2. Persuasive Games, A Decade Later

Ian Bogost

Abstract
More than a decade ago, Bogost invented the concept of 'procedural rhetoric'—the idea that games and software can make arguments through their mechanics. Even earlier, he founded a studio called Persuasive Games that adopted procedural rhetoric as a design philosophy. These ideas have had some influence on game studies and design, including finding their way into the title of this volume. And yet the promise of persuasive games in the world as a force that would introduce systems literacy to the mass media has not been successful. What happened, and what—if anything—can be done about it?

Keywords: procedural rhetoric; persuasive games; design philosophy; procedurality; games as literacy

It has been a decade since I published *Persuasive Games*, my book on how computer games and simulations make arguments and express ideas (Bogost, 2007). The game studio that I founded (which I also named Persuasive Games) to produce those sorts of games for politics, education, business, and more is now fifteen years old. These milestones are sufficiently notable, for me at least, that I've been giving them considerable thought.

It's not just my idea, of course. In the book, I drew on lots of precedents in theory and design. Clark Abt's work concerned non-computational serious games in the early 1970s that long predated the digital versions that became popular around the turn of the millennium (Abt, 1970). Meanwhile, designers like Chris Crawford were making political games two decades before the publication of *Persuasive Games*. And simulation games—from *Sim City* (Electronic Arts, 1993) to the delightful, esoteric titles about farm machinery and cheesemaking that line the coffers of Steam—all try to capture the world and represent it, in part, in game form.

Hera, T. Dela, J. Jansz, J. Raessens, B. Schouten, *Persuasive Gaming in Context*. Amsterdam: Amsterdam University Press, 2021
DOI 10.5117/9789463728805_CH02

My version of the idea was always pretty simple: games and simulations are systems of interlocking parts and behaviors. The world is also made of interlocking parts and behaviors. This parallel structure gives games a unique purchase on representing how things work in the world. And because games are representational, they can also depict how things *should* work—that is, they can make arguments about which worldly behaviors are desirable or undesirable. This approach to argument seemed different enough from other forms of rhetoric—verbal, visual, and so forth—that I suggested a new category for it: *procedural rhetoric*, namely rhetoric arising from processes, behavior, and models.

This argument has had some considerable influence. People read the book and, to some extent, still have to read it if they want to pursue the theoretical canon of game studies. As the design philosophy for the studio, it produced some interesting work, including the first official game for a U.S. presidential candidate (which I worked on with my colleague Gonzalo Frasca and his studio in Uruguay), along with games about airport security, consumer debt, disaffected workers, the petroleum industry, suburban errands, a pandemic flu, and tort reform. Millions of people played some of those games, and others were collected or exhibited internationally. I appeared as a guest on the TV program 'The Colbert Report' and received lots of attention.

Yet looking back, I have to admit that this influence has not been as substantial and important as I'd hoped it would be in the late 1990s and early 2000s. Indeed, to some extent, there is a reckoning to be had for persuasive games.

The promise—my promise—was that the big, important problems in the world were also complex systems. Issues like the climate, health, economics, and social justice offer examples, but even small-scale phenomena also work like complex systems. Running a local shop or understanding the impact of a new municipal ordinance also muster systemic behavior. At the studio, for example, we made a game about portioning for a franchised ice-cream parlor. The system in this case was quite odd and unique: The texture and viscosity of various ice cream flavors were important, as were the topology of its vat (as workers served from it over the course of a shift) and that phenomenon's interaction with the economics of the franchise, including both customer and worker satisfaction. The idea, at least in my head, was that almost everything involved systemic behaviors that couldn't be explained by simple, declarative statements.

This truth seemed so clear to me in the early 2000s that I made some remarkable predictions. It's worth emphasizing how long ago that was—before

Facebook, before iPhone, before YouTube. Blogs were the big thing, along with Google, which hadn't yet gone public. Among my ill-advised notions was the claim before the 2004 U.S. presidential election that every candidate for major office would have their own PlayStation-quality game by 2008, outlining their policy positions in simulated form—a playable platform. Instead, by 2008, we got YouTube and video-based campaigning, and then Facebook and data-based campaign targeting. By 2016, that data took on a weaponized form in the United Kingdom, the U.S., Myanmar, and elsewhere. The extraction, sale, and manipulation of data seemed to become the standard method for social 'engagement'. As I write this in 2018, it's pretty clear that I could not have been more wrong in thinking that debates fueled by procedural rhetoric would emerge as a new standard in political discourse.

It's not just politics, either. Games were supposed to produce 'system literacy' and help people embrace complexity. The game designer Eric Zimmerman, writing with the journalist Heather Chaplin, imagined the 21st century as the 'ludic century', in which playful sophistication would make prior forms of communication outmoded (Zimmerman & Chaplin, 2013). Instead, we ended up with ever-simpler discourse, built around shorter and more impatient sound bites. Television condensed into online video. Discourse metastasized in comment sections, then Twitter arguments. This situation seems only to have gotten worse. Moreover, it's unclear how it might be stopped. After the Cambridge Analytica crisis of 2018, which was just one of countless extractions of Facebook data in the interests of social manipulation, Facebook executives, including CEO Mark Zuckerberg, were asked to testify before the U.S. Congress and the U.K. Parliament. Despite this, just a few weeks later at the annual Facebook developers' conference, Zuckerberg was joking about the whole affair. The company's stock price, meanwhile, had recovered from much of the losses suffered from its Cambridge Analytica fiasco, thanks to enormous quarterly profits. Furthermore, in general, very few people have quit Facebook. How could you? It's where two billion people socialize.

Around 2010, I started to realize an inconvenient truth: that in order for people to be persuadable by games, it wasn't enough to have a few interesting games that represented the potential for a revolution in knowledge and understanding. Part of this realization came from my own work in news games, both theoretical and applied. After failing to scale up a promising partnership in game development with the *New York Times*, largely for organizational-political reasons, I began surveying that field (with my students and thanks to support from the John S. and James L. Knight Foundation). One of the lessons we discussed in the book resulting from

that work was the need to scale up (Bogost, Ferrari & Schweizer, 2010). You can't invent televised news broadcasts by trying one or two out and seeing how it goes. An entire social practice must be cultured around the form, involving habits of time and attention. The same is true for games for news, politics, education, or anything else.

And yet, you can't will that sort of scale. The rest of the media environment would have to support it. And that support would require change. In fact, it might even need the *decline* of the media formats of the 20th century for systems-driven procedural rhetoric to have any hope of taking its place. Even more positive developments in media failed to take the form of playable systems with procedural rhetorics. Instead, smartphones filled up with the media forms of the 20th century: words, images, moving images, and audio. That is, more or less, what everyone makes and consumes for computers. It's the same kind of media that they've been producing since the turn of the century, even if it's tuned and updated for modern means of fashioning and disseminating it. The revolution of systems thinking never came, and by the look of things, it isn't poised to do so anytime soon. Instead, 20th-century media grew ever more powerful, recombining with computers and smartphones into new versions of themselves.

It's interesting to pause and think about the approach many of us used to discuss the non-entertainment uses of games in those days. We were conducting historical research, to a point, and contemporary criticism, too. But efforts like *Persuasive Games* were also future forecasts. They imagined a media experience that wasn't yet present; one that might instead be lurking just over the horizon. This is a tricky gambit for a futurist, let alone a critic or scholar. It's one thing to wax philosophical about forthcoming trends and then to collect massive consulting or speaking fees for the privilege of espousing them; it's a little different to do so in the context of research and commentary.

Consider James Paul Gee, for example, whose 2003 book *What Video Games Have to Teach Us About Learning and Literacy* made a major splash in this field (Gee, 2003). He had already had two full careers in two different disciplines, linguistics and literacy, by the time he turned his focus to games in the early 2000s. Gee is a very strategic thinker, as I'd learn when I got to know him in those early days of persuasive games, some fifteen years ago. The position he presented was one about the *potential* of games as literacy tools, or as models for learning. He never presented learning games as a *fait accompli*, a goal realized. Rather, he used careful readings of commercial games like *Ninja Gaiden* (Tecmo, 1988) as evidence for the premise that good

games provide better teaching than other kinds of learning experiences. Yet what they teach, at least for now, is just how to play the game.

I think Gee's approach to this matter was far more tactical than mine. That is, he knew that realization was a much more complex and squirrely problem than visioning. He'd had a lot more experience at that time than I had, after all. The joke was on me and others who tried so hard to realize our ideas rather than rising above them and viewing the patterns of social behavior that might make them work or not. It's possible that folks like me, supposedly righteous for doing both theory and practice, may have actually closed our eyes to the truth of our successes and failures because we were so head-down trying to realize them.

The promise of persuasive games was tempting, in part because it seemed so structurally plausible. Given complex systems in the world, what better way to depict them—and create tools to revise them—than by translating and representing them with computational systems? This offered a tidy, symmetrical view of the world that might, in retrospect, have betrayed its reliance on logic and reason.

Yet ironically, and in reality, it was emotion and novelty that drove much of the interest in this work. In my own case, a tremendous amount of the value and benefit of persuasive games came not from the ends they supposedly facilitated through procedural rhetoric but from the *idea* of that promise. Hey, a game about educational funding! A game about contagious diseases! The headlines followed suit: 'It's Not Just Fun and Games', or the like. In this environment, games functioned on a rhetorical register alright, but not on a procedural one; instead, they worked on the level of their impression and concept. Elizabeth Losh calls this rhetorical use of digital tools *virtualpolitik*; that is, the digital media themselves are not deployed to their functional ends but are held up as evidence of a type of labor and creativity (Losh, 2009). The fact of persuasive games' existence became their primary effect. Talking about the idea of a game on, say, poverty or politics replaced—or at least far outstripped—any exploration of the system in the game itself. In many cases, particularly when my own games have received attention in the press, it's clear that far fewer people ever thought to play them than thought to think about doing so.

When they are played, the effects of persuasive games are often very different than the ones their creators might expect. One of my favorite examples of the genre is Molleindustria's (2006) *McDonald's Videogame*, a scathing critique of the multinational fast-food industry. The game demonstrates the abject corruption required to maintain the profitability and manageability of a large global food company. It's a terrific example of procedural rhetoric, and both stylish and even fun to boot.

In the game, players control fields in South America where cattle are raised and soy is grown, a factory farm where cows are fed, injected with hormones and controlled for disease, a restaurant where workers have to be hired and managed, and a corporate office where advertising campaigns and board members set corporate policy.

As play progresses, costs quickly outstrip revenue, and the player must take advantage of more seedy business practices. These include razing rainforests to expand crops, mixing waste as filler in the cow feed, censuring or firing unruly employees, and corrupting government officials to minimize the public outcry against such actions.

But many players—especially those who are technically minded and who enjoy mastering their video games—find themselves lamenting the difficult job of McDonald's executives rather than becoming incensed by their corrupt corporate policies. I've had a number of students make this observation about the game, in fact. 'Wow, I really empathized with the CEO of a big company. They have it rough.'

When Molleindustria released a similar game some years later, it sailed a slightly different tack. The game, *Oiligarchy* (Molleindustria, 2008), was about the global petroleum industry and its collusion with government at all levels. Paolo Pedercini (the individual creator who publishes his work as Molleindustria) posted a 'postmortem' with text and images that explain the premise of the game: peak oil, supply and demand, imperialism, and so forth. It included the following statement:

> This document, written after the release of Oiligarchy, attempts to outline the major game design choices we faced and provide footnotes and additional documentation to the parts that reference real-world situations or events. Since the inception of the Molleindustria project we argue that game design is never an ideologically neutral process: games, as every other cultural product, reflect the designers' beliefs and value systems. And this is particularly visible in games that claim to 'simulate' actual non-deterministic situations (Pedercini, n.d).

In Pedercini's defense, he produced that document in part to fulfill the requirements of his MFA degree, which required this sort of documentation. But even so, the materials exist, and they risk overtaking the work. And at least the game itself was good and worthwhile as a game. Many of my own games have been far less adept procedural arguments than Pedercini's, and yet they have been effective enough successes from the vantage point of virtualpolitik.

Take one of my own games, a documentary version called *Fatworld* (Persuasive Games, 2007), about the politics of nutrition. The game was a strange mix of *Animal Crossing* (Nintendo 2001), the terrific Nintendo series about living in an animal village, and the work of the nutritional historian Marion Nestle. You can create a character that has physical properties like avatars in every game. But then they also have health properties, including girth and medical histories, as well as food allergies and other predispositions. That character then gets dropped into a simulated world in which socioeconomics have an impact on the choices players can make with the character they designed.

So, players can design recipes and meals for their characters, but they have to shop for, and therefore be able to afford, the component parts of those meals. That might be easier or harder depending on one's financial situation. Players can also mess with the world's non-player characters by deciding what they can and can't eat—you could create a Fried Chicken Emporium or a Wheatgrass Hut, or anything in between, although the market may impact the viability of those choices.

Players can also alter public policy, experimenting with regulation politics and subsidies. These subsidies recombine with socioeconomic contexts to create nutrition effects, for example the relationship between fast food and low-income diets. So, you could attempt to ban trans fats (or even vegetables, if you prefer), although political influence is strongly tied to financial access.

What's more, knowledge about your character's health and wellness only becomes available if you can afford healthcare, although policies for subsidized or even socialized medical care are also possible if the will of the community supports it. In this way, the feedback mechanism necessary to do well in the game is subject to the game's own simulated politics, such that adjusting the choices and opportunities for your character may be harder or easier depending on how good and how frequently that health feedback loop can be run.

Then, eventually, your character dies and you can start over again.

This is precisely the kind of game that I've been endorsing for years now—one that embraces the complexity of a sociopolitical issue and in so doing characterizes it honestly. Yet this game did terribly. Part of it was our fault—the budget and timeframe didn't match the ambition—but part of it was related to reception and expectations, just as was the case for Molleindustria's titles.

It's interesting to compare *Fatworld* to one of its contemporaries, another game-related effort to address nutrition and obesity that followed shortly thereafter: the *Apps for Healthy Kids* contest. This was one of the initiatives in Michelle Obama's efforts to address diet and wellness from the White House.

One of the winners, called *ZisBoomBah*, was 'an innovative website that challenges conventional wisdom and develops tools to empower children and inspire parents to live a fun, active and healthy life'. ZisBoomBah's free online tool *'Pick Chow!'* allows children to create meals by dragging and dropping foods. This is clown-town stuff; just another obvious 'choose the carrot, not the candy bar' simulator that couldn't possibly teach anyone anything about the mechanics, let alone the politics, of nutrition and obesity.

And yet it was massively successful. Why? Because addressing the complexity and political intractability of nutrition was not really the White House's goal. Instead, it wanted to signal technological adeptness and literacy. In the Obamas we had an executive branch that knew what an app was and could make a colorful website with hip, big form-fields. Once again, the project works on a different rhetorical register than the procedural.

In both these cases, the games' ability to do the work of procedural representation was short-circuited by media distractions, by orthogonal media situations that resist games' fundamentals while furthering their own power and effect.

A question arises, for Pedercini, for me, and for all designers of persuasive games: If the game is incapable or inadequate when it comes to doing this work on its own, and if the traditional, un-systemic, presumably outmoded media of text and image are necessary or even better, then why are we making games at all? The whole practice risks becoming an aesthetic exercise. And that's only the case when the games are any good!

Many years ago, during the height of the early success of persuasive games (the idea, the book, and the studio), I saw the writer Steven Johnson speak at an industry conference. He had just published his book *Everything Bad is Good for You*, which took up games and other somewhat reviled popular media that are unexpectedly adept at making people smarter (Johnson, 2005). During his talk, Johnson noted that he'd seen my name and my stuff—persuasive games—and admitted that he just didn't think that games could ever become a really effective persuasive medium, at least not one as effective as language—text and orality, anyway, the bread-and-butter of this writer's universe.

At the time I stewed on this observation, dismissing it as unimaginative naysaying. Yet, since then, I've wondered if Johnson had a point. Today, I spend much more of my time writing words about the world than I do making games that depict its operation. Have I given up? No, not at all. Although, in some ways, the next generation of persuasive games, in theory and in practice, probably needs to come from different voices than those who inaugurated the form. Instead of fatalism, I suggest a kind of stark

realism for that next chapter. Like it or not, persuasive games remain an aspirational media form. A form with potential, as James Paul Gee would say, of games and learning; a potential yet to be realized.

A while back, it became a tech-industry cliché to talk about 'changing the world'. Everything from an app that orders pet food to a new way to purify water became equally implicated in the process of world-changing. The idea became so comical that it was even sent up on the HBO series *Silicon Valley*; at a simulated rendition of the TechCrunch Disrupt conference, socially inept entrepreneurs mumbled about their inscrutable products and services, always announcing in the process how it was going to 'change the world'.

That aspiration—really a marketing hook, not a goal—has bled into all aspects of contemporary life now that computers, smartphones, and apps are all pervasive. Games were lured in, too. 'Can games change the world?' read one headline back in 2012, far closer to the heyday of persuasive games' first generation. This is ironic, because that very notion was always anathema to the gambit of persuasive games. The very idea of changing the world as a simple principle is incompatible with the premise that games have a unique power to reject simplicity, demonstrate complexity, and help people to mistrust singular answers. The quandary now poses a paradox, one that the next generation of persuasive-games theorists and designers will have to reconcile and resolve.

Some might read these words and see pessimism or defeat, which are sentiments I really don't mean to embrace. So, let me end with two thoughts. The first is a reminder, one I issue to myself as much as to anyone who might read this. The promise of procedural rhetoric and persuasive games, to me at least, was one of a moderated rationalism. It wasn't meant to descend into brusque positivism, where logic would win out over emotion. That's just rational extremism—something best left to economists. Instead, it was meant to embrace realism. In particular, it was meant not to shy away from the messy, true nature of tough, even intractable social and political systems. To dismiss that approach also means rejecting the project. Instead, we must face it head-on. How can games become the tools of complex knowledge that many of us have promised, while also participating in, and altering, the media circumstances that resist and even destroy complex knowledge? That is a challenge for the future—for me, for you, for all of us who make, play, and advocate for persuasive games.

And that leads me to the second thought, which is a reflection rather than a directive: My self-critique risks forgetting where the bar was set for games about unfamiliar topics, from statements of policy to health appeals

and from playable education to characterizations of human experience. I didn't invent this idea, of course—versions of those games had been around for decades. Infocom text-adventures had danced with themes of human loss and regret, edutainment titles had become cultural icons, and political-strategy games had been discussed in the *New York Times*. Yet at the start of the new millennium, those games had mostly been forgotten, except as specimens from an alternate timeline.

Even so, at that moment, new tools, audiences, and opportunities opened up. One of the most important contributions of persuasive games as a concept might have been amplifying that moment in time and giving it some lift. The idea that you could make games for learning or business or policy was part of that notion one subsumed into so-called serious games and games for change as well. But those tools were—and remain—largely instrumental. While I don't believe there's anything wrong with instruments, persuasive games also promised something more: that games could embrace the soul of political, social, and personal speech; that they could do so unapologetically and with style and persona, too; and that they could be like the social-realist novel or the lyrical poem or the documentary film. I wasn't responsible for the blossoming of those flowers in the decade thereafter, but I do think that the most important contribution of persuasive games as an idea, a studio, a book, and a theory might have involved watering those buds at a moment when they particularly craved it. And you know, maybe that's enough. Just as procedural rhetoric argues that the important thing is to see how a constellation of influences, causes, and effects conspire to produce complex outcomes, so persuasive games themselves had a role in such a bigger play. One that's not over yet, either.

References

Abt, C. (1970). *Serious Games.* New York, NY: Viking.

Bogost, I. (2007). *Persuasive Games: The Expressive Power of Videogames.* Cambridge, MA: MIT Press.

———, Ferrari, S., & Schweizer, B. (2010). *Newsgames. Journalism at Play.* Cambridge, MA: MIT Press.

Electronic Arts (1993). *Sim City* [Computer Game].

Gee, J.P. (2003). *What Video Games Have to Teach Us About Learning and Literacy.* New York, NY: Palgrave.

Johnson, S. (2005). *Everything Bad is Good for You: Today's Popular Culture is Actually Making Us Smarter.* New York, NY: Riverhead.

Losh, E. (2009). *Virtualpolitik: An Electronic History of Government Media-Making in a Time of War, Scandal, Disaster, Miscommunication, and Mistakes.* Cambridge, MA: MIT Press.

Molleindustria (2006). *McDonald's Videogame* [Online Game].

Molleindustria (2008). *Oiligarchy* [Online Game].

Nintendo (2001). *Animal Crossing* [Console Game].

Pedercini, P. (n.d). Oiligarchy Postmortem. Retrieved 10 October 2018 from http://www.molleindustria.org/oiligarchy-postmortem/.

Persuasive Games (2007). *Fatworld* [Online Game].

Tecmo (1988). *Nija Gaidem* [Console Game].

Zimmerman. E. & Chaplin, H. (2013). Manifesto: The 21st Century Will Be Defined By Games. *Kotaku.* Retrieved 10 October 2018 from https://kotaku.com/manifesto-the-21st-century-will-be-defined-by-games-1275355204.

About the author

Ian Bogost is the author of *Persuasive Games* (MIT Press, 2007) and an award-winning game designer. He is the Ivan Allen College Distinguished Chair in Media Studies and Professor of Interactive Computing at the Georgia Institute of Technology, where he also holds an appointment in the Scheller College of Business. Bogost is also Founding Partner at Persuasive Games LLC, an independent game studio, and a Contributing Editor to *The Atlantic*.