# **INTRODUCTION**

## Mapping the Machine Zone

ON A WEEKDAY EVENING in the fall of 1999, Mollie and I sit at the floor-length windows of a room high in the South Tower of the Main Street Station Hotel and Casino in downtown Las Vegas. Blinking brightly below us is a four-block stretch of Fremont Street, the city's former central artery of casino life. At the top of Fremont begins the long flicking perpendicular of Las Vegas Boulevard, otherwise known as the "Strip," a corridor of commercial gambling that extends for five miles in a southwesterly direction until it reaches the edge of the city and fades into gas stations, billboards, and desert. As the sky grows darker, pockets of light flare up in the relatively dim areas to either side of this infamous thoroughfare, marking off-Strip gambling establishments that cater to a burgeoning local clientele.

Mollie's frequent video poker play at these establishments has earned her a complimentary stay at Main Street Station. Her eleven-year-old son, Jimmy, lies lengthwise on the bed behind us, his gaze riveted to the television screen as his hands work the controls of the PlayStation console his mother has rented from the front desk to occupy him while we talk. "Mom, it's the Vegas game," says Jimmy from the bed. "You drive all around Vegas and try to play games." "Oh great, that's all we need," she responds.

At her first job, when she was not much older than Jimmy, Mollie dispensed change for slot machines on a US military base where her father, an air force officer, had been stationed. She now works as a hotel reservationist at the MGM Grand, the largest megaresort in Las Vegas and the second largest in the world. A gargantuan rectangle of green glass modeled after Oz, the MGM glows in the distance as we talk. "Mom, I won!" Jimmy interjects. And fifteen minutes later, with the same excitement, "Mom! I already lost 95 bucks!"

"I tell him he should be careful," says Mollie. "He might end up with a problem. But he doesn't listen. He plays video games constantly; he's just zoned into them." She pauses. "Of course, I don't set a very good example."

Mollie recounts how her play began, and how it escalated. It started soon after she moved to Las Vegas with her third husband in the 1980s, when he taught her to play video poker on a miniature, handheld machine. "I became hooked on that amazing little machine. And then I graduated to the real thing." Short stints at video poker on weekend visits to casinos turned into sessions of hours and then days. Her financial expenditure grew in step with her play, to a point where she was spending entire paychecks over two-day binges at machines. "I even cashed in my life insurance for more money to play," she tells me.

When I ask Mollie if she is hoping for a big win, she gives a short laugh and a dismissive wave of her hand. "In the beginning there was excitement about winning," she says, "but the more I gambled, the wiser I got about my chances. Wiser, but also weaker, less able to stop. Today when I win—and I do win, from time to time—I just put it back in the machines. The thing people never understand is that *I'm not playing to win*."

Why, then, does she play? "To keep playing—to stay in that machine zone where nothing else matters."

I ask Mollie to describe the machine zone. She looks out the window at the colorful movement of lights, her fingers playing on the tabletop between us. "It's like being in the eye of a storm, is how I'd describe it. Your vision is clear on the machine in front of you but the whole world is spinning around you, and you can't really hear anything. You aren't really there—you're with the machine and that's all you're with."

#### TURNING THE TABLES: MACHINES TAKE THE FLOOR

A few months after speaking with Mollie in Main Street Station's South Tower, I found myself in the midst of another conversation about the zone. This time I was standing in the back of a packed, windowless room in the labyrinthine basement of the Las Vegas Convention Center, where a panel of representatives from the gambling industry had gathered from around the country to speak on the profit-promising future of machine gambling. Echoing Mollie's wish to stay in the machine zone, they spoke of gamblers' desire for "time-on-device," or TOD. An evolving repertoire of technological capabilities was facilitating this desire. "On these newer products, they can really get into that zone," remarked a game developer from a top manufacturing company. Like Mollie, the industry panelists were invested in the zone state and its machinery.



Figure i.1. Opening day at the Global Gaming Exposition, 2005. Courtesy of Oscar Einzig Photography.

The panel I attended was held during the World Gaming Congress and Expo, now called the Global Gaming Expo or G2E, the premier annual trade show for the gambling industry (see fig. i.1). In 2007 a record 30,000 attendees convened at G2E to take stock of the industry's latest products and applications, from video graphics to ergonomic consoles, surround-sound acoustics to marketing schemes, plastic press-buttons to player tracking systems. Equipment manufacturing industry giants like International Gaming Technology (IGT), Bally Technologies, and WMS Gaming occupy the largest and flashiest of the 520 to 750 booths that crowd each year into G2E's 300,000 square feet of convention space. "The attention at G2E," a convention journalist wrote in 2005, "gravitates toward one essential product: the slot machine. G2E is where the evolution of slot technology has been witnessed."

The one-armed bandits of yesteryear were mechanical contraptions involving coin slots, pull-handles, and spinning reels. Today's standard gambling machines are complex devices assembled on a digital platform out of 1,200 or more individual parts. "Game design is a process of integration, assemblage," as one game developer told me. This process involves up to three hundred people, including script writers, graphic artists, marketers, mathematicians, and mechanical, video, and software engineers—not to mention designers of auxiliary components like touchscreens, bill validators, and machine cabinets. "Modern slot machines are rarely the work of one company," read the blurb for a 2009 G2E panel; "they are symphonies of individual technologies that come together to create a single experience."

The gambling experience has evolved in step with technological innovation. Once a relatively straightforward operation in which players bet a set amount on the outcome of a single payline, today machine gambling begins with a choice among games whose permutations of odds, stakes size, and special effects are seemingly endless.<sup>3</sup> Instead of inserting coins into a slot as in the past, players are more likely to insert paper money, bar-coded paper tickets, or plastic cards with credit stored on chips or magnetic stripes. To activate the game, they no longer pull a lever, but instead press a button or touch a screen. Denomination of play can vary from one cent to one hundred dollars, and players can choose to bet from one to as many as one thousand coin credits per game. On or above the play area, which typically features a video screen or three-dimensional reels behind glass, "pay tables" indicate the number of credits to be awarded in the event that certain symbols or cards appear together.<sup>4</sup> To the right, a digital credit meter displays the number of credits remaining in the machine. Linked via telecommunications systems to a central server, the machines also perform data-gathering and marketing functions for the casino. Critical nodes in the larger networked system of the casino rather than stand-alone units, they have "become the central nervous system of the casino," an industry representative remarked in 2007.<sup>5</sup>

Until the mid-1980s, green-felt table games such as blackjack and craps dominated casino floors while slot machines huddled on the sidelines, serving to occupy the female companions of "real" gamblers. Often placed along hallways or near elevators and reservation desks, rarely with stools or chairs in front of them, the devices occupied transitional spaces rather than gambling destinations.<sup>6</sup> By the late 1990s, however, they had moved into key positions on the casino floor and were generating twice as much revenue as all "live games" put together.<sup>7</sup> In the aisles and meeting rooms of the G2E, it became common to hear gambling machines referred to as the "cash cows," the "golden geese," and the "workhorses" of the industry. Frank J. Fahrenkopf Jr., president of the American Gaming Association, the commercial interest lobby that sponsors the annual expo, estimated in 2003 that over 85 percent of industry profits came from machines.<sup>8</sup> "It's the slot machine that drives the industry today," he declared.<sup>9</sup>

Several factors contributed to the dramatic reversal of slots' once lowly status in the gambling economy. Relatively unburdened by the taint of vice as a result of their association with arcade gaming, women, and the elderly, they played a key role in the spread of commercialized gambling in the 1980s and '90s, as recession-stricken states (whose federal funding had been cut by the Reagan-Bush administration) sought new ways to garner revenue without imposing taxes. <sup>10</sup> The low-stakes devices fit comfortably with the redefinition of gambling as "gaming" by industry spokespeople and state officials who hoped to sway public endorsement of the activity as a form of mainstream consumer entertainment rather than a form of moral failing or predatory entrapment. <sup>11</sup> The growing consumer familiarity with screen-based interaction that accompanied the rise of the personal computer and electronically mediated entertainment such as video games further facilitated the cultural normalization of machine gambling. Meanwhile, the ongoing incorporation of digital technology into gambling machines altered the player experience in subtle but significant ways, broadening their market appeal. <sup>12</sup> Gambling regulations were revised in lockstep with technological innovation, sanctioning its application to slots.

Since the early 1980s, when machine revenues surpassed table revenues for the first time, the ascendance of machines in the culture and economy of American gambling has continued unabated. The devices are now permitted in forty-one states (up from thirty-one in 2000) and are under consideration by others as this book goes to press. In 1996 there were 500,000 devices in the United States; in 2008 the count had reached nearly 870,000—not including an underground market of unauthorized machines in bars and taverns, truck stops, bowling alleys, and restaurants across the country, or devices engineered to circumvent restrictions by fitting state definitions for bingo, amusement machines, or sweepstakes games. <sup>13</sup>



Figure i.2. Machine floor at the Four Queens casino in downtown Las Vegas. Courtesy of Quang-Tuan Luong Photography. (QT Luong/terragalleria.com)

Bo Bernhard, native Las Vegan and sociology professor at the University of Nevada, has described the effects of machine gambling's spread as a kind of technological "deforestation" of table games. "Right now," he told an audience at the International Conference on Gambling and Risk-Taking in 2000, "somewhere out there in a casino, a blackjack table is being sawed down to make room for machines." Extending the metaphor, his former mentor Robert Hunter, a well-known Las Vegas psychologist of gambling addiction, has compared the spread of gambling machines to the insistent creep of kudzu (the

ground-covering vine that wreaked havoc on the ecosystem of the rural South when it was imported from Japan during the Great Depression). "Survival of the fittest," remarked a casino floor manager at the Four Queens, a downtown casino not far from the one where I spoke with Mollie, as he and I stood watching a group of uniformed men carry defunct tables out a back door and roll in shiny new slot machines to take their places (see fig. i.2). Soon gamblers would be seated before them, and some, like Mollie, would be playing for hours and even days at a time.

### RESIDENT GAMBLING: THE RISE OF REPEAT PLAY

This book explores the significance of the meteoric expansion of modern machine gambling over the past two decades in the United States through an examination of the relationship between the changing technological configuration of gambling activities and the changing experience of gamblers. Although such an inquiry could plausibly be set in any number of jurisdictions where the activity is legal and readily available, Las Vegas offers a particularly illuminating backdrop.

In the early 1980s, cultural critic Neil Postman said that one had only to look to Las Vegas to understand America. <sup>16</sup> In the mid-1990s, casino tycoon Steve Wynn turned this pronouncement around, remarking that "Las Vegas exists because it is a perfect reflection of America." Since then, journalists and academics alike have debated whether the rest of the country is becoming more like Las Vegas, or if, alternatively, Las Vegas is becoming more like the rest of the country. Some have called the city "the new Detroit" to signal its status as capital of the postindustrial economy, while others have pointed out that Detroit itself is now home to the popular MotorCity Casino. <sup>18</sup> Running alongside the debate over whether Las Vegas is a mirror or a model for America is the question of whether to view the city as a shape-shifting marvel of human inventiveness and technological sophistication or as a dystopic instantiation of consumer capitalism. <sup>19</sup> Whatever its relationship to the culture at large, it is clear that Las Vegas "has become a vast laboratory," as urban historians Hal Rothman and Mike Davis wrote in 2002, "where giant corporations, themselves changing amalgams of capital from different sectors, are experimenting with every possible combination of entertainment, gaming, mass media, and leisure." <sup>20</sup> In the Las Vegas laboratory, machine gambling figures both as a means and an end of experimentation.

A critical historical event in the rise of the machine-based gambling economy was the passage of the Corporate Gaming Act by the Nevada state legislature in 1969, allowing corporations to purchase and build casinos without subjecting every stockholder to the thorough background checks formerly required.<sup>21</sup> The new ease of raising capital, within the broader context of a growing service economy, encouraged Wall Street to take an active interest in the city. Las Vegas experienced an unprecedented period of growth as casinos shifted hands from organized crime to publicly traded corporations, metamorphosing into a hub for mass market vacationing and conventioneering. Throughout the 1990s, over a period that was often called the "Disneyification" of Las Vegas, one corporate-financed, corporate-run megaresort after another was constructed along the Strip.<sup>22</sup> Tourist visitation to the city increased fourfold between 1980 and 2008, reaching 40 million. This boom in business drew job seekers in droves, and the local population more than quadrupled over the same period—from 450,000 to 2 million.<sup>23</sup>

Either directly or indirectly, most residents rely on the gambling industry for their livelihood.<sup>24</sup> For its part, the industry relies on residents not only for its workforce but also, increasingly, for revenue. A full two-thirds of those who reside in metropolitan Las Vegas gamble. Of these, one study finds, two-thirds gamble heavily (defined as twice a week or more, for four hours or longer per session) or moderately (one to four times a month, for up to four hours per session).<sup>25</sup> Known in the industry as "repeat players" (as opposed to tourists or "transient players"), they typically gamble at neighborhood casinos that offer easy parking, child care facilities, and other amenities. Like Mollie, nearly 82 percent of local gamblers are members of loyalty clubs such as Station Casinos' "Boarding Pass," carrying player cards that document the volume of their play and reward them accordingly with free meals, free rooms, and other perks.<sup>26</sup> They also play at gas stations, supermarkets, drugstores, car washes, and other local outlets that have inspired the term "convenience gambling" (see fig. i.3).<sup>27</sup> "Our local players are very discriminating," observed a slot manager at one venue popular among residents; "they know what they want, and they're there five to seven days a week."

What local players want is machines, and this preference has closely tracked the evolving appeal of slot machine technology. While only 30 percent of residents identified machines as their preferred form of gambling in 1984, just ten years later the figure had sharply risen to 78 percent.<sup>28</sup> Generating impressive revenues for gambling establishments through the collective, steady repetition of their play, low-rolling local machine gamblers displaced high-rolling tourist table gamblers as the heavyweights of the gambling scene in Las Vegas. "This is machine city," a cocktail waitress remarked as she led me through aisle upon aisle of gambling devices at the Palace Station casino in 1999.<sup>29</sup>

That year at the industry's annual meeting, Las Vegas locals were frequently acknowledged as the most "mature" of

domestic machine markets. Some spoke of the city as a sort of experimental barometer for the future, speculating that the rest of the nation would follow its model.<sup>30</sup> Seven years later, by which point the Station Casinos franchise had blossomed into thirteen properties and was capturing nearly 90 percent of its gambling revenue from machine play by local gamblers, the signs were auspicious.<sup>31</sup> "We're seeing more and more people coming to the Strip looking for more mature product," said one executive. "They're coming from California, the Midwest, and New York, where they're playing on a more regular basis. We're definitely seeing the trend for repeat play."<sup>32</sup> As states across the country push to legalize or expand existing machine gambling to cope with the financial challenges of the current economic downturn, and as gambling equipment manufacturers pursue new markets for their products, this trend is growing.<sup>33</sup>





Figure i.3. Convenience gambling. *Top*: Video poker alcove at Lucky's Super-market in southwest Las Vegas. *Bottom*: AMPM gas station in north Las Vegas. Photographs by the author.

## GAMES AS CULTURAL CLUES

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The French sociologist Roger Caillois, author of *Man, Play, and Games*, believed that games carried clues to the basic character of a culture.<sup>34</sup> "It is not absurd to try diagnosing a civilization in terms of the games that are especially popular there," he wrote in 1958. Caillois argued that one could make a cultural diagnosis by examining games' combination of the following four elements of play: *agon*, or competition; *alea*, or chance; *mimesis*, or simulation; and *ilinx*, or vertigo. Modern cultures, he claimed, were distinguished by games involving a tension between *agon* and *alea*—the former demanding an assertion of will, the latter demanding surrender to chance.

This tension is at the heart of the cultural diagnosis made by the American sociologist Erving Goffman in 1967 based on his ethnographic study of gambling in Las Vegas, where he worked as a blackjack dealer and was eventually promoted to pit boss. Goffman regarded gambling as the occasion for "character contests" in which players could demonstrate their courage, integrity, and composure in the face of contingency. By offering individuals the opportunity for heroic engagements with fate, gambling fulfilled an existential need for "action" or consequential activity in an increasingly bureaucratic society that deprived its citizens of the opportunity to express their character in public settings of risk. For Goffman, gambling was not so much an escape from everyday life as it was a bounded arena that mimicked "the structure of real-life," thereby "immersing [players] in a demonstration of its possibilities." <sup>36</sup>

Along these lines, in 1973 the anthropologist Clifford Geertz famously interpreted Balinese cockfight gambling as a "tournament of prestige" that simulated the social matrix and laid bare its status dynamics. The activity, he argued, served as a medium for rehearsing the collective and existential dramas of life. Like Caillois and Goffman, Geertz emphasized the synergistic interaction of randomness and competition in the cockfight. The less predictable the outcome of a match, he observed, the more financially and personally invested participants became and the "deeper" their play, in the sense that its stakes went far beyond material gain or loss.<sup>37</sup> Fyodor Dostoyevsky's description of a sudden windfall at a Swiss roulette table in *The Gambler* captures Geertz's idea of deep play as a compelling mix of chance, risk, and status: "Why, I had got this at the risk of more than my life itself. But I had dared to risk it, and there I was once again, a man among men!"<sup>38</sup>

Caillois, Goffman, and Geertz each referred to coin-operated machine gambling in the course of their analyses, and each of them dismissed it as a degraded, asocial form of play not worthy of cultural analysis. For Caillois, it was pure *alea*—an absurd, compulsive game in which one could only lose.<sup>39</sup> For Goffman, it was a way for a person lacking social connections "to demonstrate to the other machines that he has socially approved qualities of character"; machines stood in for people when there were none to engage with.<sup>40</sup> "These naked little spasms of the self occur at the end of the world," he wrote of machine gambling in the very last line of his analysis, "but there at the end is action and character." Geertz described slot machines as "stupid mechanical cranks" operated by concessionaries at the outer circumference of the cockfight circle, offering "mindless, sheer-chance-type gambling" that could be of interest only to "women, children, adolescents ... the extremely poor, the socially despised, and the personally idiosyncratic." "Cockfighting men," he continued, "will be ashamed to go anywhere near [the machines]." In other words, the devices were not a medium through which to become "a man among men," as Dostoyevsky had written of roulette; unlike the "exquisitely absorbing" *affaire d'honneur* of deep play, slot play was shallow, without depth of meaning, investment, or consequence. Incapable of illuminating the fundamental codes and concerns of a culture, machine gambling was not a properly "sociological entity," Geertz wrote.

The dramatic turn to machine gambling in American society (and beyond) since the 1980s prompts me to question such dismissals; surely, in this turn, one can find clues to the distinctive values, dispositions, and preoccupations of contemporary culture. But what kind of clues, and how to access them? Unlike Goffman's card gaming or Geertz's cockfighting, machine gambling is not a symbolically profound, richly dimensional space whose "depth" can be plumbed to reveal an enactment of larger social and existential dramas. Instead, the solitary, absorptive activity can suspend time, space, monetary value, social roles, and sometimes even one's very sense of existence. "You can erase it all at the machines—you can even erase yourself," an electronics technician named Randall told me. Contradicting the popular understanding of gambling as an expression of the desire to get "something for nothing," he claimed to be after nothingness itself. As Mollie put it earlier, the point is to stay in a zone "where nothing else matters."

In his 2003 book on gambling in America, *Something for Nothing*, the cultural historian Jackson Lears approaches gambling as a "port of entry into a broader territory," opening the book with a scene of machine gamblers who are so absorbed that they urinate into cups so as not to break the flow of their play. 42 Yet these particular gamblers are in fact quite marginal to the analysis that follows, in which Lears argues that national character is defined by a sharp tension between its "culture of chance" (epitomized by the figure of the speculative confidence man) and its "culture of control" (epitomized by the disciplined, self-made adherent of the Protestant work ethic). As machine gamblers tell it, neither control, nor chance, nor the tension between the two drives their play; their aim is not to *win* but simply to *continue*.

Sharon, trained as a doctor but working as a card dealer at the time we spoke, explained the value of continued play in terms of its capacity to keep chance at bay:

Most people define gambling as pure chance, where you don't know the outcome. But at the machines I do know: either I'm going to *win*, or I'm going to *lose*. I don't care if it *takes* coins, or *pays* coins: the contract is that when I put a new coin in, get five new cards, and press those buttons, I am allowed to *continue*.

So it isn't really a gamble at all—in fact, it's one of the few places I'm certain about anything. If I had ever believed that it was about chance, about variables that could make anything go in any given way at any time, then I would've been scared to death to gamble. If you can't rely on the machine, then you might as well be in the human world where you have no predictability either.

In Sharon's narrative, the gambling machine is not a conduit of risk that allows for socially meaningful deep play or heroic release from a "safe and momentless" life (to use Goffman's phrase), but rather, a reliable mechanism for securing a zone of insulation from a "human world" she experiences as capricious, discontinuous, and insecure. The continuity of machine gambling holds worldly contingencies in a kind of abeyance, granting her an otherwise elusive zone of certainty—a zone that Mollie described earlier as "the eye of a storm." "Players hang, it could be said, in a state of suspended animation," writes one machine gambling researcher.<sup>43</sup>

A zone in which time, space, and social identity are suspended in the mechanical rhythm of a repeating process may seem an unpromising object for cultural analysis. Yet such a zone, I argue, can offer a window onto the kinds of contingencies and anxieties that riddle contemporary American life, and the kinds of technological encounters that individuals are likely to employ in the management of these contingencies and anxieties. Over the last two decades, social theorists have focused a great deal of attention on the leading role that technology has played in the production of broad-scale insecurities—from global warming and other catastrophic environmental disasters to financial crises and unstable job markets. While some have acknowledged the subjective insecurities that percolate through so-called risk society as a result of these "manufactured uncertainties" (as the sociologist Ulrich Beck has termed them), fewer have examined how individuals use technology to manufacture "certainties" of the sort that Sharon discussed above. Counterintuitively, machine gambling can serve as a "port of entry," to borrow Lears's term, into this less examined but no less significant territory. Although the activity explicitly entails risk—involving money, no less, a key measure of social and economic value—it contains that risk within a dependable framework, allowing gamblers to enact a mode of self-equilibration that has become typical of everyday technological interactions.

In a historical moment when transactions between humans and machines unfold "at an ever greater level of intimacy and on an ever greater scale" (as the sociologist Bruno Latour has written), computers, video games, mobile phones, iPods, and the like have become a means through which individuals can manage their affective states and create a personal buffer zone against the uncertainties and worries of their world. Although interactive consumer devices are typically associated with new choices, connections, and forms of self-expression, they can also function to narrow choices, disconnect, and gain exit from the self. More than a case study of a singular addiction, an exploration of gambling addicts' intensive involvement with gambling machines yields clues to the predicaments, tendencies, and challenges that characterize wider "zones" of life. 47

## A HUMAN-MACHINE ADDICTION

As the rise of interactional gadgetry has changed the nature of everyday life, so the rise of machine gambling has changed the face of gambling addiction. By the mid-1990s in Las Vegas, the vast majority attending local meetings of the self-help group Gamblers Anonymous (GA) played machines exclusively—a striking change from the 1980s and earlier, when the typical GA member bet at cards or on sports. "Currently in the treatment center where I work," Bo Bernhard reported on Robert Hunter's outpatient clinic in 2000, "over 90% of individuals are in treatment for video gambling." He urged scholars to conduct research on how this swiftly spreading form of gambling might influence the acquisition, course, and experience of gambling addiction.

Still today, however, the preponderance of research tends to concentrate on gamblers' motivations and psychiatric profiles rather than on the gambling formats in which they engaged. This tendency was reinforced by the American Psychiatric Association's endorsement of "pathological gambling" as an official psychiatric diagnosis in 1980.<sup>49</sup> The diagnosis, soon to be renamed "disordered gambling," is associated with job loss, debt, bankruptcy, divorce, poor health, incarceration, and the highest rate of suicide attempts (20 percent) among all the addictions.<sup>50</sup> Its symptom criteria, modeled on those of other addictions, include preoccupation, tolerance, loss of control, withdrawal, escape, and denial (see fig. i.4).<sup>51</sup> Although previous psychiatric literature had described excessive gambling as a kind of mental illness, this literature typically emphasized the toxic and debilitating effects of gambling itself rather than focusing on gamblers' dispositions.<sup>52</sup> By contrast, the 1980

diagnosis presented the problem as "persistent and recurrent maladaptive gambling behavior," emphasizing gamblers' inability to resist internal impulses. If in the past all gambling had been considered potentially problematic, now there was a qualitative difference between "normal" and "problem" gambling; since problem gamblers were a discrete class of person, the rest of the population could gamble without cause for concern.<sup>53</sup>

PREOCCUPATION Preoccupied with gambling (e.g. reliving past gambling experiences, handicapping or planning the next venture, thinking of ways to get money with which to gamble) TOLERANCE Needs to gamble with increasing amounts of money to achieve desired excitement LOSS OF CONTROL Made repeated unsuccessful efforts to control, cut back, or stop gambling WITHDRAWAL Restless or irritable when attempting to cut down or stop gambling **ESCAPE** Gambles as a way of escaping from problems or of relieving a dysphoric mood (e.g. feelings of helplessness, guilt, anxiety, depression) After losing money gambling, often returns another day in order to "get even" LYING Lies to family members, therapists, or others to conceal extent of gambling ILLEGAL ACTS Committed illegal acts (e.g. forgery, fraud, theft, embezzlement) to finance gambling RISKS RELATIONSHIPS Jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling BAILOUT Relies on others to provide money to relieve a desperate financial situation caused by gambling

Figure i.4. Diagnostic Criteria for Pathological Gambling, of which an individual needs five or more to qualify for the diagnosis. American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders IV-R*, 2000.

While the medicalization of excessive gambling helped somewhat to undermine condemnations of gamblers as weak of will or morally compromised, ultimately it did more to undermine condemnations of gambling vendors as purveyors of a socially and morally corrupting activity. The gambling industry has embraced the diagnosis and its suggestion that problematic play is "confined to a small minority of constitutionally predisposed or mentally disordered problem gamblers," as one critic aptly puts it. The "small minority" in question is the 1 to 2 percent of the general population who fit the requisite diagnostic criteria at any given time, along with the additional 3 to 4 percent who qualify for the less severe "problem gambling." Notwithstanding the significant complications of prevalence measurement, there is broad consensus around these figures among researchers. Yet many find it misleading to measure the problem within the *general* population, given that the percentage of pathological and problem gamblers among the *gambling* population is a good deal higher, and higher still among *regular* (or "repeat") gamblers—20 percent, by some estimates. By any count, problem and pathological gamblers are significantly overrepresented among those who gamble. The economic ramifications of this overrepresentation have been well established: from 30 percent to a staggering 60 percent of total gambling revenues have been found to derive from problem gamblers. These numbers tell a very different story than do measures of the problem in the general population.

Going even further, some researchers point out that it is misleading to measure the problem by counting only those individuals who fit definitions for "pathological" or "problem" gambler, since *most* individuals who regularly gamble will at some point experience the hallmark features of problem gambling behavior—namely, difficulty controlling time and money spent on the activity, with negative consequences. To ignore the continuum of problematic experience among gamblers is to minimize the extent of the phenomenon, they suggest. Departing from the dominant medical emphasis on the psychological, genetic, and neurophysiological factors that might predispose an isolated subset of individuals to "maladaptive gambling behavior," they seek to understand how commercial gambling activities and environments might create the conditions for—and even encourage—such behavior in consumers.

Although most screens for problem gambling do not distinguish among different types of gambling activities and environments, studies that take such distinctions into account consistently find that machine gambling is associated with the

greatest harm to gamblers. "The academic literature on electronic machine gambling is, with few exceptions, faultfinding," write two scholars of gambling. "While there is unanimity about the superior revenue generating capacity of electronic gambling machines for both the state and gambling venue proprietors, there is also concurrence on the distress these machines can visit on the public." An increasing number of researchers, politicians, clinicians, and gamblers themselves have begun to raise the same question of gambling machines that is often asked of consumer products like cigarettes, alcohol, firearms, automobiles, and fatty foods: *Are the problems in the product, the user, or their interaction?* 100.

In 2002 the first in a line of studies found that individuals who regularly played video gambling devices became addicted three to four times more rapidly than other gamblers (in one year, versus three and a half years), even if they had regularly engaged in other forms of gambling in the past without problems.<sup>63</sup> Rather than indicating pathology in the gambler, "impaired control and subsequent problem development are an understandable and 'natural' consequence of regular, high intensity [machine] play," hypothesized the authors of another study.<sup>64</sup> Endorsing this hypothesis, an independent federal commission in Australia concluded in 2010 that "the problems experienced by gamblers—many just ordinary consumers—are as much a consequence of the technology of the games, their accessibility and the nature and conduct of venues, as they are a consequence of the traits of the consumers themselves."<sup>65</sup>

Although the gambling industry has energetically dismissed this conclusion as far-fetched and scientifically unwarranted, scientists have in fact long understood addiction to be a function of the interaction between people and things. 66 "The potential for addiction," writes Howard Shaffer, a prominent academic researcher in the field of gambling addiction, "emerges when repeated interaction with a specific object or array of objects (a drug, a game of chance, a computer) reliably produces a desirable subjective shift." Accordingly, he has suggested that addiction researchers should "emphasize the relationship instead of either the attributes of the person struggling with addiction or the object of their addiction." When addiction is regarded as a relationship that develops through "repeated interaction" between a subject and an object, rather than a property that belongs solely to one or the other, it becomes clear that objects matter as much as subjects.

Just as certain individuals are more vulnerable to addiction than others, it is also the case that some objects, by virtue of their unique pharmacologic or structural characteristics, are more likely than others to trigger or accelerate an addiction. Their distinctive potency lies in their capacity to engender the sort of compelling subjective shift on which some individuals come to depend. "The most reliable, fast-acting and robust 'shifters' hold the greatest potential to stimulate the development of addictive disorders," Shaffer has written. <sup>69</sup> This fact is readily acknowledged by researchers of substance addictions, who rarely conduct their studies in the absence of some understanding of how a given drug affects its users. Yet despite growing evidence that certain repeated activities stimulate the same neurochemical pathways as drugs do, the substanceless nature of so-called behavioral addictions has led to a lopsided focus on addicts (their genetics, psychological profiles, and life circumstances) by scientists and the public alike. <sup>70</sup> Relatively few discussions of gambling addiction, for instance, take into account the role of modern slot machines, although "reliable, fast-acting, and robust" well describes the devices.

While all forms of gambling involve random patterning of payouts, machine gambling is distinguished by its solitary, continuous, and rapid mode of wagering. Without waiting for "horses to run, a dealer to shuffle or deal, or a roulette wheel to stop spinning," it is possible to complete a game every three to four seconds.<sup>71</sup> To use the terminology of behavioral psychology, the activity involves the most intensive "event frequency" of any existing gambling activity. <sup>72</sup> "It is the addiction delivery device," says Henry Lesieur, a sociologist who wrote the first book-length ethnographic account of nonelectronic gambling addictions in 1977 before becoming a counselor in the wake of machines' spread.<sup>73</sup> Others have called modern video gambling "the most virulent strain of gambling in the history of man," "electronic morphine," and, most famously, "the crack cocaine of gambling."<sup>74</sup> "As smoking crack cocaine changed the cocaine experience," Shaffer predicted in 1999, "I think electronics is going to change the way gambling is experienced." Because video-based gambling machines "are faster than the mechanical form," he later elaborated, "they hold the potential to behave in the fashion of psychostimulants, like cocaine or amphetamines. They energize and de-energize the brain in more rapid cycles."<sup>76</sup> "I was quoted in the Wall Street Journal comparing video gambling machines to crack cocaine," the psychologist Hunter told me in 1995. "The industry didn't like it, but I call it an accurate quote. Cocaine addicts tell you about the last decade, but crack cocaine addicts tell you about the last year, and that's very similar to the video gamblers." Sensationalist metaphors aside, most researchers place different forms of gambling along a continuum of intensity that progresses from lottery, bingo, and mechanical slots to sports, dice, cards, and finally, to video slots and video poker.<sup>77</sup> "No other form of gambling manipulates the human mind as beautifully as these machines," the gambling addiction researcher Nancy Petry told a journalist. 78

Forms of gambling differ not only in the intensity of play they facilitate but also in the kinds of subjective shifts they enable. Each type of gambling involves players in distinctive procedural and phenomenological routines—betting sequence and temporality, frequency and amount of payouts, degree of skill involved, and mode of action (checking books, ticking boxes, scratching tickets, choosing cards, pressing buttons), producing a unique "cycle of energy and concentration" and a

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corresponding cycle of affective peaks and dips. 79 The game of craps, for instance, can produce a state of high energy and suspense punctuated by euphoric wins whose thrill depends largely on social feedback. The solitary, uninterrupted process of machine play, by contrast, tends to produce a steady, trancelike state that "distracts from internal and external issues" such as anxiety, depression, and boredom.<sup>80</sup> Based on his clinical practice in Las Vegas, Hunter has concluded that modern video gambling "facilitates the dissociative process" more so than other gambling formats. 81 "The consistency of the experience that's described by my patients," he told me of machine gambling, "is that of numbness or escape. They don't talk about competition or excitement—they talk about climbing into the screen and getting lost."

To put the zone into words, the gamblers I spoke with supplemented an exotic, nineteenth-century terminology of hypnosis and magnetism with twentieth-century references to television watching, computer processing, and vehicle driving. "You're in a trance, you're on autopilot," said one gambler. "The zone is like a magnet, it just pulls you in and holds you there," said another. 82 The memoirist Mary Sojourner has described video gambling as "a trancelike preoccupation in which perpetuating the trance was reward enough."83 As Mollie and Sharon told us earlier, it is not the chance of winning to which they become addicted; rather, what addicts them is the world-dissolving state of subjective suspension and affective calm they derive from machine play.

Given that this state can only exist as a function of the dynamic interaction between player and machine, it is impossible to understand contemporary machine gambling "without taking into account [the] transformation of technology and the adaptation of gamblers to the experiential possibilities the advances in technology have presented," as the sociologist of gambling Richard Woolley has written. 4 I attempt to do just that in the following pages, paying close attention to elements of gambling machine design and the kinds of affective self-management they afford gamblers. Tracking back and forth between gamblers' experience and the array of environments, objects, and software programs with which they interact, I undertake what the philosopher of technology Don Ihde has alternately called a "phenomenology of human-technology" and "materialist phenomenology."85 Such an approach avoids the tendency of strict materialism to treat technology as an autonomous, determining force, while also avoiding the tendency of human-centered approaches to regard technology as a passive, neutral tool. Instead, at every step the focus is on the ways in which objects and subjects act together, through their encounters with each other. Action, Latour has argued, is not a preformed essence that resides within subjects or objects, but something they "co-produce." 86 "In [an] encounter," write two sociologists who apply this approach to the case of drug use, "the user is seized at those very points ... of affordance that are made possible and relevant by his/her own practices, as well as by the properties of the objects used."87 The idea of addiction as a coproduction greater than the sum of the parts from which it emerges resonates with the scientific understandings of addiction sketched above, and is especially fitting for a study of an addiction to interactive gambling technology.<sup>88</sup>

In a strategic response to growing suggestions that gambling machines are to some extent implicated in gambling addiction, the American Gaming Association released a 2010 white paper called "Demystifying Slot Machines." Echoing the National Rifle Association's (NRA) famous slogan—"Guns Don't Kill People, People Kill People"—the paper asserts that "the problem is not in the products [players] abuse, but within the individuals." In this one-sided account, the machine is merely "the mechanism through which pre-existing psychological disturbances are expressed," as a researcher puts it. 90 "What gaming critics fail to understand," a reporter for Global Gaming Business sums up, is that "machines are simply inanimate objects."91

As it happens, Latour has taken issue with the abovementioned NRA slogan—and with its equally one-sided counterpart, the antigun slogan "Guns Kill People"—as a way to explain why objects are never "simply inanimate": "You are different with the gun in your hand; the gun is different with you holding it. You are another subject because you hold the gun; the gun is another object because it has entered into a relationship with you."<sup>92</sup> In other words, neither guns nor people kill; killing is an action they can only produce together, each mediating the other. Following this mediational logic, the account of addiction to gambling machines that I present here locates addiction not discretely within gamblers or gambling machines but, rather, in the dynamic interaction between the two.

At the same time, I do not wish to suggest that the respective contributions of humans and machines to the problem are qualitatively equivalent. As anthropologists, sociologists, philosophers, and historians of technology have argued, human actors bear "particular accountabilities" when it comes to human-machine exchanges, especially those humans in a position to configure the terms of such exchanges.<sup>93</sup> Unlike gamblers, who could be said to act upon themselves through gambling devices with a goal of regulating their own affective states, the designers, marketers, and managers of the devices are in a position to act on others at a distance, delegating to technology the task of soliciting and sustaining specific kinds of human behavior. Latour and his colleagues have conceptualized design as a process of "inscription" whereby designers inscribe

certain modes of use into the products that consumers will interact with; the resulting products carry "scripts" that inhibit or preclude certain actions while inviting or demanding others. "By setting the parameters for the users' actions," a given product—and by implication, its design team—plays a role in guiding their behavior. 94

The gambling machine is a case in point. Undermining their own public claims that slot machines are powerless, inert things, members of the gambling industry invest a great deal of resources and creative energy into the project of guiding player behavior through technology, endeavoring to create products that can extract maximum "revenue per available customer," or REVPAC. Of this all-consuming objective they talk freely and explicitly among themselves—on conference panels, in journals, and in the aisles and meeting lounges of exposition floors. How to get people to gamble longer, faster, and more intensively? How to turn casual players into repeat players? Despite the fine line between these objectives and the solicitation of addiction behavior, most industry members manage to maintain a cognitive disconnect between the two, distancing their script for profit from its potential harmful effects on consumers. Connie Jones, IGT's designated "Director of Responsible Gambling," describes the situation well: "Our game designers don't even think about addiction—they think about beating Bally and other competitors. They're creative folks who want machines to create the most revenue." Although Jones's statement is meant to defend against the charges of intentional harm that are sometimes leveled at the gambling industry, the fact that her defense rests on an open admission of the mercenary nature of game design, along with the dismissive assertion that "game designers don't even think about addiction," does more to illustrate the problem than to pardon it.

My aim in the following pages is not to single out specific designers or companies for blame, or even to blame the industry as a whole. Rather, in keeping with the relational understanding of addiction outlined above, I closely examine how addiction to gambling machines emerges out of the dynamic interaction between machine gamblers and the design intentions, values, and methods of commercial gambling environments and technologies. As the book's title is meant to underscore, the story of "problem gambling" is not just a story of problem gamblers; it is also a story of problem machines, problem environments, and problem business practices.

#### MOLLIE'S MAP

This book draws on research I conducted during several extended visits to Las Vegas between 1992 and 2007, including a continuous stay of eighteen months between 1998 and 2000. The research unfolded in three stages, beginning in the early 1990s as an ethnographic and archival study of the architecture, interior design, and management practices that arose during the corporate casino building boom that was then unfolding. In the course of conducting my fieldwork, as the local population grew rapidly and an assortment of new neighborhood casinos opened their doors, I became more and more curious about residents' experience living and working in a city so saturated by gambling environments and technologies. As I shifted my focus away from tourist casinos along the Strip, I was struck by the ubiquity of machine gambling in the local landscape—on billboards, in grocery stores and pharmacies, in restaurants and bars, and even at car washes.

Almost everywhere I went during this second stage of research, I encountered people who claimed to intimately know someone who had "a gambling problem" with the machines. These early encounters led me to many of the gamblers I eventually interviewed, most of whom identified themselves as "gambling addicts," "machine addicts," "problem gamblers," or "compulsive gamblers"—terms that I use interchangeably in the following pages. <sup>97</sup> The majority I came to know by attending GA meetings as well as group therapy sessions at a clinic for problem gamblers where I became an intern. <sup>98</sup>

I did not limit my pool of interviews to one category of machine gambler (e.g., middle-aged, middle-income-earning men who play quarter slots); nor did I set out to construct a statistically reliable, random sample of informants, although I did make an effort to speak to as diverse a group as possible. As it turned out, the group was quite heterogeneous in terms of age, ethnicity, education, and income. Caucasian women between the ages of thirty and fifty were most heavily represented, in part reflecting the demographic characteristics of machine gamblers in Las Vegas at the time I conducted the majority of my interviews, and in part reflecting my regular attendance at women-only GA meetings.<sup>99</sup>

Although the social, economic, and biographical differences among the machine gamblers in my study mediated their machine play in significant ways, even more striking were the continuities of experience that the common set of machines they played seemed to bring about. <sup>100</sup> In the space of one day in 2002, for instance, I interviewed a young buffet waitress living in a trailer park in the northeast part of the city and an older male businessman living in a gated community in the affluent southwestern suburb of Summerlin. <sup>101</sup> The waitress played nickel machines, often at supermarkets, while the businessman played dollar machines at a well-appointed neighborhood casino. The waitress spent whole paychecks at a time, worrying afterward that her children would not have money for school lunches. The businessman maxed out credit cards and

depleted family savings, worrying that he might not manage to shuffle his money among bank accounts in time to cover his expenditures and avoid late fees, or to intercept the mail and conceal his losses from his wife. Despite radical differences in their life circumstances, the coin denomination of their game play, and the financial consequences of their gambling, the waitress and the businessman described their interactions with machines in uncannily similar language; reading over their transcripts, I found the two narratives nearly interchangeable in this regard. Extended, intensive, and repeated encounters with the same machine interface seemed to bring gamblers from diverse walks of life into a shared zone of experience, cutting through and across the differences between them.

As my research went on, it became increasingly clear that to adequately understand the experience of these gamblers, I would need to better understand the machines they were playing. To that end I expanded the scope of my project for a third time and began to educate myself about the history and inner workings of gambling machines, as well as the design practices and marketing strategies of gambling technology suppliers. I spent long hours at the Gaming Research Center at the University of Nevada, Las Vegas, where I read through years of machine manufacturers' trade magazines, press releases, and annual reports. I also began attending gambling industry technology expositions and conference panels and interviewing executives, game developers, and marketers.

The majority of the industry members I spoke with were unguarded in their interactions with me, even when our conversations turned to the potential negative effects of the machines they built and sold. They showed me around their facilities, signed consent forms, and allowed me to record lengthy interviews in which they talked openly about their approach to technology design and marketing, the sometimes questionable effects of their innovations on gamblers, and even their own experiences playing gambling machines. Some were cavalier while others were thoughtful; some were defensive, others cynical. Although a few professed uneasiness about the possible relationship between gambling addiction and their own architectural, design, or marketing practices, most drew a strict line between the two.

The gambling addicts I met, on the contrary, were remarkably reflexive regarding their own behavior and its consequences. Belying stereotypes of addicts as blind to the futility and destructiveness of their actions, they spoke lucidly and insightfully of their predicament. Mollie reflected: "Is it about money? No. Is it about enjoyment? No. Is it about being trapped? Yes—it is about having lost the plot as to why you are there in the first place. You are involved in a series of entrapments that you can't fully appreciate from inside them." A gambler named Katrina wrote to me of the "ever-present awareness of being in a destructive process" that accompanies her involvement with machines: "Even as part of one's mind is hopelessly lost to it, lurking in the background is a part that is sharp and aware of what is going on but seems unable to do much to help." 102 Although the part of Katrina that is "sharp and aware" does not succeed at extracting her from the zone of addiction, she makes a case for its potential analytical value: "I would ask that a chance be given for the possibility that, despite close involvement, it is quite possible for someone to step outside of their situation and be 'objective' and have real 'insight' into aspects and perspectives that may be overlooked by others." This book attempts to give that chance to the gamblers I spoke with. Instead of casting them as aberrant or maladapted consumers, I include them in the following pages as experts on the very "zone" in which they are caught—a zone that resonates to some degree, I suggest, with the everyday experience of many in contemporary capitalist societies.



Toward the end of our interview, Mollie, who had always liked to draw, flipped over a page of her 12-step self-help literature, borrowed a pen, and drew a map of what it was like to live in Las Vegas (see fig. i.5). She spoke as she sketched, describing each spot on the map and its role in her daily life. She began in the upper left-hand corner of the sheet with the MGM Grand, the casino resort where she worked making room reservations. To the right she placed the 7-11 where she pumped gas on the way home and sometimes gambled, and beside it, the Palace Station, the neighborhood casino where she gambled at night and on weekends. Below she drew the supermarket where she shopped and gambled, and below that, the free clinic where she picked up medications to treat her anxiety disorder. Finally, in the lower left-hand corner was the strip mall where every Wednesday evening she attended the Gamblers Anonymous meeting where we first met. Mollie drew a road connecting each site to the next, such that they formed a continuous loop. She paused, contemplating the map, and then finished with a figure of herself suspended in the middle of the loop, seated in front of a slot machine.

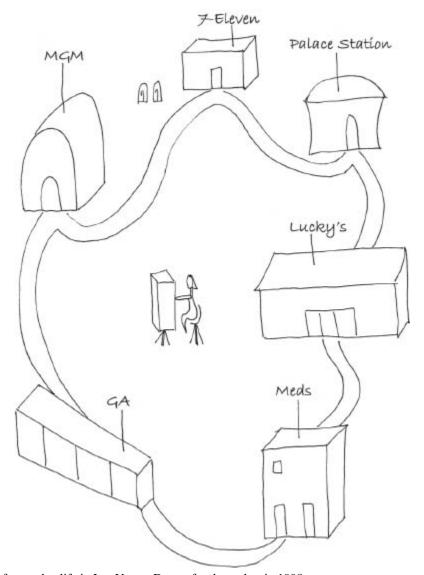


Figure i.5. Mollie's map of everyday life in Las Vegas. Drawn for the author in 1998.

Evoking the well-known analysis of *Learning from Las Vegas*, in which casinos' outsized signs reflect the visual priorities of an emergent automobile culture, Mollie marked each location on her route with a disproportionately large sign. <sup>103</sup> Yet the lesson to be learned from her map is less about the populism of commercial strip architecture and the frontier freedom of automobility than the sites of entrapment, containment, and provisional escape that spring up along the pathway of certain drives. <sup>104</sup> "Sometimes I'll be driving on Rancho," she told me, "and the next thing I know I'm on Paradise Road, and I won't remember getting there. I lose the time that it takes me to get to Palace Station, or get home—there are gaps. On the Interstate I'll be all the way to the exit ramp before I realize I've just done a big circle turn." The road she drew features no exits, appearing instead as a closed circuit of stations where various vices—as well as their remedies—may be pursued. Inside this circuit (or perhaps outside, it was not clear) her figure floated, anchored only to a gambling machine. "Where is that?" I asked when she had completed the sketch, pointing at the human-machine pair in the middle of the page. "That's nowhere," she responded; "that's the zone."

With Mollie's map in hand, this book sets out to explore the machine zone and the broader constellation of material, social, and political-economic circumstances out of which it emerges and from which it seeks escape. What dynamic circuit of architectural strategies, technological capacities, affective states, cultural values, life experiences, therapeutic techniques, and regulative discourses forms the context for this existential no-man's-land, in which gamblers seek to lose themselves and the gambling industry seeks to turn a profit? I take the human-machine encounter at the center of Mollie's map as my primary unit of analysis and move out from there, progressively widening the frame. <sup>105</sup> I have drawn my own map in four parts, each of which charts the terrain of a different position along the circuit of machine gambling.

Part one, "Design," examines how casino managers and game manufacturers script gambling environments and

technologies. Chapter 1 introduces readers to the machine-oriented architecture and ambience of the modern casino and the ways they are calibrated to draw patrons to machines and keep them absorbed in play. Chapter 2 turns to the machine interface itself and the meticulous attention its designers pay to players' bodily and sensory propensities so as to facilitate longer, faster, and more intensive play. Chapter 3 ventures inside machines to consider how the shift from mechanical to digital technology has heightened the gambling industry's control over odds—and how, in turn, this shift has changed the terms of gamblers' interactions with chance.

Part two, "Feedback," takes a closer look at how the design of gambling technologies and environments at once responds to gamblers' play preferences and patterns and seeks to steer those preferences and patterns in certain directions. Chapter 4 explores the dynamic relationship between innovations in game software and the shifting inclinations of players, focusing on the widespread turn from playing-to-win to playing for "time-on-device." Chapter 5 considers the gambling industry's evolving ability to track, analyze, and adjust to individual players' predilections so as to heighten their absorption in machines. Chapter 6 addresses the counterintuitive role that choice making and a sense of control plays in gamblers' self-dissolution and entry into the "machine zone."

In part three, "Addiction," the point of analytic focus shifts from the machine and its design to the gamblers who become addicted. Chapter 7 explores what their all-consuming machine play might reveal about the larger social forces, values, and expectations operating in their lives, particularly those pertaining to social interaction, money, and time. Chapter 8 considers how the dynamics of control and loss at stake in gamblers' personal life histories play out in their encounters with slot machines, and how these seemingly aberrant dynamics express processes, tendencies, and existential concerns that go beyond their singular experiences.

Part four of the book, "Adjustment," explores the paradoxical ways in which remedies for problematic machine gambling become implicated in the very problem they are designed to "fix." Chapter 9 addresses the double bind of gambling addicts in recovery as they struggle to practice therapeutic techniques whose aims and methods are sometimes difficult to distinguish from the self-medicating practices of their machine play. Chapter 10 turns to the domain of policy, examining the diverse regulatory schemes that have crystallized around machine gambling, along with corresponding debates over whether the management of its risks is the responsibility of gamblers, the gambling industry, or the government. The book concludes by tracking the extension of machine gambling and "repeat play" to new parts of the world and into new domestic markets, and explores how members of the gambling industry and government representatives parse the ethical issues at stake in their promotion of this model for revenue generation.