism at work, one that sees the “virtual” as separable from the “real.” Although this false dichotomy has rightly come under increasing critical scrutiny (and therefore is not the main subject here), it remains a contributing factor to the current tendency to see (digital) games as occupying a separate sphere, set apart from the everyday, as Taylor (2006) has noted in her effective discussion of the issue (pp. 151-155). If the false separation of the real and the virtual can be overturned, so can the link between “games” and “play,” and doing so will open up new vistas for games scholarship.

The empirical work on play from anthropology provides apt grounds from which to reassess the robustness of the play/game concept. When anthropologists attempted to study play in the 1970s, it was clear from the outset that there were problems with seeing play as a form of activity that is separable from the everyday. A number of human societies simply did not make a distinction between “work” and “play,” even when pressed by researchers (Schwartzman, 1980). The case of the Kpelle is representative. As David Lancy (1980) showed, the Kpelle, although differentiating in relative terms between hard and light work, refused to see “play” as a separate category. Upon coming to understand the researchers’ concepts of work and play, the Kpelle

contacts maintained that in those (imported) terms, they felt both must be present in all human action.

Similarly, in my study of gambling in Greece, it was obvious from the start that any game with stakes, such as gambling, could not usefully be seen as essentially separate from other aspects of life (Malaby, 2003b). Indeed, on this point the Greeks were wiser than many in the academy, for they understood the unpredictabilities of the games as mirrors for, as well as constitutive of, the uncertainties of their lives. As they saw quite clearly, it is not the status of a game as a game that renders it set apart from everyday life; any game can have important consequences not only materially but also socially and culturally (in terms of one's social network or cultural standing). This was especially obvious in nongambling contexts (such as most casual backgammon matches), when status and relationships are on the table in place of hard currency. The malleability of the stakes in these games goes hand in glove with their shifting and only relative separation from other domains.

Or consider another ethnographic example from Greece. In this patrilineal society, it was until very recently a common practice for the sons of a deceased or near-death patriarch to cast lots to determine which son would inherit the family's agricultural holdings (the worth of which would be heavily diluted by any material division; Herzfeld, 1980). Here we have the application of a game (casting lots) for a moment with an enormity of consequences. One might add similar examples, such as the U.S. immigration lotteries for certain countries. It may be that some would not be prone to classify these as games, precisely because they fly in the face of our Western preconceptions about games as safe, separable, and pleasurable. But there is no formal difference between them and the gambling that they resemble; all are distinguished by their status as legitimate and contrived artifacts for the generation of unpredictable and interpretable outcomes.

Beyond these offline cases, however, we have increasing empirical evidence of what is coming to be at stake in games online, including the foundational work by Castronova (2001, 2003, 2005), Lastowka and Hunter (2003), Burke (2002), and Taylor (2006), and to which I have contributed some thoughts as well (Malaby 2006b). The essential point from all of this work is that games are activities that can accommodate any number and kind of stakes and are not intrinsically consequence free or, therefore, separable from everyday experience. But what of the claim that play is essentially and always about "fun" or "pleasure"?

The association of games with pleasure in the academic imagination is one with deep roots and persistent effects (for a recent example, see Galloway, 2006, pp. 19-22), but it just as frequently informs the published work of well-known game designers, such as that by Koster (2004), Crawford (2003), and Zimmerman and Salen (2003); and it is here that one finds the most explicit commitments to games as play, and play as fundamentally about "pleasure," "fun," or "entertainment." The normative implications are clear. If play, and by extension games, are fundamentally about positive

experience, they become charged with a normative status (as “good” or, possibly, “bad” [a source of temptation or addiction]).¹ Any account of participation in games that is normatively charged in these ways, however, fails empirically, just as claims about essential separability and safety do. Consider the case of gambling again. One of the forms of gambling (in fact, the highest stakes form) that one finds in Greece is *zaria*, or dice gambling. The game is not craps (as found in most casinos), however. *Zaria* is a game with odds of, remarkably, 50-50. Two dicers at a crowded table take turns tossing a pair of dice, with five results that win and five that lose (the others are null results). The losing player gives up his turn to dice to the next player at the table, and so on. All players at the table are free to bet for one player or the other, either with those players or in side bets. But the remarkable feature of dice gambling is how a game that accommodates the highest number of players (often 15 or more) could nonetheless demonstrate an utter lack of conviviality and evident pleasure; the sociality at the table is attenuated to the point where it is best described as a moment of collective solitude.

As I showed in my discussion of it in my earlier work (Malaby, 2003b, pp. 118-133), this is a game that, more than anything else, is about a desperate and individual interest in one’s own existential circumstances. Like Max Weber’s puritans, the dice gamblers of Greece see in the tumbling dice and their fickle outcomes ephemeral signs of their place in the world, that is, whether they, for at least a moment, are in a state of grace. At stake, then, over a dicing table in Greece is something utterly removed from questions of “fun,” “leisure,” or “entertainment.” For many players, it is an existential engagement with the game, quite similar to that characterizing the protagonist of Dostoevsky’s *The Gambler*; indeed, I was often directed to the story by Greek dice gamblers as the only way I could understand their relationship to the game.² One can recall the example of inheritance by lot in Greece for this issue as well—to assume that any game must be about “fun” would make little sense when applied to such a moment.³ Similarly, Julian Dibbell (2006) has charted how, for those who seek to make their living from the economies of virtual worlds, any claim that it may be about “fun” for them becomes laughable.

As should be clear from these examples, I am not claiming that games are not engaging, whether intellectually, emotionally, or bodily. The key point is that any account of the player’s experience when gaming must avoid a priori normative assumptions about “fun” and the like. Instead, we must prefer words such as *compelling* or *engaging*; even better, we can take the more difficult and rewarding road of more thorough qualitative research to understand player experience within the wide range of particular cultural and historical milieus for games around the world. All of these features of play or games in particular times and places are, again, cultural accomplishments and should be treated (and examined) as such, rather than as inherent characteristics.

In the current moment, then, we have an accumulation of empirical cases that demonstrate that play and games are not by their very nature separate from other

domains of our experience and that furthermore, they have consequences, broadly defined. What is more, it is clear that games and perhaps all play activities are not inevitably normatively charged with positive feelings such as pleasure, fun, and the like. But if these criticisms apply not only to existing treatments of games but to play itself, then we can begin to recognize that the problem behind the claims of separability, safety, and pleasure may in fact have something to do with play's treatment as a separable *activity* in the first place.

Phillips Stevens, an anthropologist, was prompted by this empirical trouble to push hard on this issue, and he went further than anyone else had in a little-known essay, "Play and Work: A False Dichotomy?" (Stevens, 1980). He makes a key point that game researchers (and social scientists generally) are prone to forget: If by "play," we are trying to signal a state or *mode of human experience* (something like Csikszentmihalyi's [1990] "flow")—a way of engaging the world whatever one is doing—then we cannot simultaneously use it reliably as a label for a *kind* or *form* of distinct human activity (something that allows us to differentiate between activities that "are play" and those that "are not"). This is consistent with Csikszentmihalyi's (1990) investigations, where he was surprised to find situations of "work" just as likely (in fact, more likely) to produce the state of "flow" than so-called "play" activities. For the Kpelle, as well, an introduction to the Western way of parsing these terms evidently leads them to a clear-eyed view that the important issue may be a relative distinction between various modes of experience (i.e., the subjectivity of someone's participating in an activity as more or less "play-like"), rather than the false separation of human activity into "play" and "work."

Similarly, the anthropologist Sherry Ortner, in her book about Himalayan mountaineering (Ortner, 1999, pp. 23-24, 35-39), ferreted out the modernist roots of the related concept of leisure, noting that whereas mountaineering was represented as an "escape" from modernity, it was in fact produced by it. Mountaineering through the 20th century continually reproduced the form of "work" of its time, whether in the military-style campaigns of the 1930s and 1940s or the nationalist projects of the 1960s and 1970s. In the context of that work, she found it necessary to propose the category of "serious games" (pp. 23-24; no relation to the Serious Games initiative) as a way around this pernicious association of games with a lack of stakes. Throughout, Ortner was at pains to unveil how the distinction between work and leisure is itself a modernist affectation.

If the tendency Ortner, Csikszentmihalyi, and others have sought to counter is pernicious, this is because the history of Western thought has constructed a distinction between productive action as a contribution to society (ultimately in the material sense) and unproductive action, or play. Across a range of philosophical perspectives on society, from John Stuart Mill to Karl Marx to Clifford Geertz, play is set apart as an activity that is (therefore) nonproductive, a place where nothing happens, a charge only bolstered by its association with youth. Caillois (2001) put the exceptionalist position on play most strongly: "Play is an occasion of pure waste"

(p. 5). Importantly, Huizinga (1971) differed from Caillois on this point, seeing much more clearly how play should be understood as an always potentially present mode of human experience, rather than as a distinct activity (see Dibbell, 2006, pp. 59-60, for an eloquent account of Huizinga's nuanced position). Nonetheless, the exceptionalist understanding deeply informed ideas about play, games, and sports from the late 19th and early 20th century. This is particularly evident in the ideal of amateurism, a class-based distinction that allowed the upper class in Europe and the United States to exclude from the company of noble athletes those who played for money, such as boxers and football players (Hobsbawm, 1984). On that view, if games were to have any purpose, it was in building character (as part of the reproduction of class), and this required a "pure" pursuit of games for their own sake. (The Olympics were—and continue to be—a key site for the application of this bias.)

The extent to which the academic study of games (and more and more frequently, this means computer games) replicates these problems is not surprising. Like the broader social science approach from which it at times seeks to distance itself, it too is hampered in its attempts to understand the human experience of computer games, particularly the extent to which they have become a source of real consequences for many of their players.⁴ The two main schools of thought in this area are sometimes referred to as narratology and ludology, and the contrasts between their strengths and weaknesses are illuminating. Speaking very broadly (and a little unfairly), ludology at least began with an awareness of the "gameness" of games and from this conviction recognized that there was something to the *experience* of what is labeled a game that bears attention. In their fascination to draw attention to this mode of experience and make the case for its importance, however, ludologists ultimately fell into the trap of formalism, treating games as special and distinct activities, fundamentally different from everyday life, and further treated this distinctiveness normatively, seeing play as about "fun" or "pleasure" or "enjoyment."

The narratologists, for their part (again, speaking very broadly), got another aspect right, which is that games involve the construction of meaning. The problem is that following this approach, one can end up focusing on the "story" (especially in a broad sense—plot, etc.) at the expense of the experience of contingency itself, on one hand, and the fact that it does not have to "succeed" in generating a story to be a game, on the other. That is, in contrast to the ludologists' initial focus on experience, the narratologists were overly concerned with *form*, especially the extent to which the product of a game experience can become an object of reflection and interpretation. Of course, for most academics in this area (particularly those trained in the humanities), representation and its analysis is their stock and trade, but human experience is not reducible to the play of meaning. It also consists in human practice, in the lived experience itself. This is not to say that critical examinations of these meanings are not a core task of game scholarship. On the contrary, they are one of the best ways to examine the acts of boundary maintenance and exclusion that surround games (such as in the strategic representation of something as "just a game").

As Stevens (1980) recognized, we cannot empirically sustain “play” as a label for a separable human activity, but it is clear that the term may continue to have some usefulness as a label for a *mode of experience*, a way of engaging the world. Even so, the normative connotations that “play” has also accumulated, both positive and negative—likely as a result of, as Ortner (1999) charted, modernity’s construction of work and its opposites—have no place if we are to strive for a concept of play (as a mode of experience) that can hold up empirically. More work in this vein must be done to recuperate the concept of play, but let us now leave it aside. By rejecting play as a supercategory of activity for games, we free the game concept for rethinking, and that is the aim here. We can now develop an empirically informed account of what games are as a form of universal human activity, but one that is not assumed to be essentially separate. This account, to continue to steer clear of the problems play encountered, must neither romanticize games nor dismiss them and instead must see them as socially created artifacts with certain common features and allow for the way they inhabit, reflect, and constitute the processes of everyday experience.

Games as Process

So what would a nonnormative (or, at least, minimally normative) account of games as socially constructed artifacts, and one that furthermore accords with the empirical material, look like? One of the first things we must recognize is that *games are processual*. Every game is an ongoing process. As it is played, it always contains the potential for generating new practices and new meanings, possibly refiguring the game itself. Consider, for example, the opening page of Andrew Rollings and Ernest Adams’s (2003) introduction to a book on game design. It is a passage worth quoting in full:

When you were a kid, you probably started many a game of whiffle ball or Monopoly with a little negotiation over the rules. “If the ball gets stuck in a tree, it’s an out,” “Chance and Community Chest fines go into a pool, and whoever lands on Free Parking gets the money,” and so on. Kids don’t hesitate to change the rules of existing games. (p. xxi)

Games can change as they are played, and this passage points to how this can be done intentionally, as the players notice one or another pattern or possibility and attempt (much like a game designer would) to calibrate the various unpredictabilities that together constitute a game.

But games can also change through the unintended consequences of practice, such as when talented individuals or teams find new ways to play the game. This is easiest to demonstrate in major league sports. Oscar Robertson and Julius Erving, it is said, changed the game of basketball by taking it “above the rim.” Games are generative of such new practices, new tactics, which always carry the potential to fundamentally alter the game itself (and this may then lead to rule changes, such as the

introduction of the shot clock in basketball after players such as Bob Cousy developed such incredible ball-handling skills as to be able to “dribble out” remaining game time when their teams had the lead). Consider an example from American football (http://en.wikipedia.org/wiki/Tuck_rule):

In 2002, the New England Patriots played a conference championship game against the Oakland Raiders, looking to advance to the NFL Super Bowl. The tuck rule created a very controversial finish to an NFL playoff game on January 19, 2002 between the New England Patriots and the Oakland Raiders. In the closing moments of the game in a snowy Foxboro Stadium, with New England trailing by 3 points, New England quarterback Tom Brady dropped the ball after making a passing motion, and the Raiders fell on the loose football. The officials initially called the play a recovered fumble, which would have sealed the victory for the Raiders. But after instant replay, referee Walt Coleman reversed this call, declared the play an incomplete forward pass, and gave possession back to New England.

Thus began the “tuck rule” controversy, which arose from a disjuncture between the correct interpretation of the tuck rule by the officials (a quarterback cannot fumble after moving his arm in a forward, passing motion, even if he brings the arm and ball back), and most spectators’ sense that the play *should* have been a fumble. Here was an occasion where the rules that defined the game were correctly applied, but the particular outcome in a particular case showed up the limits of the rules for encompassing the game as the participants (including spectators) saw it.

The essential point, then, is that games are grounded in (and constituted by) human practice and are therefore always in the process of becoming. This also means that they are not reducible to their rules. This is because any given singular moment in any given game may generate new practices or new meanings, which may in turn transform the way the game is played, either formally or practically (through a change in rules or conventions).⁵ This recursive quality is what I mean by “process” here, and it means that any attempt to formalize games by defining them essentially in terms of their rules or through a taxonomy of types (Zimmerman & Salen, 2003) falls short because it fails to capture how games are moving targets, capable of generating new, emergent effects that then inform the following instances of the game.

This misplaced formalism is nearly as rampant in games scholarship as exceptionalism (Juil, 2005). A useful analogy for the limits of formalism for games is the shift in biology from the taxonomic system of species classification (such as that of Louis Agassiz) to the evolutionary model (see Menand, 2001). Up until Darwin, most biologists (and scientists generally) proceeded according to (in fact, *from*) pre-determined, formal categories, such as species, which separated specific categories of flora and fauna by a hard, bright line. Darwin, however, through his theory of natural selection, upended that entire formalist position by proposing that at a very fundamental level, species did not exist, at least not in that sense. Species was only a relative means of distinguishing a group of living things that shared, on average,

certain characteristics. This meant that investigations in biological variation needed to proceed with a clear eye to the range of contingency operating on the ground, beyond adaptation (as Stephen Jay Gould and Richard Lewontin continued to argue more recently; see Gould & Lewontin, 1979), instead of contenting themselves with “plausible stories” that reflected assumptions about categories of species (and their features) more than fact. Similarly, treating games formally is only as useful as the categories are pragmatically applicable; holding fast to formal features that dictate our conclusions runs the same risk it did in biology 150 years ago.

Rather than appealing to an abstract blueprint of what any given game is, a processual approach to games recognizes as a first principle that games are, like many social processes, dynamic and recursive, largely reproducing their form through time but always containing the possibility of emergent change. This point bears reiteration: I am not claiming that games are not, on the whole, reproduced in consistent practices and meanings, but it is just this reproduction that can fool researchers into adopting a formalized theory of what games are (this echoes similar problems not only in biology but also in the study of the law, where legal formalism commits the same error). Instead, we must always recognize that however apparently stable, games are capable of change in this way. From this insight, it becomes possible to identify the universal features of games as a set of processes, without sacrificing their connection with other aspects of experience.

Process in this recursive sense is a concept that may be best understood as situated within the history of American thought, specifically pragmatism and semiotics (Peirce, 1998; see also Menand, 2001), but one finds it in many schools of thought, although often under different names. The concept can also be found, with some variations in meaning, in legal realism and the anthropology of law (Moore, 1978), Marx (1978), phenomenology (Jackson, 1989), ritual studies (Turner, 1969; “ritual as process”), performance theory (Bauman, 1977; the “emergent quality of performance”), complex adaptive systems theory (Lansing, 2003), practice theory (Ortner, 1984; see below), and, more recently, science and technology studies (STS; Pickering, 1995; the “mangle of practice”). We are just now also seeing important gestures in this direction from game scholarship (Galloway, 2006; Steinkuehler, 2006; Taylor, 2006). These multiple and various arrivals at essentially the same social theoretical insight have occurred, I would speculate, for two reasons. First, the typical lack of cross-fertilization of ideas laterally in the academy is probably in large part the result of the exceptionalist tendencies of all new fields (especially in the cases of phenomenology, legal realism, ritual studies, and STS) as they seek to distinguish themselves from other areas of study (Latour, 1993, pp. 10-12, discussed this quality as the counterweight to efforts to pursue “hybridity”). Second, and more important, a commitment to process in any field is difficult to sustain, as it works against easy generalizations and demands deep empirical work. Even within many of the fields listed above, process is often sacrificed in efforts to form taxonomies, structures, and determinative, monocausal paradigms.

One school of thought, practice theory (Ortner, 1984), has been particularly effective at sustaining a commitment to a processual understanding of social change. It is no coincidence that several of its eminent social theorists see social life as having game-like qualities. This is clear to various degrees in the work of, for example, Pierre Bourdieu (1977), Michel de Certeau (1984), Anthony Giddens (1984), and Loïc Wacquant (2003). This approach to social life seeks to capture the ongoing and open-ended nature of human experience while at the same time recognizing the omnipresent influence of rule-like constraints on our actions. Its perhaps most well-known formulation of process as described here is Giddens's (1984, pp. 1-40) concept of "structuration." As I have put it elsewhere (Malaby, 2006b), the common thread of the practice theorists

is the emphasis on social action, that culturally-shaped practices, rather than transcendent structuralist accounts of any sort (such as historical materialism, or Freudian psychoanalysis), together constitute human experience (in this respect they resemble the pragmatist philosophers, including William James, C.S. Peirce, John Dewey, and Oliver Wendell Holmes). The practice theorists sought to solve the problem of structure versus agency in accounting for social change by pointing to how macro-level patterns are the result of local-level actions, themselves shaped by the inculcated expectations of culture. This is a dynamic model, that sees the complexity and contingency of everyday experience as the site for, primarily, the reproduction of social forms, but always with the potential for both incremental and radical change. (p. 147)

How might we build on this approach to develop a pragmatic treatment of games that, rather than reducing them to their rules or other formalized categories, instead accommodates their open-endedness and recursiveness, their potential to generate new practices and meanings? That is, what would a processual approach to games look like?

Games and Contingency

As may be obvious already, the rules are not a good place to start. This is because the "rules" of a game are not like the rules of a bureaucracy, which are intended to *reduce unpredictability across cases*. Even if bureaucracies are unpredictable and inefficient, their rules are of a different order than those of games because they are rationalized in the Weberian sense: They are intended to produce regular, consistent outcomes (even if they fail in practice).⁶ The same might be said of most computer software code, such as that found in an income tax program. Dibbell (2006, p. 109) drew an interesting parallel between online games and such programs. Whereas both make use of code and Internet connectivity, the income tax program is not designed to generate unpredictable outcomes. On the contrary, variations in its estimates of owed tax from one try to the next are an indication that something has gone quite wrong. Games, however, are quite importantly about the opposite: They are about contriving

and calibrating multiple contingencies to produce a mix of predictable and unpredictable outcomes (which are then interpreted). Here is the definition again:

A game is a semibounded and socially legitimate domain of contrived contingency that generates interpretable outcomes.

The remainder of this section is a development of what this means for our understanding of games.

Whatever their claims in other respects, Huizinga (1971) and Caillois (2001) recognized this fact: Games are, at root, about disorder. All games, I submit, are relatively separate (the degree of separation is highly context dependent—again, it is a cultural accomplishment) and socially condoned arenas in which one or more sources of unpredictability (or my preferred term, contingency) are carefully calibrated (by design or cultural practices) to generate contingent outcomes. The outcomes interpreted are, principally, those explicitly defined as the game's objectives, but it bears mentioning that *outcome* in this definition also encompasses the multiple contingent events that an instance of a game generates; that is, I am not only concerned with the explicit and pre-defined outcomes (and therefore also not only with "end-state" outcomes, which not all games have). This is the first component of my definition of games.

It is vital to note that the contrivance of these sources of unpredictability is achieved through various modes of control, including but not limited to the aforementioned distinctively nondeterminative rules. As I have discussed elsewhere (Malaby 2006a; and it is therefore not the principal focus here), 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.

The second aspect of games, however, is their capacity to generate meaning. The multiple outcomes (in the broad sense, i.e., not only the "end-state" outcomes) that games generate (never perfectly predictable) are subject to interpretations by which more or less stable culturally shared meanings are generated. The important point about this generation of meaning is that it, again, is open-ended. Not only can game practice (that is, how a game is played) change, but the meanings the game generates can change as well (such as in the transformation of the meaning through a number of famous Olympic results, including Jesse Owen's performance at the 1936 games, the 1972 gold medal basketball game, and the 1968 200-meter finals). An overly determinative reading of games as generative of meaning (such as in the narratologists' approach, above) often elides the potential for transformations of meaning grounded in the contingent practice of games. This is why Aarseth's (1997) contribution in this

area is so valuable; the concept of the ergodic that he developed from a literary point of view similarly seeks to capture the contingent intermingling of practice and representation that games generate.

Contingency is also a fruitful path to follow if we are interested in what makes games compelling. According to Heidegger and the phenomenologists, our existence in an uncertain world not of our own making is a fundamental aspect of human experience. In this respect, the wide-ranging unpredictability of our everyday experience and the contrived unpredictability of games point toward a bridge, rather than a gap, between games and other aspects of our lives.⁷ By *contingency* I mean *that which could have been otherwise*, that is, that which was not necessary, in a philosophical sense. The potential sources of contingency that are arranged and calibrated in games are the same sources we encounter throughout our lives. They are just semibounded (that is, only *relatively* separable) in the designed game. It is therefore the fact that games have this fundamental quality of multilayered contingency that allows them both to mimic and constitute everyday experience, and this is what makes well-designed games compelling. If we, as humans, are pattern-noticing machines (so to speak), then the unfolding of contingent outcomes in a semibounded domain such as a game is inherently compelling, presenting as it does just the right mix of the expected and the unexpected (provided it is well designed, whether by a game designer or by the practices of tradition). Game designers are notable (perhaps like good game masters in pen-and-paper role-playing games) in their practiced ability to calibrate these sources of contingency to engage the participant and make the experience compelling (I am of course avoiding more explicitly or obviously valenced normative terms such as *enjoyable*). Making a game, then, is about creating the complex, implicit, contingent conditions wherein the texture of engaged human experience can happen. Once a player is practiced at a game (or in any circumscribed domain of life, such as the focused “work” environments Csikszentmihalyi, 1990, studied), then something like “flow” can be achieved, now understandable as the learned condition of mastery over the performative challenges of a game or task.

If the contrivance of contingency is a defining feature of games, what kinds of unpredictability are involved? The most familiar source of contingency in games is *stochastic contingency* (what the philosopher Alasdair MacIntyre, 1984, pp. 99-100, called “pure contingency”). This is the randomness produced by, for example, a well-shuffled deck of cards or a tossed die. Here, unpredictable outcomes spring forth as the result of a process sufficiently complex as to produce chaotic results. Some of the oldest archaeological finds are objects of this kind: bones, dice, or lots. Other less obvious (more implicit) examples of sources of stochastic contingency in games include the weather at a baseball game or other sporting event, participants’ illness or injury, and “lag” in an online game as a result of high Internet traffic. It becomes easy to recognize that stochastic unpredictability can be both called for and generated by explicit, contrived means (dice, wheels of fortune) and generated by means beyond the control of the game’s participants. This is further confirmation of

how the separability of games is not absolute; games, by their design, can achieve at best only a relative separation from other parts of experience. More recently, this form of contingency in games, specifically computer games, has been steadily transformed away from previously predominant explicit mechanisms, such as dice, and toward implicit stochastic generation. Under the advent of computing technology—specifically, in Janet Murray’s (1997) term, its *procedurality*—this kind of unpredictability becomes a powerful and implicit aspect of computer games, as Ian Bogost (2006) has discussed.⁸

Another source of contingency is *social contingency* (MacIntyre, 1984, pp. 97-99, called this “game-theoretic” contingency). This is the unpredictability of never being certain about another’s point of view (and often, resources) and is a key component of games such as chess, poker, and countless others. The extent to which (economic) game theory has focused on differences in information is a reflection of the correct recognition of social contingency as a factor in games, but it is never the only source of contingency. It is not simply the challenge of making the right guesses about others’ points of view that is involved, it is acting on those guesses, and that leads to the third source of contingency, *performative contingency*. Here the issue is the execution of an action by a participant, an action that may succeed or fail. This kind of unpredictability plays a significant role in athletic contests but also is the core of many action-oriented computer games. Games call upon you to perform, to accomplish the actions that give you the best opportunity to succeed in the game. At times this performance is embodied and rapid, such as in first-person shooter (FPS) games; at other times, it is simply about not making errors in following game procedures, such as in counting the proper spaces in a game of Monopoly. In a way, all of our actions in games, as in life, are performative in this sense; they run the risk of failure.

Finally, games also involve *semiotic contingency*, the unpredictability of meaning that always accompanies attempts to interpret the game’s outcomes. Recalling again the tuck rule controversy and similar examples, we can see how the meaning of any given gaming outcome is not set in stone. Being a foreigner in Greece, I was often challenged to games of backgammon, prowess at which, as throughout the region, is closely associated with national identity and pride. Once I became able to do more than hold my own at the game, and in fact to win steadily from time to time, the potential meaning of the outcomes broadened, reflecting any of a number of new possibilities (e.g., “You’ve become Greek, now!” or “The clever American must have found a new way to cheat”). (For an extended discussion of the potential of gaming events to transform local meanings, see Malaby, 1999.) The complex contingency of today’s large-scale online games has powerful effects on meaning, conceived here as always arising from the meeting point of existing, shared interpretive frameworks and unique, contingent circumstances. Additionally, as games themselves show most powerfully, the shared engagement of contingency is a powerful means for the development of trust and belonging. Together, these implications suggest that if a domain is rich enough in

possibilities, it can generate for its users a distinctive disposition (Mauss and Bourieu's *habitus*) about how to act within it.

Defining games as, first and foremost, contrived forums for the generation of unpredictability avoids the normative judgments contained in the modernist account of games. Instead, and crucially, *it places game contexts and other arenas of human experience ontologically on a par with each other*. Everyday experience and game arenas, each filled with uncertainties, can inform each other through metaphor, as they do in Greece, but they can also both be the site for real stakes and real consequences. Gambling, then—gaming where there are obvious (material) stakes—becomes sensible not as an escape from everyday life but as just one of its multiform domains, an activity that is compelling precisely because, like life, it presents ongoing, unpredictable outcomes to its players that challenge them to perform. The only difference is that the game presents multiple contingencies in a relatively bounded, explicit, and perhaps more readily graspable form. It bears restating, however, that I am not, by this emphasis on games as sites for the generation of contingent outcomes, proposing that games (or life!) are not largely marked by regularities, patterns, recurrences, and reproductions, whether of institutions, practices, or meanings. It is only that any view of games that makes the crucial mistake of forgetting that their contingency, however minimal, is always present, takes an inevitable step toward separating them from the rest of our experience and undercutting what makes them compelling, powerful, and consequential, just as any deterministic account of social change founders on the accidents and contingencies that undoubtedly play a role in human history.

Conclusion

Important research possibilities follow from this approach; in particular, it opens up ground for an exploration of the relationship between certain games and other game-like processes within a particular context and can even point productively to the cultural elaboration of ethics, as I explored in my ethnography of Greek gambling (Malaby, 2003b). I found that in Chania, a city in Greece, the different games on which they gambled served as models for their actions in other high-stakes arenas of their lives: politics, health, business, and social relations. For example, poker was a fitting model for business (and business for poker), because of their common emphasis on social contingency, the reading of others' intentions and resources (see also Malaby, 1999). Discretion and the reading of others are part and parcel of poker and business, but cheating is not acceptable. By contrast, playing the state lotteries and other games, with their strong stochastic elements, was associated with one's relationship to a Greek state imagined as almost randomly capricious, especially in its efforts at taxation, which becomes grounds for justifying tax evasion. In this sense, Greeks viewed these everyday activities as games and used these characterizations to condone or condemn ethically their

own and others' actions with reference to what was allowed in the appropriate game. The power of this ethical stricture was demonstrated in force during the rollout of the euro in Greece, when accusations of unethical rounding up (somewhat disguised by the currency conversion) on the part of small retail business owners led to an unprecedented nationwide boycott of supermarkets (Malaby, 2003a). Contrastingly, in relationships with the Greek state, cheating (at taxes) is expected; indeed, it is part of the game. Games and their appropriate game-like counterparts mutually informed ethical judgment and action in Greece, and through the recognition of these common features of games and everyday life we can begin to explore how today's games are shaping the coming digital society.

In the course of this, we must keep close the "artifactual" nature of games, that they are made by people and are always socially constructed to be separable to some degree from everyday experience. This is good, because it points the way for our research. We should be very interested, in each case, empirically, in how that boundary is maintained, how it is violated, and so on. Similarly, we should also examine the practices and cultural representations (claims) about games' safety and pleasurable (or otherwise) in every case. This leads to all sorts of intriguing questions: Why is one game very separated and another not? Why is one game associated with the risks of politics and another the risks of business? We do not need (or want) our analytical picture of all games, in all places, to shut down those inquiries by answering those questions for us. Instead, we should know that we have good reason to believe that exploring that cultural project of boundary maintenance (and breach) will yield significant results. This is the interplay of practice and representation at work; what is the relationship between the particular features of a specific game (does it highlight performative contingency? Stochastic?), its practices, and its representation? We do not need to begin our inquiry somewhere by wondering how to recognize what the games are; we can proceed from the cultural representations and see if they bear fruit when examined closely. Then we will no longer be concluding from categories but reasoning from actual experience.

Notes

1. Following this characterization of games as leisure, the ethical implications for the production of games come to the fore. Whereas virtual worlds online are increasingly the sites of broad-based social action, their design process can foreclose difficult questions about this use by appealing to this picture of games as a place where nothing happens. Alternatively, an appeal to the player as a deliberative subject to whom the game responds similarly shifts ethical responsibility from the characteristics of the game's code itself. In the end, the working definition of games as interactive entertainment is deeply modernist in its outlook, setting apart leisure activities as nonproductive and locating the player as the central agent in the game.

2. For a fuller treatment of *zaria*, its existential overtones, and Dostoevsky, see Malaby (2003b, pp. 118-133).

3. Of course, some might retreat to a tautological position, claiming something like, "if it's not fun, then it's not a game." But such approaches fully reveal the normative commitments that lie behind them and leave any claims actually to represent what games are in human practice behind.

4. There are exceptions, of course. Jesper Juul's (2003) attempts to get past the issues of separability and safety were important steps in the right direction. While recognizing these limitations, however, the approach presented there, although not exceptionalist, relies too heavily on a formalist approach (seeing games as constituted by their rule systems), does not completely evade the normative issue (players are "happy" to win), and does not incorporate process (discussed in the following section) into its definition. Instead, it is an admirable effort to build a workable definition of games "from the ground up," as it were, for the most part drawing on game scholarship rather than broader social theory.

5. It is worthwhile to note that the rules do not constitute games in and of themselves for another reason: Games are governed not only by their rule systems but also by implicit and shared cultural expectations as well as the material conditions under which they are undertaken.

6. It is indeed possible that bureaucracy, driven at root by *necessity*, is the antithesis of games, which are, in my view, driven by contingency, but this tantalizing thought lies beyond the scope of this article. The most interesting thinking in this vein is by Julian Dibbell (2006). His work suggests that the ludification of daily life (in our media consumption or engagement with everything from tax software to ATM interfaces) is the way it is beginning to be presented as game-like, providing performative challenges for the user. But this presentation of the ludic, although engaging, may be only a shallow contingency; that is, the latest game-like software can lead us to feel engaged in the performative challenges that we think of as a game but perhaps without any deep transformative potential.

7. There is very productive ground to mine here in exploring the relationship between games as spaces of contrived contingency and the approach to technologized domains as ecologies, as charted by Bonnie Nardi and Vicki O'Day (1999), because of the shared acknowledgment of contingency as an ineradicable feature of human experience.

8. This randomness need not be "true" randomness; it need only be practically random, that is, indistinguishable from true randomness from the point of view of the participant (allowing for any technological or other aids available to him or her to identify patterns and thereby recognize it as otherwise).

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