

## CHAPTER 4.

### FROM ARTIFACT TO AUTO CHESS

---

VALVE'S GROWING ECOLOGY DOTA 2 ESPORTS

STEPHANIE BOLUK AND PATRICK LEMIEUX

#### ABSTRACT

*How do you play Dota Auto Chess (刀塔自走棋)? First purchase chess pieces shaped like familiar Dota 2 heroes from randomized packs of five drawn from a common pool shared with eight other players. Then place your pieces, or chesses (棋), on an eight-by-eight grid where they attack and defend against other players' boards in a round robin tower defense tournament. Like poker or mahjong, strengthen your tableaux by finding three of a kind and synergizing between suits (and, like bridge or Dominion, be careful to keep track of what your competitors are collecting!) Finally, craft randomly dropped items along a Minecraft-type tech tree and reinvest compound interest back into your bank to strengthen a StarCraft-style macroeconomy for late game. A mod of a remake of a mod, Drodos Studio's (巨鸟多多工作室) Auto Chess is a digital calvinball that mashes up computer and board game genres to create something unexpected: a metagame that remixes the meanings and mechanics of Dota 2 to reveal new forms of play. One of the most popular new videogames of 2019, Auto Chess and its many spin offs by Valve, Riot, and Tencent are currently outperforming its direct (and more widely funded and advertised) competitor, Richard Garfield and Valve's digital card game Artifact (Warr 2019).*

## Introduction

The metagame is both a fundamental element of play and a mercurial game phenomena that eludes the grasp of any single game designer or company. Richard Garfield is one of the earliest game designers to implement theories of the metagame as a game design philosophy (Garfield 2000a; 2000b; Elias et al. 2012) in collectable card games from *Magic: The Gathering*, *Netrunner*, and *Keyforge* to *Artifact*, a digital card game based on *Dota 2* and co-designed with Valve. For their part, Valve is one of the first companies to aggressively design their business model around the metagame as seen in the incorporation of player-created mods like *Counter-Strike*, *Team Fortress 2*, and *Dota 2*. In their book length study of metagaming, Stephanie Boluk and Patrick LeMieux (2017, 261) demonstrate that Valve has made a living not by designing games, but co-opting the metagame: “Very few of [the company’s] innovations center around the creation of original, inhouse IP; instead, they have developed a business model based on colonizing, expropriating, and assimilating metagames into a framework of benevolent capitalism.” And yet, despite the perfect storm of savvy metagamers attempting to develop, as Will Partin (2019) has argued, “a machine for capturing metagames,” it is *Auto-Chess* and not *Artifact* that carved a space for itself within the complex ecology of *Dota 2*’s meta media mix.

### *Auto Chess and Metagaming*

This talk will frame the emergence of *Auto Chess*—a custom mod for people “too old to play *Dota*” (Wockeez) funded by a “wildcat currency” (Castronova)—in relation to the longer history of metagaming. Starting with Nigel Howard’s (1971) game theories and Heinz Von Foerster’s (1972; Clark 2012) cybernetic experiments in the early 1970s and moving through Frank Lantz and Eric Zimmerman’s (2006) as well as Local No. 12’s (2010) metagame designs of the 1990s and 2000s, we will look at

the broader history of the concept and practices of metagaming before turning to *Artifact* and *Auto Chess*. In *Rules of Play*, Zimmerman and Katie Salen Tekinbaş (2004, 284) argue “most of any given game’s meta-game is beyond the reach of the game designer, for it emerges from play communities and their larger social worlds.” Ironically, the near-simultaneous release of *Artifact* on November 28, 2018 and *Auto Chess* on January 3, 2019 serves as a perverse object lesson in how fickle the metagame can be.

Ultimately, *Artifact* and *Auto Chess* signal a broader shift in both Valve’s geopolitical metagame in China and the further platformization of *Dota 2*. Beyond sequels and spinoffs, Valve repurposes the technical infrastructures of *Dota 2*—from character models and animations to the Source 2 engine and esports tournaments—for *Artifact* and *Autochess*. And while one game currently has about 100 players a day and a million dollar tournament that will never happen, the other has millions of players, cross platform compatibility for the first time in the company’s history, and multiple tournaments approaching within its first year.

## REFERENCES

Boluk, Stephanie and Patrick LeMieux. 2017. *Metagaming: Playing, Competing, Spectating, Cheating, Trading, Making, and Breaking Videogames*. Minneapolis, MN: University of Minnesota Press.

Castronova, Edward. 2015. *Wildcat Currency: How the Virtual Money Revolution is Transforming the Economy*. New Haven: Yale University Press.

Clarke, Bruce. 2012. “From Information to Cognition: The Systems Counterculture, Heinz von Foerster’s Pedagogy, and Second-Order Cybernetics.” *Constructivist Foundations* 7.3.

July 15. 196-207. Retrieved from <http://constructivist.info/7/3/196.clarke>.

Garfield, Richard. 2000a. "Metagames." GDC 2000 Proceedings Archive. Mar. 8–12. Retrieved from <https://web.archive.org/web/20081221121908/http://www.gamasutra.com/features/gdcaerchive/2000/garfield.doc>.

"Metagames." 2000b. In *Horseman of the Apocalypse: Essays on Roleplaying*, ed. Jim Dietz, 14– 21. Charleston, Ill.: Jolly Roger Games.

Elias, George Skaff, Richard Garfield, and K. Robert Gutschera. 2012. *Characteristics of Games*. Cambridge, Mass.: MIT Press.

Howard, Nigel. 1971. *Paradoxes of Rationality: Theory of Metagames and Political Behavior*. Cambridge, Mass.: MIT Press.

Partin, Will. 2018. "Artifact' Isn't a Game on Steam, It's Steam in a Game." Waypoint. December 13. Retrieved from [https://waypoint.vice.com/en\\_us/article/j5za97/artifact-isnt-a-game-on-steam-its-steam-in-a-game](https://waypoint.vice.com/en_us/article/j5za97/artifact-isnt-a-game-on-steam-its-steam-in-a-game).

Salen Tekinbaş, Katie, and Eric Zimmerman. 2004. *Rules of Play: Game Design Fundamentals*. Cambridge, Mass.: MIT Press.

Valve Corporation. 2012. *Handbook for New Employees*. Seattle, WA: Valve Press. Retrieved from [http://media.steampowered.com/apps/valve/Valve\\_NewEmployeeHandbook.pdf](http://media.steampowered.com/apps/valve/Valve_NewEmployeeHandbook.pdf).

Von Foerster, Heinz. 1972. *Metagames: Games of Political, Sociological, and Epistemological Significance*. Biological Computer Laboratory, University of Illinois.

Warr, Philippa. 2019 "Dota Auto Chess: The joyful deck-based

Dota 2 game that Artifact isn't." PC Gamer. February 7.  
Retrieved from <https://www.pcgamer.com/dota-auto-chess-the-joyful-deck-based-dota-2-game-that-artifact-isnt/>.

Wockeez. 2019. "Auto Chess: «Мы прислушиваемся к фидбэку сообщества»" January 20. Retrieved from <https://dota2.ru/news/11473-auto-chess-my-prislushivaemsa-k-fidbjeку-soobshhestva/>.