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The Ghostly Black-Box: Modifications of *StarCraft II*

Abstract

This article introduces the practice of modding as a form of tactical media. It argues that the concept of tactical media serves as a useful analytic for the understanding of modding as a political activity. Tactical media refers to a type of media activism that disrupts the dominant semiotic regime by creating a space of intervention where critical thinking becomes possible. These spaces are temporary and ephemeral, almost ghostly, but they are concrete platforms on which political desires surface. The *StarCraft* modding community has produced various mods that disrupt structures of capitalism built into the code of the original game. These mods encourage alternative gameplay that foreground collaboration and creativity instead of capitulating to the rhetoric of scarcity and domination. Nonetheless, *StarCraft* mods, to a certain degree, have always been co-opted by the game corporation Blizzard in the form of outsourcing. Ultimately, however, I hope to demonstrate that modding is site where the desires for the disruption of the reproduction of capitalism takes on a life of its own.

The practice of "modding," i.e. the tweaking of commercially released games through conversions, overhauls, and add-ons has become a necessary part of the gaming world. Not only did modified games or "mods" allow amateur coders and fans to expand their gaming experience, but they also achieved tremendous success, most clearly observed by the commercial accomplishments of games such as *Counter-Strike* (2000) that was originally a mod of *Half-Life* (1998) and *The Elder Scrolls V: Skyrim* (2011) that possess over 51,000 mod files developed by bedroom coders. This essay examines two modifications of Blizzard Entertainment's *StarCraft II* (2010), a deduction mod called "Mystery Game 033" and a soccer game mod called "The Star Strikers". A study of these mods reveals that they undermine the power-knowledge system built into the original game through deliberate disturbances in the capitalist logic of *StarCraft II*'s gameplay. Modding then, can be understood as a subversive performance that unsettles the rules of the game. Despite the fact that modifications can be seen as intellectual property violations, the gaming industry has embraced it for underlying economic benefits. Previous literature on game modifications (Kücklich 2016; Postigo 2010) has highlighted

the modding scene as occupying the gray area of participatory culture. Delineating modding as a form of "precarious playbour," these studies explicate the modding scene as aligned with both the profit-oriented game industry and the leisure-oriented modding community.[1] However, these accounts often overlook the performative quality of modding that perhaps alludes to the desire to escape or transform reality.

My intervention postulates game modifications as forms of tactical media. According to Rita Rayley, tactical media refers to media activism that "signifies the intervention and disruption of a dominant semiotic regime," and espouses the "temporary creation of a situation in which signs, messages, and narratives are set into play and critical thinking becomes possible."[2] In consideration of Raley's argument that victory is not a necessary end-goal, my essay investigates the "hit-and-run" aesthetic of modding that endows the practice a temporary, almost ghostly, nature. While the practice of modding itself cannot simply be hailed as resistance since it is often reclaimed by the gaming industry in the form of outsourcing,[3] they are also platforms on which political desires to create a rupture in regimes of power in real life can be observed. In this

sense, modding becomes a momentary incarnation of a repressed political unconsciousness within the gaming industry.

Two Types of Black-Boxes

Game theorists such as Alexander Galloway and Gonzalo Frasca have noted that one function of games is to reproduce the dominant power system of the real world. Galloway argues that digital games are structurally "in direct synchronization with the political realities of the informatic age"[4] while Frasca indicates the potential of videogames to operate as microworlds that may be implemented for educational purposes.[5] One framework that defines the process through which games reproduce dominant ideological regimes of reality is that of procedural rhetoric—the idea that digital games depict imagined systems by creating procedural models of real systems. Procedural rhetoric persuades players not through words or images but through "rule based interactions and representations."[6] A game as a procedural model, refers to an imposed set of rules that create particular spaces for play.[7] Nevertheless, it remains an equivocal question whether the procedural model that the game simulates directly corresponds with the power-knowledge system of late-capitalist society. This is because the political economy represented in games do not perfectly mirror that of reality. For instance, it is difficult to define the political economy of *StarCraft II* with regards to specific economic ideology such as neoliberalism that govern and modulate the post-industrial economy.

StarCraft II is a sequel to the real-time strategy game *StarCraft* (1998), an extremely successful game that gained popularity especially in South Korea and initiated the establishment of e-sports and gaming channels as a legitimate business model.[8] The narrative of *StarCraft* as a series focuses on the story of three species, Terran, Protoss, and Zerg, that are vying for dominance in a part of the galaxy named Koprulu. The player of the *StarCraft* series gets to select one species of the three and manage limited resources on the map in order to create an army of units to be utilized in battle. The strategic thrust in *StarCraft II* then, is the conversion of material resources into wealth that becomes transposed to physical power in various forms such as units, character stats and items. In

this sense, the gameplay requires players to contend for the exploitation of material resources presented on the map. The game operates on the logic of annihilation or conquest that is enabled by optimal resource management and physical control (the control of the mouse and keyboard in commanding each unit). However, it is misleading to immediately associate *StarCraft II* with neoliberalist ideology. While the economic rationale is similar, the game does not feature private industry, individualism and free market system.

On the other hand, it would be erroneous to completely devalue critical interpretations of the ideology within games. In *StarCraft II*, the player works within a market logic inherent in the exchange between qualitative and economic values within the game. This makes the game resemble a capitalist system in some ways. The algorithm of *StarCraft II* is structured around the economy of resources and productive capabilities. Each species in the game possesses units with varying attributes. Thus, the imperative to establish the balance of power between the three species rests upon the fact that qualitative values are measured in terms of economic values. In turn, qualitative differences among the three species, including unit attributes such as damage rates, defense rates, and cooldown time are exchanged in standardized resource components that are presented on the map. Further, the initial setting of the game allocates
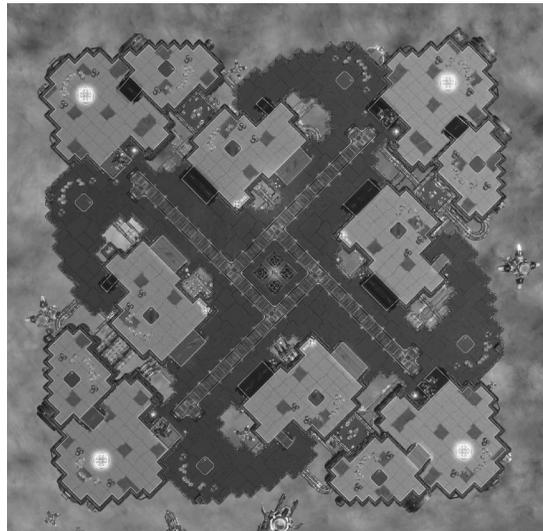

Fig.1: The configuration of a *StarCraft II* Map, "Nimbus."[10]

the player and the opponent similar amount of *limited* resources to produce units. This algorithmic structure domesticates the distinction among the three races and creates a balance that is determined by the player's skill level to achieve maximum productivity with limited recourses, rather than the initial attributes of the three races.[9]

However, the critical interpretation of this resemblance may take on a variety of forms since the power-knowledge system of the game does not completely correspond to that of reality. Drawing from Paul Starr's analysis of *SimCity,*[11] Ian Bogost illustrates how digital games create a personal, nonobjective mode of expression: "Starr sees a danger 'when simulations are used to make predictions and evaluate policies' because those decisions are themselves slaved to the rules of simulation, the specific unit operations the system does (and does not) allow. He gently criticizes the game's 'black box' nature and celebrates a possible future version wherein the player could adjust or author the assumptions of the models."[12] For Starr, modifications themselves could be postulated as "black-boxes" articulated with regards to the individual player's subjective assumptions. Within this framework, the player is not necessarily aware of how the algorithmic structure of modifications were formulated, and hence is unable to critically engage with the powers of modding as a political performance.

Galloway offers us another way of looking at this scenario. He distinguishes between two types of black-boxes; the cypher and the function. He argues that the black-box as a cypher embodies the Marxist notion of a commodity, comprised of a mystical shell that shelters a rational kernel to be deciphered. On the other hand, the black-box as a function is constituted of a mystical kernel and a rational shell.[13] Following Galloway, I suggest that modifications can simultaneously be regarded as two distinct types of black-boxes. First, modifications are black-boxes which adjust their inner-workings according to the modder who is reformulating the procedural rhetoric of the game. By manipulating the rules and assumptions of the original game, the modder disrupts the power-knowledge system within the game. Second, game modifications are also black-boxes that engage with players only superficially, utilizing its exterior grammar but not successfully

delivering its connotation as a transfigured object. Indeed, for the most part we are inattentive to how the systems of modifications of *StarCraft II* depart from its original procedural rhetoric despite the fact that the ludological differences in gameplay are immediately perceived. Thus, the game's procedural nature not only empowers the modder to physically adjust the algorithms of *StarCraft II,* but can also obfuscate the transformative desire inherent within the modification with personal accounts of gameplay.

This double-sided nature of modifications designates the practice of modding as simulations of political resistance that are both real and imaginary. In critiquing expansive gameplay, Felan Parker asserts that, "the difference between a reactionary politics that ineffectually rages against 'the system' and an actual practice of freedom is that the latter recognizes and comprehends that subjectivity is fully and irrevocably constituted by the very system that is being critiqued."[14] Understanding modding as a performance that embodies a desire for political resistance, also relies on a conception of games as being part of the larger system of power-knowledge. Such awareness, however, and the ludic pleasure of gaming are often conflated in the practice of creating and playing a modification. The desire for political transformation embodied in modding, not only simulates but also re-contextualizes the configuration of political resistance to a more invisible, ghostly form. From this viewpoint, modifications closely resemble forms of tactical media. They embody a performative aspect that prioritizes a hit-and-run aesthetic that is not focused on an end result or victory, and occupies the middle ground between metaphor and practice.[15] If the algorithm of "games can be seen as real parts of the systems of power and knowledge that constrain experience and constitute people as subjects,"[16] physically reconfiguring the game's procedural rhetoric by editing triggers and scripts of the original algorithm can be interpreted as a performance.

"Mystery Game 033" and "The Star Strikers"

The underlying mechanism of modding is, for the most part, analogous across various editing procedures such as unit modeling (icon, motion, and qualitative values, etc.), weapon modeling, sound effect, skill effect, trigger modeling (the

governing rule or objective of the game) and the actor (execution of the aforementioned models). With regards to *StarCraft II,* trigger modeling holds the greatest potential to transform the procedural rhetoric of the game. When a defeat trigger and victory trigger are modified by altering events, local variables, conditions, and actions assigned to the trigger, the governing rules and objectives of the game are substituted with alternatives. The modding community is divided about whether to interpret such alteration of triggers as a legitimate method of game modification. The argument from the disapproving side is that modifications that initiate modeling upon altered execution files, such as *DotA* (2003), should be distinguished from modifications that convert triggers while preserving the original game's execution file. Nevertheless, transforming triggers brings about consequences that dismantle the procedural rhetoric of the original game by constructing an alternative power-knowledge system, and therefore should be regarded as a meaningful performance that embodies a political desire.

It is in this sense that modding becomes a physical practice through which a user can transform a black-box by adjusting the inner-workings of a commodity. The interior configuration of *StarCraft II* is first decoded and then functionalized with a different trigger. The resulting modification assumes the form of a black-box in that its kernel may continually be replaced by alternate triggers according to the modder's preference. The modder engages in a performance that is not policed by the system of the original game, but rather politicizes a self-created alternative system. This allows players an opportunity to conceptualize play differently from the original game. Of course, not all modifications dissociate themselves from the capitalist rhetoric of *StarCraft II*—the exploitation of limited resources that leads to the exchange between qualitative and economic values. "Pandorium Survivor," a mod in which the objective of the game was altered from annihilating the opponent, to escaping the map through collaboration with other players, is still bracketed by a similar economic rhetoric. While the player has to utilize different skills assigned to each units, those skills can only be employed with the acquirement of limited supply depots that are randomly allotted throughout the map.

In other words, even if the modification promotes a different objective, it cannot necessarily be thought of as portraying a transformative desire unless it disconnects from the power-knowledge system of the original game. Nonetheless, there are several modifications that successfully depart from *StarCraft II*'s standard power-knowledge system. "Mystery Game 033" and "The Star Strikers" are two salient examples that transform the governing market logic rule of *StarCraft II* and illustrate how modding may prevail as a political performance that indicates the desire to "modify" reality.

"Mystery Game 033" is the most recent version of a popular South Korean modification series "Mystery Game" developed by a user known as 'bisaryang.'[17] In "Mystery Game 033," the player is randomly assigned the identity of one of the seven innocent classes—the killer, the doctor, the housewife, the police, the medical student, the deadbeat, the soldier, and the salary man. The objective of the killer is to complete three murders within a designated amount of time. The remaining participants are expected to surmise the suspect when the game terminates. In this mod, finite resources are replaced with unlimited items and equipment that participants of different classes may utilize in order to complete the deduction. The original market logic of *StarCraft II*, based on

Items for the Killer Class				
Firearms	Machine Gun	Revolver	Shot Gun	Crossbow
Blunt Weapon	Hammer	Wooden Bat	Pipe	Fist
Poison	Strychnine	Potassium Cyanide	Tetrodotoxin	Dry Ice
Strangling	Choking	Rope	Necktie	
Blades	Dagger	Knife	Samurai Sword	
Explosives	Bomb	Gas Bomb	Remote Control Bomb	

Fig.2: Mystery Game 003: Items for the Killer Class

Items for the Innocent Class (Doctor, Housewife, Police, Medical Student, Deadbeat, Solider, Salary Man)			
Luminol Reaction Test	Poison Analysis	Autopsy	Magnifying Glass, Body Check, Camera, Search, Player Surveillance
Doctor	Doctor	Doctor, Medical Student,	

Fig.3: Mystery Game 003: Items for the Innocent

competition for finite resources is thereby subverted.

For instance, while the acquisition of various items and equipment is advantageous for the killer, these items are definitely not a crucial source of power that is necessary in order to complete the task. Majority of the equipment pertaining to the killer class are designed to be employed perpetually. Some categories of these items, such as 'firearms', 'poison', and 'explosives' (excluding the crossbow), are disposable, but they do appear constantly on the map within a certain period of time. Even without the procurement of supportive items, the killer class is configured in a manner that enables the unit to commit a crime with its bare fist. Quantitative resources and limitations do not hold a significant leverage on the outcome of "Mystery Game 033," because their values are not necessarily exchanged into power.

Moreover, the employment of various equipment promotes a non-competitive gameplay. The fact that the majority of the items that players utilize to figure out the perpetrator of the murder are inexhaustible could possibly render the game tedious or not challenging enough. "Mystery Game 033" redeems this quality through implementing certain class-exclusive deduction equipment, such as 'luminol reaction test' and 'autopsy', that are still more powerful than equipment that are universally employable, thereby prompting characters to outline their deduction process collaboratively. For instance, while the housewife, the salary man, and the deadbeat have access to items like 'surveillance camera' and 'magnifying glass', they are still motivated to cooperate with the doctor, the medical student, and the police because those classes are endowed with useful class-specific items. Thus, "Mystery Game 033" makes the game's balance reliant on collaboration rather than the market logic, thereby widening the range of available options in terms of gameplay and player existence in the game.

In similar vein, "The Star Strikers" engenders an alternative gameplay experience that is disjoined from the procedural rhetoric of *StarCraft II*. Developed by a user known as 'Chirus Highwind,' "The Star Strikers" embodies the characteristics of a sports game. The modification constructs two teams, each including up to five players, to contest against each other with the objective of scoring as many goals as possible through passing

and shooting a soccer ball into the competitor's goal within a limited amount of time. Each unit possesses a distinct special ability which assists the unit to contribute to teamwork in diverse ways. The basic control mechanism for the modification mirrors that of joystick controllers or of video game consoles like Xbox, Nintendo and PlayStation. The mechanics consist of the four keys—ZXCV—as a default setting that corresponds with respective abilities of skill-1/skill-2/push/kick. The two universal abilities that bestow a fundamental sports game backdrop are, of course, kick (V) and push (C). Kick is utilized to pass the ball to other players or shoot the ball to the net. Push is a tackling move which makes the unit dash towards a certain direction and, if executed correctly, push another unit to lose control of the ball. The ability consumes a certain amount of the unit's HP in return.

Unlike the all-inclusive and redundant actions that accompany kick and push, skill-1 and skill-2 are maneuvers that execute abilities that are distinctive to each 21 possible units that a player may select from the three races of Terran, Zerg, and Protoss. Since each player is encouraged to avail oneself of distinct skills that each unit possesses, skill-1 and skill-2 become surrogates for quantitative resources such as minerals and gas and serve as alternative categories that allocate qualitative values. For instance, SCVs, drones, and probes share a common denominator as units because they are the only units that can perform as goalies. In addition, each of the three possesses idiosyncratic skills that shape team strategies or play-styles in separate ways. Drones may utilize the skill-1 'nydus worm' through which the player implants a nydus worm at a certain spot on the field. The nydus worm remains invisible for the first 12 seconds (permanently invisible if planted at off-side) and, if the ball passes over the designated area, teleports the drone to the specified spot enabling the player to snatch the ball. Drone users are assumed to perform as goalies that also operate as 'pass-breakers' because of this skill. SCVs, on the other hand, possess the skill 'missile turret' that enables them to snatch the ball and automatically pass it over to adjacent ally units. If the player is competent at reading the map and decision-making, their SCV unit can support the team as 'pass-liaisons' that could lead to a game of greater elegance. Protoss probes are equipped

with 'gravity field', a skill that magnetizes the ball towards the player, and are therefore appropriate for team strategy that puts an emphasis on vigorous defense.

"The Star Strikers" then, is fundamentally at odds with the capitalist regime that the original game foregrounds. The qualitative values of "The Star Strikers" that promote different play-styles are not 'exploited' but 'cultivated.' While probes are apt for users who prefer a defensive play style, SCVs complement players who gravitate towards a more complicated and embellished approach, and drones are suitable for players who prioritize a strenuous and forceful tackle. These special abilities cannot be attained through an exchange of quantitative resources that generate balance among discrepant characteristics of different units but can only be perfected through bodily training. The special abilities of "The Star Strikers", are not only mastered but developed into types of reflexes that players should synchronize with. In the Korean star strikers league, for instance, an expert SCV unit player who is proficient at utilizing missile turrets will be referred to as the slang term 'God.' Master players are revered because they have familiarized themselves with units through countless experiences of performing the skills of a certain unit. One could argue that *StarCraft II*'s original structure also incorporates aspects of embodied simulation or bodily training. As we can observe in the preoccupation with Actions Per Minute (APM) rates among professional players, it is undeniably a game that prioritizes physical competency which requires nimble corporeal reaction and subtle mouse control. However, physical ineptitude within the procedural rhetoric of *StarCraft II*, whether it be clumsy control of units or sluggish screen supervision, is associated with the economic anxiety of not being able to consume enough resources to produce units and complete upgrades. In contrast, "The Star Strikers" not only overturns the logic of physical aptitude but also advocates a cooperative procedural rhetoric. "The Star Strikers" is comprised of two periods prearranged according to a timeline. To score as many goals as possible and win, players must utilize their special abilities to the fullest and combine them through teamwork, weaving different skills together in order to devise an efficient strategy. The resulting gameplay prioritizes

synergistic creativity and is no longer hinged upon the exploitation of limited resources.

Conclusion: Locating the Political

When a player chooses to play a real time strategy game according to the rules of a detective or a sports game, he or she produces an entirely new kind of experience. However, as Felan Parker points out in his Foucauldian observation: "there is nothing inherently freeing about physical exercise" unless it is "framed in a certain way to be liberatory."[18] Thus, the transformative potential of the mod might be ephemeral and modifications can also be interpreted as black-boxes that engage with players only through their facades. The kernel of the black-box, or a renewed procedural rhetoric that engenders a discrete power-knowledge system, is likely to be inconceivable to the player of the modification. In relation to this, Simon Penny makes a useful distinction between the aesthetics of interactivity and traditional visual representation. Penny draws on Pierre Bourdieu's idea that social behavior is often shaped through unconscious learning and that such learning may differ from actually enacted behavior, to make the argument that bodily training is innately an anti-intellectual activity because training is only effective when it is perceived as automatic.[19] Indeed, modifications like "Mystery Game 033" and "The Star Strikers" come to occupy an ironic position wherein the players of these games may or may not critically engage with its discursive powers. The procedural rhetoric of these games is likely to be incomprehensible to the player while the changes in gameplay might be more
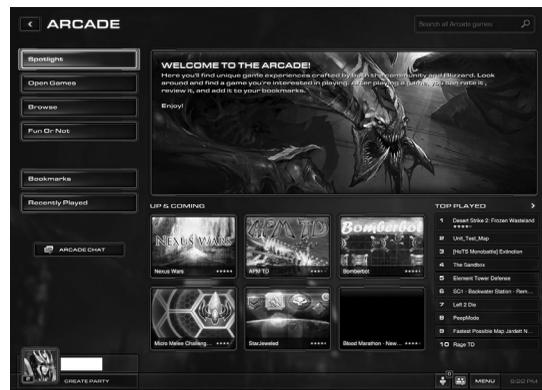

Fig.4: Screenshot of *StarCraft II: Heart of the Swarm* Arcade.[20]

easily observed. For instance, players of "Mystery Game 033" and "The Star Strikers" are more likely to be concerned with the process and experience of playing the mod, rather than identifying the transformations in the rules of the game from a critical distance.

Some studies of the political economy of game modifications such as that of Hector Postigo, have also contended that modding as participatory culture cannot be considered as bringing about a subversion of the game industry. Postigo's observation that the material expressions of modding culture were placed both inside and outside of the game industry,[21] seems to fit perfectly in case of Blizzard's market strategy. During the early period of *StarCraft*'s circulation, the modding community gravitated towards unauthorized programs like SSEditor Final, Scm Draft, and StarForge. After the development and distribution of *StarCraft II,* however, Blizzard embedded editing tool kits like '*StarCraft II* Galaxy Editor' in the game itself in order to outsource the labor of the modding community more aggressively. Blizzard now also provides an in-game platform called 'Arcade' that curates existing modifications according to their popularity that help gauge which modifications appeal to the public. Platforms like Arcade indicate Blizzard's attempts to outsource the modding community and gamers in general in developing and expanding a business model that will be beneficially for the company in the long run. Clearly transgressive limitations of these modifications exist like as long as they are co-opted to the market.

The transformative potential in "Mystery Game 003" and "The Star Strikers" ironically fades away through co-option and gameplay, adopting the form of a ghost. Where, then, can we locate the political in this cultural phenomenon? The challenge lies not only in analyzing games but also in theorizing resistance in a wider sense within regimes of commodification and capitalism. One possible answer is to hypothesize a resistance of respite. The most subversive activity that could overthrow the system of real-time strategy games might not be altering the game's procedural rhetoric which translates quantitative resources to power, by refusing to engage with the game by not playing at all. However, this may be easier said than done; if the system colonizes every attempt

of resistance, would not it also be impossible to refuse participation totally? The imperative, therefore, is to identify how the ephemeral nature of a modification's resistive potential alludes to the *desire* to resolve such contradictions. According to Frederic Jameson, when a contradiction pertaining to a specific mode of production cannot be resolved through conscious thinking and action, cultural products start to *dream* a resolution.[22] The value in analyzing modifications rests on revealing desires to subvert or escape the system. Modifications, as cultural products, shed light on the imperative of "restoring to the surface of the text the repressed and buried reality"[23] of struggle. Modifications like "Mystery Game 033" and "The Star Strikers" are commodities that have been produced under the contradictions of capitalism. But they are also manifestations of a political unconscious that strives for a symbolic unweaving of such contradiction.

If we are invested in recuperating the possibility of resistance within capitalism, it is necessary to remain wary of regarding cultural practices such as modding as only forms of survival tactics. In fact, what makes modding ephemeral and unstable might perhaps become the ground on which we can locate the political. Modding as performance—a continuous reestablishment and relocation of the rules of the game, may perhaps be regarded as the practice of organizing a community. If games can be conceptualized as microworlds, as Frasca suggests, then modding might also provide us the opportunity to re-conceptualize politics and resistance on a larger scale. Even though modifications embody a resistive potential that is rather unstable, the practice of modding itself may function as a kind of a political exercise that might ultimately equip people with the ability to reconfigure politics and resistance in the future.

Mods such as "Mystery Game 003" and "The Star Strikers" then, allow gamers creative and subversive ways of engaging in play based on co-operation. Paradoxically however, games and the game industry are also subject to the power-knowledge system of a late-capitalist society. But this contradiction, does not necessarily foreshadow an abysmal future. If we can locate the political in the continuous resettlement of variables and rules of the game, the ephemeral nature of modding as a finished cultural object becomes not defeat but

the result of an ongoing practice. The ghostly nature of the resistive potential of modifications attests to virtuosity, not escapism. It is from this viewpoint that "Mystery Game 003" and "The Star Strikers" occupy an arena of political resistance that is not entirely imaginary nor entirely real.

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Notes

1 Julian Kücklich, "Precarious Playbour: Modders and the Digital Games Industry." The *Fibreculture Journal,* Issue 5, Multitudes, creative organisation and the precarious condition of new media labour (2016), Accessed November 15, 2016, http://journal.fibreculture.org/issue5/kucklich_print.html

2 Rita Raley, *Tactical Media* (Minneapolis: University of Minnesota, 2009), 6.

3 Walt Scacchi, "Computer Game Mods, Modders, Modding, and the Mod Scene." *First Monday* 15 No.5 (2010), Accessed September 10, 2017, http://firstmonday.org/ojs/index.php/fm/article/view/2965/2526.
Along with scholars like Kücklich and Postigo, Scacchi argues that both employed game developers and independent game modders benefit from the resources generated in the modding scene. He emphasizes how the practice of modding equips amateur coders the ability of build their profile that may help them acquire a career trajectory in the game industry. Whether modders eventually become professional game developers or not, it is clear that game studios are extracting economic benefits through outsourcing the labor of expanding game experience to the game's users. For instance, Battle.net, Blizzard's digital distribution platform, curates various *StarCraft II* conversions and overhauls developed by self-motivated fans and thereby enriches the game's content.

4 Alexander R. Galloway, *Gaming: Essays on Algorithmic Culture.* (Minneapolis: U of Minnesota, 2006), 91.

5 Gonzalo Frasca, "Videogames of the Oppressed." Edited by Noah Wardrip-Fruin and Pat Harrigan. *First Person: New Media as Story, Performance, and Game.* (Cambridge, MA: MIT, 2004), 90.

6 Ian Bogost, *Persuasive Games.* (Cambridge, MA: MIT, 2010), ix.

7 Ian Bogost, "The Rhetoric of Video Games." *The Ecology of Games: Connecting Youth, Games, and Learning.* Edited by Katie Salen. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning. (Cambridge, MA: The MIT Press, 2008), 122.

8 Dal-Yong Jin. Korea's *Online Gaming Empire.* (Cambridge, MA: 2011), 13.
According to Jin, eSports instituted its first league in 1998 when the game *StarCraft* became popular in South Korea among Korean youth. This expedited the growth of many related businesses such as live broadcasting of StarCraft competitions, management of professional gaming teams, and created new forms of employment such as game casters and interpreters. Game channels such as OGN flourished throughout the 2000s, incorporating more genres and titles of games into their programs, and with the recent popularity of games such as *League of Legends* and *Overwatch* is continuously thriving. The Korean eSports league and related businesses are also coming into contact with European and North American franchises such as IEM, MLG, and DreamHack, expanding both party's accessibility across the globe.

9 Alexander Galloway, "StarCraft, Or, Balance." *Grey Room* 28 (2007): 95.

10 Image available from the *Team Liquid* website. http://wiki.teamliquid.net/starcraft2/File:Nimbus.jpg (accessed September 4, 2017).

11 Paul Starr. "Seductions of Sim: Policy as a simulation game," *The American Prospect* 5.17 (1994): 19-29.

12 Ian Bogost. *Unit Operations.* (Cambridge, MA: The MIT Press. 2008), 103.

13 Alexander Galloway. "Black-Box, Black-Bloc." Edited by Benjamin Noys. *Communization and Its Discontents: Contestation, Critique, and Contemporary Struggles.* (New York: Autonomedia, 2012), 244.
Galloway denotes that the recent proliferation of political obscurantism is a response that programs rather than decodes, serves as a demand to leave demands, upends power through making no claims about power—a change in the dimensions of being itself.

14 Felan Parker, "In the Domain of Optional Rules: Foucault's Aesthetic Self-Fashioning and Expansive Gameplay." 5th International Interdisciplinary Conference on Philosophy of Computer Games, 2011. (https://

gameconference2011.files.wordpress.com/2010/10/), 4.

15 Raley, 24-30.

16 Parker, 1.

17 The original modder of the modification that conceived the format of a deduction game is a user known as 'neko kiyanti.' Bisaryang took on the project in order to update and expand previous versions of "Mystery Game" to a configuration that suits *StarCraft II* better.

18 Parker, 3.

19 Simon Penny. "Representation, Enaction, and the Ethics of Simulation." Edited by Noah Wardrip-Fruin and Pat Harrigan. *First Person: New Media as Story, Performance, and Game.* (Cambridge, MA: MIT, 2004), 74.

20 Screengrab from *Failcraft*. http://failcraft.org/wordpress/wp-content/uploads/2013/01/StarCraft-2-Heart-of-The-Swarm-Beta-Screenshot-Arcade-Menu.jpg (accessed September 4, 2017).

21 Hector, Postigo. "Modding to the big leagues: Exploring the space between modders and the game industry". *First Monday* [Online], Volume 15 Number 5 (3 May 2010), Accessed September 12, 2017, http://journals.uic.edu/ojs/index.php/fm/article/view/2972/2530

22 Frederic Jameson. *The Political Unconscious: Narrative as a Socially Symbolic Act.* (Ithaca, NY: Cornell UP, 1981), 64, 171.

23 Ibid. 20