

Travis Chi Wing Lau // Part of the way I cope with the demands of academic life is through gaming (and maybe eating my feelings from time to time). Gaming, for me, remains a rare pleasure (yet) untouched by my trained habits of critical interpretation. Whenever I make any attempts to pleasure-read, for instance, I still instinctively take a pen to the text if even to underline a word or two. I find myself still active reading, still parsing lines as if refusing to do so would be some missed opportunity. Yet with gaming—particularly fast, high-intensity games like *Overwatch*—I too often find myself in a state of sensory overload to think critically at all about the experience. Perhaps it is the suspension of the critical self that makes each anxious 15-30-minute match so ironically pleasurable. But after revisiting my colleague Matthew Phillips' brilliant essay on *The Legend of Zelda: Breath of the Wild* (2017) and marveling at an undergraduate student's critique of *The Witcher* franchise, I realized just how much I enjoy talking about the smart things video games do but also how few opportunities I have to do that as a literary scholar working in older historical periods.

*What follows then is an essay in its truest sense: a try at thinking through what a game might offer us working in medical humanities.*

In 2012, Ndemic Creations, an indie studio in the UK, released a real-time strategy simulation game called *Plague Inc.* I first discovered the game when it came up as a recommendation on Steam, a popular digital game distribution platform. But it was only when the game was ported for mobile phones that I really got back into playing it (often while traveling, which only made it that much more real and disturbing).



The premise of *Plague Inc.* is simple: create a pathogen, spread it, and evolve it enough to destroy the world. Like the quick games I enjoy, *Plague Inc.* simulates global epidemic by having the player strategize how to infect and decimate the world's population. Toggling between various modes of

transmission (air, water, insects, birds), symptoms (coughing, cysts, vomiting, organ failure), as well as abilities unique to that particular pathogen (drug resistance, environmental resistance, rapid mutation), the player spends DNA points acquired through the spread of infection.



Winning the game involves infecting every person on earth and becoming lethal enough to kill all of them. Even if the player manages to infect everyone, countries can still actively counter your efforts by researching a cure that will then eradicate your plague. Rather than only focusing on the evolution of the pathogen, players must be vigilant (especially at higher difficulties) about the progress of that pathogen through various countries, each with different climates, demographics, and susceptibilities. The strategic element thus lies in prioritizing what aspects of the pathogen to evolve and managing the limited DNA points given in response to unexpected political, cultural, and environmental factors, especially toward the end of a game when you are racing to kill off the countries working together on the cure. Winning the game at lower difficulties unlocks more types of pathogens (virus, fungus, bio-weapon) and genetic code modifications that will provide certain advantages in future games. The replay value is infecting the world over and over again in entirely different ways.

*Plague Inc.*'s mechanics involve the manipulation of both the characteristics of your unique pathogen but also its spread across a world map—a familiar trope in popular pandemic disaster films like *28 Weeks Later* (2007) and *Contagion* (2011). The game begins with the player choosing a country of origin but quickly zooms out as time progresses (which can be accelerated, slowed down, or paused by the player). Players succeed by thinking globally—not only responding to data and cues supplied by the game itself but also to random events and news headlines that appear on a ticker newsfeed at the top of the screen. As countries react in real-time by closing off ports of entry or investing resources in medical research, players are encouraged to apply real-world logics and experiences to their gameplay.





This real-world applicability—*Plague Inc.*'s pandemic realism—has made it an unexpected tool for education in the way that it models different concepts in public health and epidemiology. Like the “Corrupted Blood” incident in the online roleplaying game, *World of Warcraft*, epidemic simulators like *Plague Inc.* interest epidemiologists and organizations like the CDC for the various ways they represent human behaviors during crisis and help theorize strategies for preempting, containing, and preventing infectious disease.

Such use of disaster scenarios has long been a part of U.S. national security since the Cold War and has since taken the form of virtual modeling post-9/11. Operating based on a security paradigm of epidemic preparedness, disease surveillance systems like the Global Influenza Surveillance and Response System and EpiCast project possible catastrophic futures through large-scale data collection and simulation. As Lindsay Thomas has rightly argued, such technologies “produce the catastrophic threats for which they seek to prepare by proliferating time, creating multiple presents and multiple real times.”[1] For Thomas, such simulations serve as affective training for what is persistently presented as impending, inevitable epidemic disaster. *Plague Inc.* precisely models the “multiple real times” of pandemic as the player watches their outbreak unfold live “as if no processes of mediation separate you from it.”[2] The very simultaneity of the player’s decisions and the outcomes (many of which occur so quickly that they can only be realized belatedly or in retrospect) produces this urgent sense that the player, and more importantly, the world is always unprepared. *Plague Inc.* is a spectacular game of risk that frames programs of population surveillance and management, however dehumanizing and invasive, as necessary in our global state of perpetual emergency.

Most perverse, if we read such games as disciplinary in the ways Thomas describes, is the way that it gamifies the epidemic event. Part of *Plague Inc.*'s appeal is how it uniquely situates the player in the agential position of the contagion rather than that of the human survivor more typical of horror games. I share Carli Velocci's deep discomfort with how the game's realism encourages players to kill: “In the board game *Pandemic*, you band together to try and eradicate the disease. In *Plague Inc.*, you are the disease. You get to play the villain.” This is enabled by the fact that there are no actual bodies represented in the game but merely national regions to be bled with contagious

red. As opposed to named individuals with histories, there are only deindividualized statistics, pie charts, percentages because this macro-data is what ultimately matters to the player working on a global scale of population. This reductionist quality of the game contributes to what Scott Mitchell and Sheryl Hamilton have observed as the game's fundamental reproduction of "the hierarchies between the Global North and South" in which the Third World is persistently framed as easier to infect, more contagious, and most expendable.[3] One of the running jokes of the game is that players almost always fail to infect Greenland because of its cold temperatures and geographic isolation. While the game seems to imply universal vulnerability to contagion as a result of increasing globalization, players are still primed to see the real challenge of the game as the breaking down of the societies and infrastructures in the Global North. To put this in terms of my colleague Lorenzo Servitje's incisive critique of the game: *Plague Inc.* reproduces in its own viral form as a mobile game the very biopolitical logics that underpin speculative fictions of biosecurity. [4]

Game creator James Vaughan has attributed the viral popularity of *Plague Inc.* to its universality: "The theme of the game translates perfectly across all cultures and because it's based on science." Vaughan and his team have repeatedly underscored the scientific realism of the game's design at the level of algorithm and model. The game's surge in downloads during the 2014 Ebola outbreaks testify to the ways in the game made epidemiology accessible at a moment of heightened anxiety around disease vulnerability and epidemic preparedness. *Plague Inc.* widely employs the visual and textual grammar of scientific realism to both create the anxious insecurity of a pandemic event but also to suggest that security still lies with science. The blue percentage bar indicating the global progress toward cure fills slowly but surely throughout the game as if global crises can be ended with a silver bullet made in the lab. But the game also makes clear that the problem of epidemic is a *social* one. To follow Priscilla Wald's theorizing of contagion as a catalyst for interconnection—"communicability configuring community,"[5]—, the absent presence of the human subject and its social relations throughout the game begs serious ethical questions about the ramifications of an insecure paradigm of epidemic preparedness. What are the invisible costs of cure and prevention that these simulations refuse to reckon with or even see? What happens when those very human costs are reducible to games?

All images taken from *Plague Inc.* by Ndemic Creations

[1] "Pandemics of the Future: Disease Surveillance in Real Time." *Surveillance & Society*. 12.2 (2014): 287-300.

[2] *ibid.* 291.

[3] "Playing at apocalypse: Reading *Plague Inc.* in pandemic culture." *Convergence*. 24.6 (2018): 587-606.

[4] "H5N1 for Angry Birds: *Plague Inc.*, *Mobile Games*, and the Biopolitics of Outbreak Narratives. *Science Fiction Studies*. 43.1 (2016): 85-103.

[5] *Contagious: Cultures, Carriers, and the Outbreak Narrative*. Durham: Duke UP, 2008. 12.