

Social Studies of Science

<http://sss.sagepub.com/>

Machine gambling in the 'zone': Natasha Dow Schüll's *Addiction by Design*

Hansen Hsu

Social Studies of Science 2013 43: 952 originally published online 22 October 2013

DOI: 10.1177/0306312713507496

The online version of this article can be found at:

<http://sss.sagepub.com/content/43/6/952>

Published by:



<http://www.sagepublications.com>

Additional services and information for *Social Studies of Science* can be found at:

Email Alerts: <http://sss.sagepub.com/cgi/alerts>

Subscriptions: <http://sss.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://sss.sagepub.com/content/43/6/952.refs.html>

>> [Version of Record](#) - Nov 21, 2013

[OnlineFirst Version of Record](#) - Oct 22, 2013

[What is This?](#)

Machine gambling in the 'zone': Natasha Dow Schüll's *Addiction by Design*

Social Studies of Science

43(6) 952–956

© The Author(s) 2013

Reprints and permissions:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/0306312713507496

sss.sagepub.com



Hansen Hsu

Department of Science and Technology Studies, Cornell University, Ithaca, NY, USA

Natasha Dow Schüll, *Addiction By Design: Machine Gambling in Las Vegas* (Princeton, NJ: Princeton University Press, 2012), 442 pp., ISBN 9780691127552.

Natasha Schüll's *Addiction By Design* is fascinating, absorbing, and at times, a bit frightening. The book is concerned with the co-production of gambling addiction through the interaction of gambling environments, technologies (slot machines and video poker), and their users. Schüll's work will have wide relevance to many audiences, including those interested in technology studies, media studies, software studies, game studies, values-in-design, and the psychology and sociology of addiction and other technologically mediated behavioral disorders.

Schüll's central argument hinges on the introduction of two theoretical concepts: the 'zone', and 'asymmetric collusion'. The 'machine zone' is an affective state of calm equilibrium where everything seems to disappear, including a sense of one's own self and body. Unlike the social gambling of cockfights and table games described by Geertz and Goffman, machine gamblers, Schüll argues, are not playing to win, nor participating in a heroic contest of character or a reenactment of status dynamics. Rather, they play to keep playing and to reach and stay in 'the zone' as long as possible. The zone is made possible by the tight cybernetic loop between machine and player and by the machine's ability to give instant feedback on a game's result. The gambler reaches the zone by increasing the speed of betting until the point where the risks of each individual bet are smoothed out over thousands of plays, establishing a 'perfect contingency' between player and machine. Schüll, drawing on child psychoanalyst D. W. Winnicott, describes perfect contingency as 'a situation of complete alignment between a given action and the external response to that action, in which distinctions between the two collapse' (p. 172).

Corresponding author:

Hansen Hsu, Department of Science and Technology Studies, Cornell University, 306 Rockefeller Hall, Ithaca, NY 14853, USA.

Email: hh334@cornell.edu

The response of another entity (be it a machine or another person) to the subject is so immediate and predictable that the subject experiences the other entity as an extension of itself. The tight coupling between gambler and machine in the zone, over hundreds of plays, reduces chance to a smooth and predictable gradual depletion of funds; the gambler's knowledge of this certainty allows her to feel in control of her own losses. Knowing that you will either win or lose, and eventually will lose, creates a numbing sense of comfort in which the uncontrollable contingencies of real life recede.

In this state, anything preventing the player from hitting that button to immediately bet again needs to be minimized lest the zone state evaporates – this includes having to get more money, being interrupted by casino attendants, or even winning, if it involves waiting for long animations or for a large jackpot to dispense as physical coins. As described by Schüll, in the 1990s, the industry began to recognize that their revenues had shifted to machine gamblers who preferred low betting denominations, high speed, and played not for the thrill of the occasional big jackpot, but for more consistent and frequent medium-sized wins that kept them playing for as long as possible. The industry responded in the 2000s by designing electronic slot and video poker machines to 'give people what they want', thereby increasing players' 'time on device' for maximum profits. New machines were designed to help get gamblers into the zone more quickly, making their play more rapid and intense by replacing levers with buttons, allowing players to skip animations, and replacing physical coins with virtual credits stored on a player's rewards card, enabling winnings to be instantly re-bet rather than cashed out. Machines and environments were also designed to keep players in the zone longer, by improving the ergonomics of the machines and chairs, removing distracting lines of site, arranging machines in areas that felt contained and thus safe, and smoothing out the payout algorithm's pattern of wins and losses by increasing the frequency of small wins over big ones.

In Schüll's account, it is clear that gamblers are cooperating with the gambling industry in the design of addictive machines, yet this is ultimately an unequal partnership, or as she puts it, an 'asymmetric collusion' (p. 73). This second contribution highlights the different stakes involved in the gambling arena. Gamblers play not to win, but to stay in the zone, even though doing so leads to their ultimate financial liquidation. The industry, in contrast, is always playing to win, maximizing profits by catering to the desires of the most intensive gamblers as their tolerances gradually increase in adaptation to ever faster, ever more complex slot machines. This collusion seems innocuous enough through the first half of the book, when Schüll's narrative focuses on the designers and the machines themselves, and the responses of the industry to 'what players want'. However, once Schüll's account shifts to the addicts themselves, it is clear that 'giving players what they want' has a dark side. More often than not, addicts are women. The root of their addiction lies in feeling a lack of control in a world full of contingency (often, caused by bereavement, abandonment, or violence), leading to the pursuit of escape and self-annihilation within the zone. Paradoxically, the perfect contingency of the zone depends on addicts ultimately knowing they will lose. They feel in control of their own losses, and of their speed. Yet, this control is an illusion, leading to financial extinction, social and physical depletion, and squandered potential. The gambling industry's rhetoric is that such 'problem gamblers' are a tiny subset of the general population, differing from normal, responsible gamblers. However, Schüll shows that not only does a staggering

majority of the industry's revenue come from 'problem gamblers', but that their intense interactions with machines lie at the extreme of a continuum of behavior cultivated by the industry. Casinos' marketing and loyalty rewards programs, fed by intensive data gathering and surveillance, are designed to encourage, increase, and subsequently target 'repeat play'.

Schüll notes that in a sense the gambling industry and the governments who depend on its revenue are also simultaneously addicted to gambling. By laying bare the logic of machine gambling, Schüll attempts to make a larger point about contemporary capitalism, noting that the kinds of profit-maximizing practices of the gambling industry presaged the similar predatory lending practices of finance, leading to the global financial crisis. In Chapter 5, she outlines how the kinds of surveillance and intensive gathering of data on players was pioneered by casinos but is now making its way across our modern, computerized landscape. In her discussion in Chapter 2 of how the design of casino environments condition gamblers' bodies, she points out that such architectures are less examples of Foucauldian discipline than of Deleuzian 'control society', which seeks to regulate flows of 'capital, information, bodies, and affects' (p. 51). As opposed to the factory, which seeks to extract labor through discipline, the casino seeks to elicit 'experiential affect', keep players in the zone, and extract their money through control. Schüll calls the casino the epitome of Julian Dibbell's 'ludocapitalism', which profits from consumption of play and entertainment experience.

In her discussion of the psychology of addicts and their paradoxical drive to gain a sense of control through the perfect contingency of the slot machine, Schüll powerfully notes how late-capitalist, neoliberal societies' tendency to turn individuals into 'actuarial selves' that are constantly regulating and managing a myriad of financial and social choices, helps to create both the problem gambler and the double bind of addiction recovery – the problem that recovery itself depends on addictive self-regulation. Gambling addicts, Schüll notes, are not incapable of actuarial, economic thinking; rather, it is this type of thinking – controlled and distilled in the relatively safe medium of machine gambling – that drives their play within the zone. Moreover, the same kinds of self-regulatory behaviors are part and parcel of their therapy, leading to the danger that therapy itself could lead them back into their addictions.

Schüll references an eclectic collection of theories to explain the psychology behind the zone. In Chapter 8, she uses Freud's explanation of the 'death drive' (p. 223), or the drive to annihilate the sense of self that gamblers seek in the zone in order to control or eliminate the anxieties associated with traumatic pain or loss, as a way to explain the self-destructive behavior of gambling addicts. In the introduction to Part 2 and in Chapter 4, she notes that gamblers themselves use behaviorist explanations for their own attachments to slot machines – they are 'rat people' attached to 'Skinner boxes' (pp. 104–105). In Chapter 6, the notion of 'perfect contingency' is drawn from the field of child development (p. 172). In the same chapter, Schüll notes how the zone is similar to psychologist Mihaly Csikszentmihalyi's notion of 'flow', a desubjectified state in which a person is pursuing a goal-oriented task with some skill and is given immediate feedback, 'bestowing a sense of simultaneous control and challenge' (p. 166).

Some of these various psychological explanations are simultaneously analytical categories and actors' categories. Behaviorism is evoked by a number of the actors themselves

to explain their own attachment to the machines; yet, clearly, there is a resonance between it and the cybernetic language of feedback that undergirds all of Part 2. More interestingly, the concept of the 'zone' itself is both an actor's and an analytical category. Both gamblers themselves and the gambling industry talk about attaining (or helping others attain, through design) the 'zone'. Yet, the paradox of the zone lies in its being an affective state in which the subject seeks and feels a measure of control while being out of control, is embodied yet feels disembodied, is a subject while being desubjectified.

Schüll's notion of the 'zone' is an important contribution to Science and Technology Studies (STS) literature on the 'flow' states of the human-machine cyborg. Indeed, the 'zone' resonates considerably with Sherry Turkle's (1984, 1995) discussions of interactions with computer games and graphical user interfaces. More recent discussions of such states include Gabriella Coleman's (2013) description of the blissful 'deep hack mode' or Fred Turner's (2009) transcendent 'Silicon Pentacostalism'. Similarly, Schüll argues that it is precisely the cybernetic, computerized affordances of video slots that make the machine encounter so compelling. Although all of these cyborg experiences evoke disembodiment and desubjectification, Schüll's zone is ultimately destructive; it is not Haraway's beneficial symbiosis (p. 179). Yet, as Schüll notes in her discussion of the 'double bind of therapeutics', anything – including exercise, caring for others, religious activity, and therapy itself – can potentially become addictive, and the absorption of hacking and programming could easily take the same turn. What then, differentiates positive from negative flow? Csikszentmihalyi located this in the motivations and inclinations of the subject to either 'escape forward' or 'backward', but Schüll argues that the properties of the flow activity itself, and the objects such activity involves, matters. Addiction is co-produced between the gambler and the machine. Yet, because the machine is designed to be addictive, in her collusion with it the gambler is simultaneously complicit in her addiction and at the mercy of the machine and its designers. Thus, Schüll's notion of 'asymmetric collusion' provides to STS scholars a new way of understanding the entanglements of agency and delegation in a human-machine pair, especially in the context of consumer technologies.

More ambitiously, Schüll attempts to use the case of machine gambling to make a larger point about technology and late-capitalist, consumer-driven society. How exactly do the concepts of the 'zone' and 'asymmetric collusion' relate to this larger argument? Asymmetric collusion is present in all consumer industries, especially technological ones. Moreover, in Dibbell's concept of 'ludocapitalism', the boundaries between labor and play and between consumption and production are blurred. 'Flow' activities such as free software hacking, computer gaming, and machine gambling are all done for 'leisure' and yet are harnessed asymmetrically through consumer technologies to produce value.

But what is being produced, and for whom? Gambling consumers produce value not for themselves – their play/labor depleting mind, body, and bank account – but for others, the industries and governments whose revenues depend on their addiction. This productivity is dependent precisely on gamblers becoming disciplined into self-managing and regulating, neoliberal selves, made possible by an expanding array of mobile devices and applications that both regulate and surveil us. Such skills are similar to those of the Wall Street financier, but while society praises the financier's actuarial skills to maximize

profit for himself at cost to others, it excoriates the gambler's skills in maximizing profit for others, in asymmetric collusion with them, at cost to herself.

I suggest then that regardless of whether a given flow activity is intrinsically self-actualizing or self-depleting, individual members of capitalist societies may evaluate the activity as such depending on whether he or she considers it 'productive' to the subject and/or society, in accordance with the ideology of the Protestant work ethic. In the meantime, the corporate powers continue to extract value from consumers through asymmetric collusion, 'giving them what they want' as they spend money or time on leisure. Such consumers are disciplined into neoliberal subjects, each individual responsible for regulating and managing his or her capital, body, and mind, increasingly through ubiquitous information technology. If Schüll is correct, then living in today's late capitalist, digitally mediated society we are all actuarial selves, we are all potential gamers, seeking control in the midst of contingency, each seeking our own version of the zone.

References

- Coleman EG (2013) *Coding Freedom: The Ethics and Aesthetics of Hacking*. Princeton, NJ: Princeton University Press.
- Turkle S (1984) *The Second Self: Computers and the Human Spirit*. New York: Simon & Schuster.
- Turkle S (1995) *Life on the Screen: Identity in the Age of the Internet*. New York: Simon & Schuster.
- Turner F (2009) Burning Man at Google: A cultural infrastructure for new media production. *New Media & Society* 11(1–2): 73–94.

Author biography

Hansen Hsu is a graduate student in Science and Technology Studies at Cornell University, specializing in the sociology and history of computing. Hansen has a BS in Electrical Engineering and Computer Science (EECS) from the University of California, Berkeley, and an MA in History from Stony Brook University. He is also a former Apple software engineer. Hansen is completing a dissertation on the culture and values of the third-party Apple software developer community, and their influence on the design and production of apps. He is currently examining how the community is constituted around practices of knowledge sharing.