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Acceleration and Information: Managing South Korean Online Gaming Culture

DISSERTATION

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DOCTOR OF PHILOSOPHY

in Anthropology

by

Stephen C. Rea

Dissertation Committee:
Associate Professor Keith M. Murphy, Chair
Professor Tom Boellstorff
Professor Bill Maurer

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CURRICULUM VITAE

Stephen C. Rea

2003	B.A. in Cross-Cultural Relations, Simon's Rock College of Bard.
2005	A.M. in Social Sciences, The University of Chicago.
2008	Adjunct Instructor, South University, Montgomery Campus.
2008-2013	Graduate Teaching Assistant, University of California, Irvine.
2010-2015	Graduate Student Researcher, Institute for Money, Technology and Financial Inclusion, University of California, Irvine.
2012	Korea Foundation Field Research Fellowship.
2012-2013	National Science Foundation Doctoral Dissertation Research Improvement Grant.
2013-2014	Social Computing Graduate Researcher, Intel Science and Technology Center, University of California, Irvine.
2014	Teaching Associate, University of California, Irvine.
2015	Ph.D. in Anthropology, University of California, Irvine.

FIELD OF STUDY

Digital culture, online gaming, temporality, sports, and medicine in urban East Asia

ABSTRACT OF THE DISSERTATION

Acceleration and Information: Managing South Korean Online Gaming Culture

By

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This ethnography explores the practical experiences and institutional entanglements of online games, gaming, and gamers in contemporary South Korean culture and society. Korean online gaming culture is encountered at numerous sites and scales of experience, from the virtual worlds of online games, to the offline spaces where gaming happens, to societal practices and discourses around the management of online gaming and gamers backed by competing institutional interests. Online gaming is contextualized within the history of building Korea's high-speed, high-tech information society, a process known in Korea as “informatization.” Korean online gaming culture is evaluated according to a sociocultural appreciation of speed that elevates qualities of quickness and acceleration as virtues of practice and behavior, the performance of which calibrates individuals with normative expectations that inflect approaches to IT use in Korea's information society.

Since its emergence in the late 1990s, Korean online gaming culture has been the source of both celebration and controversy. While online games have proven to be lucrative for the Korean economy, the objects of a vibrant popular culture, and an area of business and leisure activity that distinguishes Korea as a leader on the world stage, they have also been the objects of

political and medical interventions around problematic gaming, or online game "addiction." Gamers exist in the middle of this tension, their practices and behaviors evaluated against models of normative online gaming and IT use. These evaluations differ from site to site and across scales of experience, yet they are all inflected by a preoccupation with quickness and acceleration as characteristics of a normative orientation to information practices, including online gaming. Performance of these qualities connects individuals with Korea's information society, contributing to normative gaming socialities that I argue are associated with chronotopes: participatory frameworks in which temporality, spatiality, and sociality are intrinsically interconnected. Korean online gamers must calibrate themselves and their practices with normative expectations for gaming and for being social across these chronotopic scales. Failure to calibrate "correctly"—or, rather, mis-calibrating—can have serious consequences for gamers, prompting their enrollment in institutionally-backed disciplining techniques and strategies designed to align them with normative gaming socialities.

Playing at the Speed of Life: Korean Online Gaming Culture and the Aesthetic Representations of an Advanced Information Society

"Fire in the hole!" Beom-seo balled up a piece of paper and launched it in the direction of Sang-joon on the other side of the classroom. Both boys laughed, and as Sang-joon reached for the paper in an attempt to lob it back at Beom-seo, I grabbed the would be missile and placed it in the garbage. I tried to direct their focus back to the day's lesson, but was confused by what had just happened: Beom-seo and Sang-joon were second and first graders, respectively, in my beginning English as a foreign language class, and an idiomatic expression like "Fire in the hole!" was well beyond their abilities at that time. I knew that I had not taught them this phrase, so where could they have learned it?

Several months later I accompanied two of my middle school-aged students in a more advanced class to their favorite online computer gaming café—known as a PC *bang*[1]—near the English academy in the small suburb where we all lived. It was my first time visiting a PC *bang*, but the café and the boys' favorite online games were frequent topics of conversation in our classroom. They helped me log into *Sudden Attack*, a popular first-person shooter (FPS) game developed by Nexon, one of Korea's largest game companies. Amid the sounds of digitized gunfire and explosions featured in the game's firefights I heard a familiar phrase voiced by one of the boys' virtual proxies as he hurled a grenade at the opposing forces on the screen: "Fire in the hole!" At last Beom-seo's outburst those many months earlier made sense to me. He had been mimicking *Sudden Attack*, and, more importantly, Sang-joon had understood him because they had a shared frame of reference based on their knowledge of and experience playing the game.

1 *Bang* is the Korean word for "room," and is attached to the names of different Korean leisure spaces, e.g. *norae-bang* ("karaoke room"), *jjimjil-bang* ("steam room"), or *manhwa-bang* ("comic book (-reading) room").

***

These were just two of the many occasions that demonstrated to me the importance of online computer games for social life in South Korea[2] when I first visited the country as an English language instructor between 2006 and 2007. When I returned in 2012 to conduct ethnographic fieldwork in Seoul—Korea's capital city—online games were just as difficult to avoid as they had been five years earlier. I was bound to see advertisements for the latest games on the sides of city buses and subway platforms, and PC *bang* appeared on what seemed like every street corner. None of this surprised me. After all, in 2007 the *Joong-Ang Daily* newspaper conducted a survey and found that 56% of Korea's estimated 34 million Internet users reported playing online games frequently (Seok & DaCosta 2014:229).[3] Online game exports represented a greater share of Korea's GDP than all other culture contents exports[4] *combined* in 2012 (AP 2013), accounting for 6.3% of sales and 28.5% of all online game revenues worldwide (Choi 2013). These data support claims such as the Game Culture Foundation's that "there is something special in Koreans' cultural DNA, [and] games are at its center."[5]

Online games grew to popularity in Korea in the late 1990s during the beginning phase of

2 My research is limited to the Republic of Korea, i.e. South Korea. For the sake of brevity and in accordance with scholarly tradition in Korean studies, I will simply use "Korea" and "Korean" throughout this dissertation except in cases where the distinction between South and North Korea is relevant.

3 Another estimate holds that by 2008 around 54% of all Koreans had played online games at some point in their lives (Oh & Larson 2011:146).

4 "Culture contents" are an area of industry and professional development in Korea. Hanyang University—which has a Department of Culture and Contents—defines them as "all the multimedia contents of culture and art conveyed in the formation and distribution of various digital media such as movies, games, animation, characters, records, broadcasts, mobile contents, web contents, and e-books" (Source: http://www.hanyang.ac.kr/user/structureDirectEng.action?structureSeq=395, accessed April 11, 2015). The dissemination and popularization of Korean culture contents in East Asia and elsewhere in the late 1990s and early 2000s has often been referred to as *hallyu* or the "Korean wave" (e.g. Choi 2006; Goldsmith et al. 2011; Lee 2011); online games are a prominent part of *hallyu*.

5 Source: http://www.gameculture.or.kr/intro/greeting.php, accessed February 12, 2015. Founded in 2008, the Game Culture Foundation is an advocacy organization for the Korean games industry, partnering with the six largest Korean game developers—NeoWiz, Nexon, NCSoft, Netmarble, NHN, and WeMade—as well as the Ministry of Culture, Sports and Tourism, the Korea Internet and Digital Entertainment Association, and the Korea Creative Content Agency.

"informatization," a political and business project to integrate information technology (IT) into daily life and build the world's most advanced information society. For online gaming enthusiasts around the world, Korea is synonymous with some of the most popular game titles, such as *Guild Wars*, *Maple Story*, and the *Lineage* series. Online gaming is even a professional vocation for some players in the world of electronic sports—or "e-sports"—where Korean players have excelled, gaining global recognition for their athletic accomplishments.

However, in the past decade Korea has also increasingly become associated with so-called Internet and online game "addiction" as represented in news stories of gamers spending days on end playing games at PC *bang*, suffering health problems, and—in a few rare cases—even dying from exhaustion. The same week that I arrived in Seoul to begin fieldwork, closed circuit television cameras captured a young woman in her twenties throwing her newborn baby in a garbage bin outside of a PC *bang* in Seoul (Yoo 2012). The police investigation that followed revealed that she had given birth to the baby in the gaming café's bathroom before disposing of the child and returning to the game that she had been playing. The Korean news media immediately labeled the woman a "game addict" (e.g. Yun 2012) and quoted witness reports that she spent most of her time at that particular PC *bang*. The incident was just the latest reminder of the complicated and conflicted status of online gaming culture in contemporary Korea: while games are lauded for their economic and cultural significance, they are also problematized for how they are connected to the alleged "bad effects" (NIA 2008a:14) of Korea's information society. In light of events such as this one, games and gamers have increasingly become objects of medical and political interventions designed to "manage" Korean online gaming culture.

I was intrigued by the discursive contradictions surrounding online games and gaming in Korea: Were they fun leisure activities that promote social interaction and communication, or dangerous and seductive vehicles for addictive behavior? Were they lucrative examples of Korea's creative economy, or the source of social and public health problems that threatened the country's long-term future? Questions like these motivated my research into Korean online gaming culture: its constitutive activities, the places and times in which it is located, and the historical contexts from which it emerged. As I discovered in the course of doing fieldwork, online games and gaming afford certain socialities—forms of being social, and the particular practices entailed in those forms—that characterize life in Korea's high-tech, information-centric society. Korean online gaming culture is about much more than just leisure and recreation; rather, it is entangled in contemporary political, legal, medical, labor, and educational practices and discourses that are shaping Korean modernity.

Korean online gaming culture exists at a number of different sites, including PC *bang*, online game worlds, e-sports competitions, and treatment facilities for game addiction. Gamers operate at the intersections of these different sites, their individual subject positions ineluctably linked to gaming socialities, the evaluations of which can have significant consequences for them. Gamers who are understood to be "mis-calibrated" with the normative expectations for their gaming may be subjected to disciplining strategies that encourage certain practices and behaviors while seeking to diminish or outright eradicate others. By examining Korean online gaming culture, important insights can be gained about a contemporary style of governance that attempts to establish a normative model of relations among individuals, society, and both public and private institutions. This dissertation examines how different institutional interests attempt to

manage Korean online gaming culture, and how gamers respond to those attempts.

In the twelve months that I spent doing fieldwork: I visited more than twenty PC *bang* across four different cities; I logged nearly 900 hours as a participant observer in *Lineage II*, a popular Korean online game; I attended over 100 professional e-sports matches; I interviewed psychiatrists, psychologists, and other specialists working on Internet and online game addiction treatment and prevention; and I analyzed archival documents related to Korea's information policies and legislation, the history of online games and e-sports, and the medicalization of online gaming.

One consistently recurrent theme that spanned across all of these contexts was a certain lexicon of "speed"—both literally and metaphorically—that my interlocutors used to evaluate Korean online gaming culture. For instance, Dong-ryul—a twenty-one year-old university student, e-sports fan, and avid online gamer—shared with me his observations of what some people in Korean society at large think about online games: "Korean parents think that the most important thing is studying, and going to college, and getting a good job. But they think games are having a slow effect, … that because of games Korea is going so *slow*. It's a negative thing. They think Korea is slowing *down*." His comments reflect a generational difference in the appreciation of online games, but they also draw a connection between online gaming culture and Korea's macroeconomic history of growth and development. He was not alone in making this association; many of the people with whom I spoke placed online games' emergence within a broader historical context of Korean economic, political, and social transformation. And as Dong-ryul's remarks illustrate, that history—and, by extension, contemporary appraisals of Korean online gaming culture—is often evaluated in terms of a sociocultural understanding of

speed that is both a lived aesthetic and an ethical imperative for everyday practices.

Speed in the Land of the Morning Calm[6]

Considerations of speed inflect social life in Korea across micro and macro scales of activity. The aesthetic qualities of speed are salient in interpretive practices that produce and reproduce ethical evaluations of social behavior. As Jae Chung has observed, "Speed is one mode of temporality, and hurriedness, or celerity, is a Korean variant of speed" (2003:12). Although in the colloquial sense "speed" is often used interchangeably with quickness and increasing velocity, in a strictly kinematic sense speed is the measure of positional change over time, thereby establishing a relationship between space and time. From this perspective, slowness is just as important as quickness in qualitative experiences of speed that mediate relationships among individuals, groups, places, and times. Attending to how those relationships filter through an emic appreciation of speed's qualities is indispensable to understanding the social significances of online games and gaming in contemporary Korea.

Slowness is often ignored in social theories that account for speed as a quality of practice and experience, particularly in historical contexts where the quickness afforded by technological innovation becomes an index of modernity and progress. When slowness does appear it is most often in relation to something that is outdated, or as an obstacle to be overcome. Anthropologist Thomas Hylland Eriksen argues that this tendency to overlook slowness as a factor in speed's phenomenology—and, moreover, as a desirable quality of everyday life—is symptomatic of

6 "The Land of the Morning Calm" is an unofficial name that is often associated with Korea (see Lee 2003), usually by Western observers. The origins of the name are disputed, but some believe that it was an early attempt at translating the name given to first century Korea in Chinese records (□ □) into English (Source: http://en.wikipedia.org/wiki/Names_of_Korea, accessed April 19, 2015). In using it here, my intention is to show an example of how Korea in represented in terms of temporal aesthetics, in this case emphasizing qualities of slowness and serenity.

what he calls the "tyranny of the moment" that threatens to eliminate "slow time":

> "Speed ... affects slow time adversely. It threatens to fill all the gaps ... Speed is excellent where it belongs. But it is contagious, and it has possibly serious side-effects. Unless we understand how speed functions, what it adds and what it removes, we are deprived of the opportunity to retain slowness where it is necessary" (2001:59).

Both quickness and slowness are constitutive qualities of online gaming experiences in Korea that inflect discourses on gaming and gamers. Through discourse and practice, these qualities become associated with particular socialities, places, activities, etc. and are important for evaluating individuals' gaming practices and behaviors against normative expectations.

Bballi bballi munhwa*: a culture of acceleration*

Korean online gaming culture emerged out of a historical moment in the 1990s when the government and telecommunications industry committed to establishing the necessary infrastructural, legal, and economic frameworks for an advanced information society. Public policy declarations at that time pitched investment in IT not only as the key to Korea's economic future, but also as a means of maintaining the country's rapid economic, political, and social development. From 1960[7] to the mid-1990s, Korea transformed from one of the most impoverished countries in the world at the end of the Korean civil war[8]—a primarily agrarian

7 The student-led "April 19 Movement" forced then-President Syngman Rhee into exile in 1960. After a short-lived democratic government, General Park Chung-hee seized power the following year in a military coup. Korea's economic growth has been attributed largely to the Park regime's policies, which I discuss in more detail in the next chapter.

8 In his survey of post-independence Korea on the eve of the Korean civil war in 1950, American historian George McCune offered this assessment of South Korea's economic prospects vis-à-vis its northern neighbor: "The greater part of the country's mineral wealth was in the north, as was the heavy industry. The lighter consumer goods and processing industries were concentrated in the south along with a larger share of the agriculture. But the mineral resources and the heavy industries of North Korea were almost valueless to the North Koreans because there was no means of converting the raw materials into consumer goods, nor were there export markets where they could be traded … In South Korea, on the other hand, there were many manufacturing plants but most of them needed the raw materials from North Korea, among other urgent requirements" (1950:54-55). McCune predicted that "should the division of [North and South Korea] be prolonged indefinitely, the strong measures being taken by the North Korean government to promote capital development and the generally more

society with little in the way of industry—to one of the world's largest economies[9] and a leader in technological innovation.

Korea's economic development was experienced not only as rising GDP per capita rates and large-scale construction projects that changed Korea's physical environment, but also affectively as a perceived acceleration of daily life. The writer Kim Young-ha demonstrates how acceleration and quickness become part of a felt aesthetic in his novel *I Have the Right to Destroy Myself*. "K"—one of the story's protagonists—is compelled to race his taxi cab at night on the highways around Seoul. Kim writes: "A strong force pulls K's body back as the car accelerates … He feels a little dizzy, but it isn't entirely unpleasant. The world has always moved around him quickly, and right now this [taxi] is his world. Soon he will adapt. The speed of his body will adjust to that of the taxi" (2007:21). *I Have the Right to Destroy Myself* was first published in Korea in 1996, in the beginning stages of informatization. K's taxi ride can be read as an allegory for that historical moment: excitement about the promise of rapid change tempered somewhat by the "dizzying" and disorienting effects of that change.[10]

Dr. Moon—a noted Korean psychiatrist, hospital superintendent, and professor emeritus

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favorable resource position of the north may eventually make North Korea the more economically stable of the two areas" (1950:262). Of course, McCune's prediction could not have been more wrong, but it does indicate just how devastated South Korea's economy was after independence from Japan—a situation that only worsened during the Korean civil war.

9 As of 2015, Korea has the eleventh largest GDP in the world, and the thirteenth largest GDP by purchasing power parity (PPP) (Source: http://www.imf.org/external/pubs/ft/weo/2015/01/weodata/index.aspx, accessed April 19, 2015).

10 The simultaneous pleasure and terror derived from acceleration is a motif in social theories of speed and modernity (e.g. Duffy 2009). In *The Founding and Manifesto of Futurism*, the artist F. T. Marinetti celebrated the "beauty of speed" and the pleasure to be found in submitting to the relentless advancement of history, urging his colleagues to embrace the uncertainty experienced in moving at ever-increasing velocities: "'Let's break out of the horrible shell of wisdom and throw ourselves like pride-ripened fruit into the wide, contorted mouth of the wind! Let's give ourselves utterly to the Unknown, not in desperation but only to replenish the deep wells of the Absurd!'" (1973[1909]:20). Paul Virilio has written of the embodied experience of speed as both pleasurable and disagreeable, likening it to the ingestion of chemicals: "It's true that speed is a drunkennes, a drug—there's no doubt. It has the same effects. You vomit, you get a headache … At one and the same time, it is dreadful, in that it causes us to lose the relationship to the subject. But it also teaches us about our fragility, our fugacity" (2001:77).

—lived through this transformative period in Korea's modern history, and offered his insights about the macro-scale social changes that he had witnessed. “Speed is critical here,” he told me. “Especially in Korea, society changed very rapidly. Everything—and I am sorry to say this—is oriented around money.” Dr. Moon believed that this society-wide orientation around money—making it, spending it, maximizing it—was connected to what he saw as an increased desire for instantaneous pleasure. “Now in the rapidly changing society,” he continued, “[people] cannot wait for the final pleasure. [They say] ‘I need pleasure now!’” According to Dr. Moon, in the immediate post-war period when resources were scarce people were more willing to defer their own pleasure in the interest of collective improvement. However, the affluence engendered by economic growth had, in his opinion, made Koreans more impatient and less willing to postpone pleasure.

Dr. Moon contextualized this increased emphasis on money and pleasure in relation to what Koreans call “*bballi bballi munhwa*.” “*Bballi*” is the Korean word for “quickly,” and “*munhwa*” means “culture”; “*bballi bballi munhwa*” can be translated roughly as “chop chop culture” (thereby retaining the alliteration in the Korean phrase). *Bballi bballi munhwa* emerged during the early days of Korea’s industrialization in the 1960s as a vernacular description of the rapid economic, political, and social changes of the era. However, the “*bballi bballi*” in *bballi bballi munhwa* is not just descriptive, but also prescriptive. Nicholas Harkness writes that *bballi bballi* is a “directive to do things rapidly” (2013:228), an ethical imperative that calibrates practice and behavior with the temporal aesthetics of quickness and acceleration. This imperative has influenced contemporary Korean socialities as well. As Dr. Moon put it, “*Bballi bballi munhwa*: ‘If you need help, I can help you, but if you don’t want it, I am very busy. You can just

go your own way.'" His comments reveal the seemingly contradictory characteristics of *bballi bballi munhwa* as an expression of normative sociality.[11] On the one hand, performing the qualities of quickness so valued in *bballi bballi munhwa* binds individuals with society; it is a matter of individual calibration with the normative pace of social activities. But on the other hand, preoccupation with doing things quickly stimulates competition and—according to Dr. Moon, at least—emphasizes individual pleasure and self-aggrandizement, both of which are problematized as anti-social or "mis"-calibrated.

Compressed modernity and the sociocultural entailments of acceleration

Bballi bballi munhwa is the colloquial articulation of a temporal aesthetic that stresses quickness and is associated with representations of modern Korean history. In Korean studies, that history is often interpreted through the theoretical framework of "compressed modernity" as developed by the sociologist Chang Kyung-sup, who defines the concept as:

> "a civilizational condition in which economic, political, social and/or cultural changes occur in an extremely condensed manner in respect to both time and space, and in which the dynamic coexistence of mutually disparate historical and social elements leads to the construction and reconstruction of a highly complex and fluid social system" (2010a:446).

Relative to other national-historical contexts, Korea's industrialization and its attendant social effects occurred within a "compressed" time frame, "achieving over a mere few decades what

11 A complementary sociocultural concept to *bballi bballi munhwa* is "*yeolpoong*," the Korean word for "violent wind." *Yeolpoong* refers to what is perceived as the Korean proclivity for rapidly adopting the latest popular culture trends, especially around technology and entertainment. Jae Chung writes that "Korean social life … is said to reproduce this logic of rapidity in widely disparate endeavors … Koreans are constantly rushing about, constantly cutting in line, constantly absorbed in the latest social trend (*yulpoong*, literally a typhoon), and constantly shedding the latest thing that has outlived its popularity [sic]" (2003:4). As a complement to *bballi bballi munhwa*, *yeolpoong* can help explain the spread of online gaming culture in Korea, especially the explosion in popularity of specific game titles.

took Westerners two or three centuries" (Chang 1999:31).[12] Compressed modernity is simultaneously an analytic and the object of analysis; it is a tool for interpreting Korean economic, political, and social history in comparative perspective—characterizing that history as qualitatively accelerated—but when compressed modernity is taken as a given it becomes a means for understanding the social and cultural effects of an orientation to the world in terms of the qualities of speed.

Spacetime compression has been a central feature in social theories of modernity (e.g. Harvey 1989; Giddens 1990; Beck[13] 1992, 2000) that influenced Chang's formulation of compressed modernity. Each of these theories places special importance on advancements in communication and transportation technologies accompanied by shifts in traditional social relations as indexes of a modern condition. The historian Hartmut Rosa notes that "the history of modernity seems to be characterized by a wide-ranging speed-up of all kinds of technological, economic, social, and cultural processes and by a picking up of the general pace of life" (2003:3). Rosa's assertion echoes Paul Virilio's (1986), whose influential theory of "dromology" characterizes modernity as an unfolding of contests over the techno-political regulation of time and mobility that work to sustain acceleration. In Virilio's model of history, the pursuit of "speed for speed's sake" initiates an unending cycle of technological innovation and obsolescence whereby the creation of an engine capable of propelling objects to greater speeds is almost immediately surpassed by faster ones. Ultimately he envisions a future in which acceleration reaches the threshold of instantaneity, where space and time are compressed such that "past,

12 Jung-en Woo makes a similar reference to the "speediness" of Korean industrialization in the title of her historical analysis of modern Korean business "*Race to the Swift*" (1991).

13 Prior to his death in January 2015, Ulrich Beck had been an influential figure in Korea, partnering with Korean sociologist Han Sang-jin among others for the "Seoul Project," a two-year study for Seoul's metropolitan government on climate change and global cities (Source: http://isa-global-dialogue.net/in-memory-of-professor-ulrich-beck-january-8-2015/, accessed April 19, 2015).

present and future contract … just as the expanse of the terrestrial globe does these days in the excessive speed of the constant acceleration of our travels and our telecommunications" (2010:71).

Virilio has been criticized for his cynical take on the future (viz. Thrift 2005) and the assumption that acceleration is irreversible in his dromological representation of history. Moreover, he posits a reading of speed that is homogenous, denying contexts—such as Korean online gaming culture—in which speed is experienced as multiple, coincidental, complementary, and contested. The notion that everyday life is accelerated and accelerating as a consequence of technological innovation is often taken for granted in social science literature (see Gleick 1999; Rosa & Scheuerman 2009; Agger 2004; and Wajcman 2008, 2014), becoming part of clichéd understandings of modern, high-tech societies like Korea's that reproduce discourses about progressive acceleration more than they accurately represent real world situations. Instead of accepting wholesale the premise of this discourse, recent social scientific research aims to "[critique] a tacit acceptance that the world is getting faster by examining instead how the discourse of speedup is part of the problematic cultural context in which people understand and experience time" (Sharma 2014:8). I approach the qualities of acceleration and quickness as represented in the concept of compressed modernity from a similar position, following Seo-young Park's suggestion that we "move away from a notion of abstract time to the notion of time that is embodied, experienced, and created through everyday action" (2011:19). The qualities of speed have both literal and metaphorical purchase on people's experiences in Korean online gaming culture, invoking external temporal metrics as well as embodied senses of time in representations and evaluations of those experiences. It is important to parse the differences

between these two ways of measuring speed, and to attend to the specific times, places, and activities where one or the other is more salient.

Whether or not acceleration is a fact of social life in advanced information societies like Korea's, it is clear that accelerating the speed at which information can travel affords new ways of being social, e.g. synchronous communication across vast spaces, the ability to work and live in geographically removed places, and specialized places for leisure and socializing that are not restricted to physical locations. It is not just time but also *space* that is compressed by acceleration, and spatial compression is perhaps even more obvious in Korea than temporal compression. The Korean peninsula is a predominantly mountainous region, with just under 40% of the South Korean territory being developed land. Given that South Korea is roughly the size of the state of Indiana and has a population of around 50 million, the country's geography and demographics have contributed to this quality of compression and resulted in a high rate of urbanization, with around 83% of the total population living in cities. Furthermore, over 60% of all Koreans live in high-rise apartment buildings.[14] Accounting for the phenomenological dimensions of social change related to spacetime compression is not unique to Korea, but rather has been a consistent feature in classical theories of modernity—especially in relation to the logic of capital and industrial society (e.g. Marx 1993; Durkheim 1997; Thompson 1967)—such as in Simmel's description of urban sociality at the beginning of the twentieth century:

> "The psychological foundation, upon which the metropolitan individuality is erected, is the intensification of emotional lift due to the *swift* and continuous shift of external and internal stimuli ... Lasting impressions, the slightness in their differences, the habituated regularity of their course and contrasts between them, consume, so to speak, less mental energy than the *rapid* telescoping of changing images, pronounced differences within what is grasped at a single

14 Virilio relates an anecdote that further underscores the claustrophobic quality of Korean geography: "In 2008 ... South Korea, via Daewoo Logistics, the agricultural subsidiary of the industrial giant, bought up half the arable land of Madagascar, or 1.3 million hectares, thereby outsourcing a Korean geography too cramped to feed its native population" (2010:67).

> glance, and the unexpectedness of violent stimuli ... It creates in the sensory foundations of mental life, and in the degree of awareness necessitated by our organization as creatures dependent on differences, a deep contrast with the *slower*, more habitual, more smoothly flowing rhythm of the sensory-mental phase of small town and rural existence" (2002[1903]:11-12, my emphasis).

The quickening of everyday activities and the narrowing of spaces demand that people adjust their practices and behaviors, just as K's taxi demanded that his body adjust to its velocity. Those adjustments are made at an individual, embodied level, in order to calibrate with a normative model of sociality.

However, the accelerated and accelerating entailments of compressed modernity are not completely deterministic, and their effects—though wide-ranging—are not necessarily absolute. According to Chang, Korea's compressed modernity is distinguished by how "South Koreans on the one hand have achieved incomparably fast capitalist industrialization, political democratization, and social structural change, and on the other hand have exhibited a particularly strong family-centrism, i.e. an overwhelming influence of family on social order as well as private life" (2010b:3). This tension between rapid change and enduring tradition is reflected in the phenomenon of "flexible sociality" that Cho Myung-rae identifies as characteristic of life in contemporary Korea, particularly in cities. With respect to Seoul specifically, Cho writes that:

> "Flexible sociality in Seoul has its genesis in a hybrid urban social formation that is comprised of sociocultural codes of different periods, resulting from Seoul's rapid transformation from a premodern to modern, and finally a postmodern city … [Korean modernization has] occurred in just one generation, in such a highly compressed way that one stage of development led into the next without first removing the residues of the previous stage … Seoul is a city where different layers of temporality related to different stages of development are mixed together to shape a seemingly coherent urban cultural edifice" (1999:124-125).

Flexible sociality, as theorized by Cho, is constitutive of adjustments to the exigencies of compressed modernity. In the face of swift, unpredictable social change, Koreans draw upon their familiar resources and relationships—such as family, hometown associations, and alumni

clubs—to help make sense of and adapt to the pace of everyday life of contemporary Korean society.

Although the effects of compressed modernity—i.e. fast industrialization and economic growth—are often cited positively as evidence of Korea's capacity for hard work, innovation, and resiliency, they have also attracted criticism for their role in perpetuating social inequalities and precipitating an environment of volatility and uncertainty. The material consequences of such a rapid pace of development were evident in the collapses of Seoul's Seongsu Bridge in 1994 and the Sampoong department store in 1995 due to accelerated yet shoddy construction, both of which became emblematic of the excesses and instability of Korean modernity. When Korea experienced a devastating financial crisis in the late 1990s, many Korean academics blamed the models of business and politics that had sustained the nation's accelerated rate of growth (e.g. Chang 1999; Cho H. J. 2000; Shin 2000). Feminist critiques of compressed modernity in Korean studies draw attention to how—as a sociocultural phenomenon—it simultaneously invokes and reinforces a masculinist aesthetic insofar as it represents "a structure of feeling or taste" (Abelmann 2003:282) leading to "the destruction of the quotidian" (Cho H. J. 2000:54). These critical reflections on compressed modernity challenge a particular reading of history that treats Korean modernity as homogeneous and unquestioned, not to mention as measured against a contrived Western standard.[15]

While speed—as an aesthetic, as a hermeneutic, or as an appeal to action—is something that appeared repeatedly in my observations of, participation in, and conversations with people in Korean online gaming culture, I want to resist treating speed purely as acceleration and to avoid

15 Chang notes that "even Western modernity has never been a self-contained evolutionary experience for most countries in the region" (2010:450).

rehashing well-worn arguments about spacetime compression as a condition of modernity. Rather, my goal is to take seriously the relationship that speed makes between time and space and to compare the different ways that this relationship is articulated in Korean online gaming culture. Online games, gaming, and gamers each derive their significance from being embedded in spheres of activity located in particular times and places, and from the socialities that these spheres afford, promote, and discourage.

Chronotopes, Taskscapes, and Governance

Chronotopes

Online games in Korea are encountered at different temporal and spatial scales, ranging from one-time interactions within online game worlds to society-wide phenomena over long periods of time. The people, places, times, practices, and technologies involved in Korean online gaming coalesce in particular formations—some more stable and longer-lasting than others—within a complex of nested *chronotopes*. Mikhail Bakhtin defined chronotopes as "the intrinsic interconnectedness of temporal and spatial relationships" (1981:84) that signify literary genres, setting the spatial and temporal parameters for narratives, and, in so doing, affording some possibilities while precluding others. Asif Agha notes that "Bakhtin's conception of the chronotope … involves more than depictions of time and space," and that in fact "a chronotopic depiction formulates a sketch of *personhood* in time and place; and, the sketch is enacted and construed within a participation framework" (2007:321, my emphasis). Because the semiotics of time and space that characterize a given chronotope are shared by the people who participate in

them, those temporal and spatial features are arranged in a symbolic system with attendant prescriptions for interpretation. These symbolic systems are resources for evaluating others' behaviors and practices—as well as one's own—according to normative expectations. And, as Agha points out, chronotopes are most clearly experienced in contradistinction to one another; in other words, the significance of temporal and spatial aesthetics and their ethical entailments in one chronotope are reproduced by and through comparison with other chronotopes. He writes that:

> "Each chronotope informs an official picture of the world … in one circle, and is the object of derision (and sometimes rage) in the other. More generally, whether or not a chronotopic model is widely known, is felt to be legitimate, is uniformly accepted by those acquainted with it, or whether it fractionates into positionally entrenched variants, the process as a whole proceeds *as a social process* through modes and moments of participatory access to the model itself … and through forms of alignment to *that* model (or variant) to which participants orient in some modality of response … through their own semiotic activities. Chronotopic contrasts become most vivid when they are voiced … as contrasts among institutionalized forms of life" (2007:322).

The essential "social-ness" of chronotopes implies that one never experiences just one chronotopic representation of the world, but rather moves among and within several chronotopes at multiple scales, often simultaneously. Successfully managing behavior and practice according to evaluations of time and space—and the different normative expectations for those evaluations—demands a near constant process of calibration and recalibration to various chronotopic standards.

Chronotopes are lived representations of social worlds that arrange qualities in certain ways, entailing specific guidelines for interpretation and action. People orient to the salient qualities of a given chronotope, as "cultural convention and institutionalized practice turn elements of qualitative experience into meaningful signs which people rely on to reflect upon, interpret, and engage with their world" (Harkness 2013a:15). Those qualities are made

significant by their arrangement—both internally (in relation to each other), and externally (in relation to other qualitative arrangements)—and how they are associated with bodies, materials, environment, beliefs, values, etc. Nancy Munn describes the standards of interpretation in Gawan society around qualities of speed and their associations with action in the world:

> "Speed and buoyancy entail an expansive spatiotemporal control: Body tempo is fast (less time is taken) and, in effect, the body energetically 'goes beyond itself' forming active relations with the physical world outside itself. Slowness and heaviness, on the other hand, entail a winding down of activity, a contraction or negative transformation of the body to a level of spatiotemporal integration in which it does not form a dynamic interrelationship with the external, physical world" (2007 [1986]:79).

Munn's articulation of the Gawans' symbolic arrangement of speed's qualities and their attendant socialities is similar to how speed works as an organizing principle for different chronotopes within Korean online gaming culture. Taking *bballi bballi munhwa* as the normative chronotopic sociality in Korea's information society, quickness becomes synonymous with ideals like productivity, modernity, and progress, as well as bound to conventions for social interaction and collaborative activities, like those afforded by online games. By contrast, slowness is more closely associated with social isolation and immersion in practices that are "out of synch" with the normative expectations shared by a given community, both of which are important for diagnoses of Internet and online game addiction, as well as for gamers' evaluations of their peers and themselves.

Three chronotopes—broadly conceived—were most salient in my engagement with Korean online gaming culture: 1) online game worlds; 2) the offline spaces and times of online gaming, e.g. PC *bang*, homes, e-sports matches, etc.; and 3) information society writ large and its conflicting institutional interests with respect to the role of online games in/for contemporary Korea. These chronotopes are organized in a nested formation so that they overlap, but have

differently-scaled spheres of influence (see Fig. 1 below). For instance, *Lineage II*—the popular massively-multiplayer online role-playing game (MMORPG) that I played as part of my fieldwork—is its own chronotope, a participatory framework for collaborative action. Within the Korean *Lineage II*-playing community, members share conventions for evaluating each other's behavior—as well as their own—in the context of the game's spatiotemporal aesthetics. These conventions are influenced by players' experiences in the larger chronotopes (e.g. PC *bang*, Korean information society) that *Lineage II* is nested within, although there are also game-specific criteria that are important for making evaluations. However, influence does not necessarily move in the other direction: Some of *Lineage II*'s spatiotemporal aesthetics, their attendant values, and directives for action may be identical to those in the larger chronotopes, but not all are relevant outside of the context of *Lineage II*. In this way, Korean online gaming chronotopes are mutually reinforcing and only experienced in relation to each other, yet remain distinct spheres of activity that occasionally come into conflict. Moreover, each chronotope operates on different temporal and spatial scales, and since activities are never restricted to just one chronotope, moving among scales requires calibration to different participatory frameworks and their normative expectations for online gaming practice and behavior.

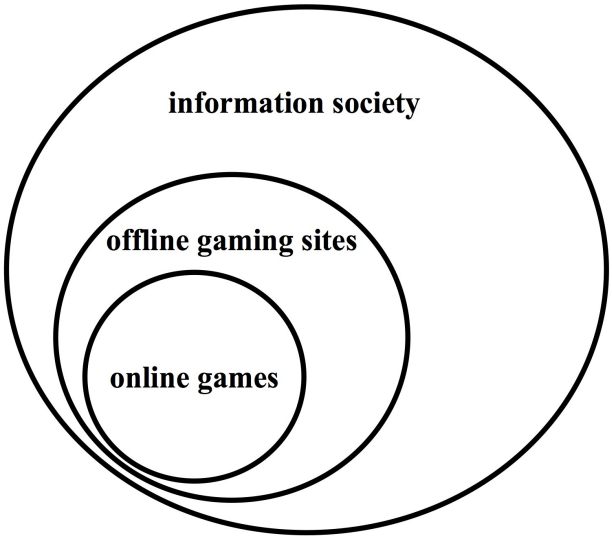

Fig. 1: Korean online gaming chronotopes

Taskscapes

With respect to how practices are organized temporally and spatially *as well as* socially, chronotopes are related to what Tim Ingold calls "taskscapes": "[arrays] of related activities" in which "temporality and historicity are not opposed but rather merge in the experience of those who, in their activities, carry forward the process of social life" (2000:194-195). Taskscapes bring together times, spaces, people, and practices. They are interactive, and they are embodied. What is more, taskscapes are constituted by and through their relationships to other taskscapes. The temporality of taskscapes, according to Ingold, is intrinsic and "lies not in any particular rhythm, but in the network of interrelationships between the multiple rhythms of which the taskscape is itself constituted" (2000:197). Thinking with taskscapes helps to make sense of what happens at the intersection of multiple chronotopes, and how individuals are embedded in several

participatory frameworks at once, each with sometimes complementary, sometimes conflicting prescriptions for action and interpretation.

For instance, a person playing *Lineage II* in a PC *bang* in Seoul is embedded in (at least) three chronotopes simultaneously. Within the game, tasks are organized around the rhythms of game mechanics—e.g. "cool down" timers on spells, the time that it takes to advance from one level to the next, the limitations on when and how often specific raids can be joined—as well as the social rhythms of in-game communities. Players are evaluated according to how well they can master the different tempos of play, often admonishing one another to "hurry up" or complimenting someone on how quickly his or her character reached a certain level.

In PC *bang*, players are subject to different demands on their time. Although open twenty-four hours a day, PC *bang* undergo "waves" of customers in rhythm with daily cycles both inside and outside of the cafés, with the afternoons and early evenings typically being the busiest. Furthermore, several of the players with whom I interacted referenced the temporal distortion that they would experience when switching from being more concentrated on in-game activities to focusing on activities within the space of the PC *bang*; this distorted sense of time was felt even more acutely when moving outside of the PC *bang*, where players had to once again calibrate to the rhythms of the city, and of Korean information society in the abstract.

Finally, from a chronotopic perspective outside of online game worlds and PC *bang*, online gamers and games are evaluated according to the ethical entailments of *bballi bballi munhwa*. As Dong-ryul's comments about adults' fears that online games are "slowing down" Korea illustrate, the problematization of games and gamers in discourses like the one around "addiction" connect gaming practices and behaviors with temporal aesthetics associated with

stagnation and social decay. At the same time, PC *bang* and online games are also arenas for aspiring professional gamers to hone their skills before entering competitions where they can attract the attention of e-sports teams. Both evaluations—either as a problematic gamer and potential addict, or as a rare athletic talent whose play has social and economic value—entail participation in practical regimes designed to either cultivate or eliminate certain skills and behaviors. In this way, Korean online gamers are subject to different sets of institutional interests vying to regulate their play. When and where these three chronotopes intersect concurrently, they form taskscapes for individual gamers who must learn to manage their activities according to demands at different chronotopic scales.

Within a designated chronotope, individuals calibrate themselves and their activities with those of other participants, specifically in relation to a community's normative expectations for those activities. Performing this sort of calibration is a means of signaling membership in a community and of binding individuals with groups of similarly-oriented participants. However, the sense of belonging derived from calibration to the tempos and paces of activity in one chronotope is simultaneously productive of a sense of exclusion or alienation from tempos and paces in another chronotope—and from their attendant values in the community. In some cases, calibration to normative practices and behaviors in one chronotope entails *mis*-calibration with normative practices and behaviors in another chronotope. And since participation in Korean online gaming culture necessarily involves shifting among multiple chronotopes, gamers must continually calibrate and recalibrate to the expectations incumbent upon them at any given moment, at any given scale. Failure to calibrate "correctly" can have serious consequences for an individual's social status vis-à-vis others, ranging from rebuke in a community of other gamers

to conscription into institutionalized strategies for managing their play.

Dromology and governance

It is in relation to these processes of calibration—both voluntary and coerced—that Korean online gaming culture has become the object of methods of governance designed to mold a "healthy" and "mature" information society (NIA 2008b:35). These forms of governance do not focus solely on games, but rather the entirety of IT-related practices and behaviors. For instance, the Lee Myung-Bak administration (2008-2013) attempted to institute a number of media reforms in order to "establish a reliable information society … and [prevent] conflicts caused by the expansion and proliferation of inaccurate information" (NIA 2008a:14). These included the so-called "real ID" law, an amendment to the "Act on Promotion of Information and Communications Network Utilization and Information Protection, Etc." requiring websites with over 100,000 unique daily visitors to verify the "real," offline identities of anyone posting information in online forums like comment sections, message boards, or chat rooms. This restriction on the conditions of online participation is related to another of the Act's provisions that prohibits the "circulation of unlawful information" including obscene content, defamatory content, anything that aids in the commission of a crime, and any sort of "hacking" or virus dissemination (Article 44-7, Act No. 9119, 2008). The pretense for these reforms was an uptick in reported cases of cyberbullying—the online-mediated harassment of individuals—as well as political organizing against the Lee administration and a proposed free trade agreement with the United States, much of which was done online where activists circulated information that Lee's government deemed defamatory or false. Although the government did not adopt all of the

proposed Lee-era media reforms, information policy during this period was focused on creating a "'trusted information society'" by "actively responding to bad effects of informatization including hacking, personal information infringement, and exchange of illegal and obscene contents" (NIA 2008a:13). These policies complement appeals to self-regulation of online activities promoted in public education programs, child welfare advocacy efforts, and the social conventions of online communities themselves, helping to usher in a "world of panoptic visibility … which increasingly impels individuals to be on guard and engage in self-censorship" (Epstein & Jung 2011:83).

Online gaming culture occupies an ambiguous position with respect to policies directed at regulating practices and behavior in Korea's information society. On the one hand, online games have been and continue to be important—and lucrative—culture contents that the government promotes through subsidizing game developers and supporting Korean e-sports. But on the other hand, the specter of online game addiction is part and parcel of the other "bad effects of informatization" targeted for reform in policies like the ones outlined above. As with strategies for managing cyberbullying and the circulation of information online, the task of managing online gaming culture combines public policy with tools for self-regulation, emphasizing individual responsibility for calibrating with normative expectations on gaming practices and behaviors. These calibrative strategies attempt to align individuals with social norms in part by making the body a site for intervention. Virilio has written about how in modern societies when "bodies are guilty of being out of synch, they have to be put back in the party *line*, at the speed of an entire population" (1986:33). A similar project of calibration and regulation applies in management strategies for online gaming culture, where embodied practices and behaviors are

targeted either for development or for elimination in the interest of aligning gamers with the normative "pace of life" at different scales of activity.

The Plan of the Dissertation

Online gaming in Korea is not merely a popular practice limited to a sociocultural domain of leisure activities, but rather a lens through which we can observe the playing out of contradictions in Korea's information society. People's experiences in and evaluations of Korean online gaming culture are grounded in ways of assessing speed—especially the qualities of acceleration, quickness, and slowness—as an confluence of temporal aesthetics that help to organize practices and behaviors in an ethical framework of interpretation. Vernacular cultural concepts like *bballi bballi munhwa* and theories like compressed modernity promote a hegemonic dromology, that is, a guideline for evaluating the self and others according to a specific understanding of velocity and its entailments for socialities, both normative and non-normative. Korean online gamers work to calibrate themselves with this hegemonic dromology and its attendant prescriptions on game-related practices and behaviors. When they deviate from a normative model of sociality they become subject to techniques and strategies for calibration and regulation that attempt to realign them and their behaviors with a given community's expectations. Pressures and incentives to calibrate one's activity operate across multiple scales, and are encountered in a structure of nested chronotopes that gamers often inhabit simultaneously. Strategies developed for managing practices and behaviors in Korean online gaming culture have entailments for modern forms of governance that respond to the (relatively) rapid transformation of social institutions in the ongoing process of informatization.

The remainder of the dissertation is structured as follows. Chapter 2 recounts the institutional history of Korean informatization and the role of online games in that history. The focus of informatization was the construction of the Korea Information Infrastructure (KII), which provided the material conditions of possibility for Korean online gaming culture. Developing a world-class telecommunications infrastructure had been an economic and political goal for Korea since the late 1970s, but with the proposal of the KII in 1994 the discourse about the country's place in the world underwent an important transformation. Whereas previously Korean politicians had spoken of "catching up" with advanced global economies, informatization —and the KII in particular—was pitched as an opportunity for Korea to *surpass* the rest of world in fostering a modern, high-tech, high-speed information society. This sentiment was captured in a well-known newspaper slogan from 1995 for a computer literacy program: "Slow to industrialize, but let's lead in informatization." The KII was completed in 2005—ten years ahead of initial estimates—and provides the world's fastest average Internet connection speeds to over 97% of all Korean households. However, the accelerated timeline of informatization and the successful completion of the KII may not have been possible if not for the role that online games played in helping to demonstrate the capacity and utility of the new national information infrastructure. When Korea suffered a serious recession following the 1997 Asian financial crisis, public education projects aimed at improving computer and Internet literacy and creating demand for high-speed Internet were temporarily put on hold. In the absence of government-led demand creation efforts, online games and the sites where people encountered them—namely PC *bang*—became indispensable to the promotion and development of Korea's information society. As more Koreans got interested in online games and gaming, demand for the high-speed Internet

services necessary for playing such games grew quickly and dramatically. The growing interest around online games also helped the nascent Korean game development industry flourish, making a significant contribution to the country's post-1997 economic recovery.

Chapter 3 is based on data collected during my time as a participant observer in Korean PC *bang*, and from conversations with Korean online gamers. I explore the temporal, spatial, and social dynamics of these sites, attending closely to the importance that PC *bang* have for how gamers evaluate others' behaviors as well as their own. PC *bang* are representative sites of a Korean online gaming chronotope in which offline practices and behaviors related to gaming are calibrated with normative gaming socialities. At the same time, PC *bang* customers' experiences are influenced by their activities in online game worlds, their status in wider Korean society, and in contrast to non-PC *bang*-going gamers. In this respect, PC *bang* are examples of what Michel Foucault called "heterotopias," places that are set apart from the rest of society and "capable of juxtaposing in a single real place several spaces, several sites that are in themselves incompatible" (1986:25). As a gamer's focus moves among the different Korean online gaming chronotopes while he or she remains physically in the PC *bang*, calibrations must be made and remade with the different temporal, spatial, and social characteristics salient in each chronotope. PC *bang* are thus places where values about normative social interaction and engagement with online games are both challenged and reinforced.

Chapter 4 is drawn from my experiences playing *Lineage II*, my interactions with and observations of other players in the game, and participation in a *Lineage II* "clan"—a formal association of players within the structure of the game. I focus on how the normative tempos for activities within *Lineage II* come into conflict with tempos in other Korean online gaming

chronotopes, and how players manage their activities in accordance with these conflicts. Events in offline spaces often impinge upon the fantasy of participation in online games, and challenge the extent to which online games can be separated from other spheres of activity. Learning to manage the gap between online and offline and to calibrate with the normative sociality of the *Lineage II* community also involves learning how to make use of communicative techniques that are only applicable in online environments. I also discuss a specific style of play called *nokada*—slow, repetitive, and solitary activities that are nonetheless necessary for advancement in the game—and how it relates to *Lineage II*'s temporal aesthetics and expectations for gamers and gaming. Although *nokada* is part and parcel of normative *Lineage II* practice and sociality, it shares qualities with gaming behaviors that are elsewhere identified as problematic. By looking at how players engage in *nokada*, an important insight is made into how they calibrate with different ethical framework for interpreting online gaming.

Chapter 5 investigates the world of professional Korean e-sports, specifically my experiences as a participant observer in the *StarCraft II* fan community. Like other e-sports, *StarCraft II* is a competitive pursuit in which qualities of speed are fundamental in evaluating individual players' skills and performances. Cultivating quickness in playing *StarCraft II* involves a continual process of calibration and recalibration with the game's mechanics and with the tempos of competition; speed, in this sense, is itself a skill that professional gamers develop and maintain through practice and participation in communities of other professionals. The best players are lauded by their peers and by fans not only for their win-loss records, but also for the pace at which they play. Individual performances are evaluated according to a metric called "actions per minute" (APM), which measures the number of in-game actions that a player can

perform in one minute. Moreover, professional Korean *StarCraft II* is literally played at an accelerated pace—exactly 1.38 times "normal" speed—in what players and fans alike call "*StarCraft* minutes." These evaluations of performance reinforce a normative model of sociality in the Korean *StarCraft II* community at the same time as they constitute that sociality. As an institutionalized sphere of activity, e-sports are set apart somewhat from the rest of Korean online gaming culture, enjoying official endorsements from the government and sponsorship from some of the largest Korean telecommunications, IT, and media companies. Although their gaming behaviors are remarkably similar to those of would be online game addicts, professional gamers do not experience the same social stigma that amateur gamers do, in part because of how e-sports performances are aligned with the temporal aesthetics of *bballi bballi munhwa*.

Finally, Chapter 6 examines the practices and discourses around so-called Internet and online game addiction in Korea. Based on interviews with psychiatrists, psychologists, addiction counselors, and online gamers, as well as analysis of public policy, news media reports, and academic literature, I investigate the origins of the discourse in Korea, how diagnoses are made, and different strategies and techniques for addiction management. Potential addicts are understood as being "out of synch" with normative expectations on social behavior, and their orientations to online games are framed as mis-calibrations with the normative paces and tempos of life in Korea's information society. They are thus subjected to institutionalized strategies designed to calibrate them with "healthy" and "appropriate" models of gaming behavior. A key component of such strategies are various technologies of the self that are intended to help would be addicts regulate and manage their own gaming practices and behaviors. Examining the discourse and practices around online game addiction therefore improves understanding of

different approaches for managing Korean online gaming culture, which in turn reveals a contemporary style of governance that has emerged alongside the development of the Korean information society.

"Slow to Industrialize, but Let's Lead in Informatization": the Korea Information Infrastructure, the IMF, and Online Games

October 22, 2012: Dr. Park seemed as though he really wanted to help me, but I got the impression that he did not know what he could contribute to my research. I had come to visit him in his office at one of Seoul's largest universities because he had published a few articles about Internet addiction disorder in Korea. However, he told me that as a sociologist he did not have any medical expertise on the subject. As our conversation seemed headed for disaster, I decided on a whim to ask if he thought there were any correlations between Internet and online game addiction and Korea's informatization[16] policy in the 1990s. Just then he said something that surprised me.

"Korean people in general began to use the Internet around 1996," Dr. Park told me. "I was in the middle of promoting the use of the Internet and computers at that time." Immediately I was excited; I had not expected that I would be interviewing someone who had been on the inside of Korea's informatization process. Dr. Park had worked for Korea's Informatization Promotion Committee in the 1990s, under the Committee's president Choi Hyung-woo—one of then-President Kim Young-sam's closest advisors—and Lee Yong-tae, former president of both Korea's first computer manufacturer (Sambo) and Korea's first high-speed Internet service provider (Thrunet). The Committee was responsible for evaluating information policy and making recommendations, particularly regarding construction of Korea's high-speed information infrastructure. According to Dr. Park, "the Korean government planned to construct the

16 "*Jeongbohwa*" (□ □ □) in Korean. "Informatization" was coined by Simon Nora and Alain Minc in 1978 in a report written for the French President. The authors describe it as a process that "will alter the entire nervous system of social organization" (1980 [1978]:3). The report was published in Korean in 1988 and was influential for Korea's information policy planners. In Korea, informatization refers to the integration of information technology (IT) into all facets of life.

information superhighway by 2025, but we tried to persuade them to do it very fast. We told them 'You have to build it within five or ten years.'" The government took the suggestion and accelerated the construction project's timeline. Ultimately, the "Korea Information Infrastructure" (or KII) would connect every region of Korea to a broadband Internet network by the end of 2005, twenty years ahead of the original goal.

In 1996, Dr. Park traveled with Choi Hyung-woo to Seattle in preparation for Choi's presidential run (his campaign was suspended, however, when Choi suffered a stroke later that year). There they met with some of the biggest names in American IT—Bill Gates, Alvin Toffler, Scott McNealy, James Gosling, Andy Grove, and Marc Andreessen—as part of Choi's efforts to prove his worth as a political leader for Korean informatization. "At that time, it was kind of a threat," Dr. Park said. "If you didn't know how to manage or how to formulate public policies related to information technology, you could not become a really efficient President of Korea." Choi's likely opponent for the presidency, Kim Dae-jung, had already worked to present himself as a backer of venture capital and the young Korean software industry, but according to Dr. Park he knew relatively little about IT. Choi's goal was to set himself up as an alternative to Kim, someone who had the political expertise and practical knowledge to keep Korea's informatization process on schedule.

When I asked Dr. Park why IT had enjoyed such strong political support at that time—and why the Committee had recommended an accelerated timeline for the KII—he put informatization in its historical, regional context. "Korea, Japan, China: we're competing all together, all the time," he said. "China is a really big country, and Japan—in terms of economy and technology—was higher than Korea. But Korean people understand that in terms of history

they had been ahead of Korea only for less than one hundred years. So today Japan is richer than Korea, but Korean people think that 'We were always ahead of you; still, we can do that.' We think that we were late in industrialization, but we can be ahead of Japan in information."

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Dr. Park's comments about competing with Japan for dominance in IT echoed a popular slogan from the *Chosun Ilbo* newspaper's computer literacy promotion in 1995: "*San-eophwa-neun neujeot-jiman jeongbohwa-neun apseo-ja*"[17] ("Slow to industrialize, but let's lead in informatization," my translation). This motto was very familiar to me already; many of my interlocutors—from online gamers to medical professionals—articulated the *Chosun Ilbo* statement in their own ways. It also appears frequently in the academic literature on *jeongbo sahwae*, or, Korea's "information society" (e.g. Stewart & Choi 2003; Lee 2003). As an emblem of informatization, the slogan represents two dominant themes in discourses on Korea's IT history: the importance of IT for a macroeconomic strategy of "catching up" with the rest of the world's advanced technological societies; and the association of information with *acceleration*, both economic and social. These discursive features embed Korean informatization firmly within the compressed modernity narrative as an engine of modernization.

At the center of that narrative is the 1997 Asian financial crisis, known colloquially in Korea as "the IMF crisis" because of the nearly US$60 billion loan that the country received from the International Monetary Fund for economic recovery. The IMF crisis and its aftermath was a key period not only for modern Korean history, but also—and especially—for the development of Korean online gaming culture. My interlocutors frequently referred to it as a

17 "□ □ □ · ˆ □ □ □ □ □ □ · □" Source: http://news.chosun.com/svc/content_view/content_view.html?contid=1995030570106, accessed March 12, 2015.

pivotal moment in their lives and for informatization. In the ex post facto narrative of compressed modernity, the IMF crisis has become the symbolic juncture at which informatization met online gaming and the direction of Korea's political, economic, and sociocultural history changed.

Drawing upon archival data from nearly twenty years of information policies and policy assessments—as well as comprehensive histories of informatization and conversations with my interlocutors—in this chapter I discuss the cultural history of Korea's information society, the construction of the KII, and how online games and gaming became indispensable for informatization. Additionally, I argue that the people, places, and practices that constitute Korean online gaming culture are unavoidably inflected by the temporal aesthetics of Korea's information society chronotope and their attendant ethical prescriptions for engaging with IT. The KII is one of the many conditions of possibility for Korean online gaming culture; whereas it is the literal infrastructure of Korean informatization, the brief history of that process in this chapter is the contextual infrastructure for the aspects of online gaming culture covered in the rest of the dissertation.

Modern Korean Political and Economic History: A Primer

Korean informatization and the construction of the KII developed out of Korea's political and economic history in the latter half of the twentieth century. This history has been characterized as a "compressed modernity," a theoretical framework that emphasizes spacetime compression as both a material and phenomenological consequence of modernization, as well as its guiding logic and aesthetic. Korean modernity is synonymous with the country's advanced

information society, specifically with its high-speed broadband Internet service. Korean information society influences evaluations of online gaming and gamers across all chronotopic scales vis-à-vis the normative expectations for IT use that emerged during informatization. In particular, the image of Korea as "the most wired place on earth" (Rushkoff 2009) and "the bandwidth capital of the world" (Herz 2002) stresses acceleration and connectivity as aesthetic principles not only of IT-related practices and behavior, but also of their attendant socialities. However, Korea's ascendancy to the vanguard of global information societies was anything but inevitable.

Often referred to as the "Miracle on the Han River,"[18] (e.g. Gelézeau 2008; Kim 2009; Lee 2003; Choi 2009) the period of Korean history beginning in the 1960s has been marked by high annual economic growth rates, an increase in GDP per capita, and rapid expansion of industry. South Korea transformed from one of the world's poorest countries following the cessation of hostilities in the Korean civil war to the fourteenth largest economy by GDP purchasing power parity over the span of roughly four decades.[19] This was also the period during which the phrase "*bballi bballi munhwa*" first rose to prominence as a means of describing the rapid economic transformation and as an aesthetic ideal for work and daily life. As business professor Sang M. Lee explains:

> "During the rapid economic development since 1962, Koreans created a new word, '*ppali ppali*,' which means 'quickly and quickly.' This word represents Korean emotion in economic development. That is, Koreans are restless for fast growth. Consequently, Koreans consider usefulness and efficiency as important factors for a new technology or innovation [sic]" (2003:13).

18 The Han River bisects Seoul, Korea's capital city. "Miracle" is also used to describe the informatization period specifically (e.g. Hwang 2007; Aizu 2002). Cumings (1997) has challenged the characterization of rapid economic growth as "miraculous," arguing instead that it was the result of hard work. Furthermore, he notes that the use of "miracle" is symptomatic of anti-Japanese nationalist discourse.

19 Source: https://www.cia.gov/library/publications/the-world-factbook/rankorder/2001rank.html#ks, accessed May 1, 2015. The CIA ranks the entire European Union second by GDP (PPP), so if only national economies are considered then Korea rises to the thirteenth position.

The qualities of quickness and acceleration inflect discourse on the literal and metaphorical importance of informatization: in the first instance because the practical goals of informatization were to create a nationwide high-speed telecommunications infrastructure, and in the second because the project was presented as a means of "accelerating" Korea's economic and social development in an effort to "catch up" with the rest of the world. In other words, "Slow to industrialize, but let's lead in informatization."

The relationship between the Korean state and large conglomerates known as *chaebol* was crucial to the design and execution of informatization policy, and the construction of the KII.[20] This public-private economic collaboration is characteristic of what has alternatively been called "Korean (crony) capitalism" (Chang & Song 2010; Shin 2000; H. J. Cho 2000)[21] or Korea's "developmental state" (Pempel 1999; H. Y. Cho 2000;[22] Amsden 1989). The KII project benefited from the state-*chaebol* partnership, while at the same time the IMF crisis and the route that informatization took in its wake challenged the efficacy of that relationship.

Dictatorship and dirigiste development

The "Miracle on the Han River" narrative begins in 1961. Following the violence of the

20 *Chaebol* (□ □) is a combination of two Sino-Korean characters: □ , meaning "wealth" or "riches," and □ , meaning "clan" or "clique." The name emphasizes how wealth in Korea is concentrated largely among a handful of families who control the largest *chaebol* such as Hyundai, Samsung, and LG. *Chaebol* are also sometimes called *muneobal*—literally "tentacles"—in jest, highlighting the fact that the *chaebol* have diverse business interests.

21 Using Martin and Schumann's (1997) terminology, Hae-Joang Han Cho characterizes Korean capitalism as "turbo capitalism," i.e. "how capitalism has been able to develop without fetters, and with even greater speed after the fall of the Soviet Union … [destroying] a society's basis for survival by rapidly undermining its traditional culture" (2000:51). Her application of this concept is another example of how Korean economic development is cast within the compressed modernity framework that stresses the qualities of quickness and acceleration.

22 Hee-Yeon Cho notes that he actually prefers the term "developmental regime" because it underscores "the systemic and multi-faceted characteristics of the South Korean growth-oriented regime, not the phenomenal aspects of the 'autonomous' state intervention" (2000:408).

Japanese colonial occupation, the devastation of the Korean civil war, Syngman Rhee's corrupt presidency from 1948 to 1960, and the April 19 Movement—a student-led movement that culminated in Rhee's exile—Korea transitioned into the de facto military dictatorship of General Park Chung-hee. Under Park's administration from 1961 until his assassination in 1979 Korea's GDP per capita increased nearly nineteen-fold—from US$92 to US$1,747—and at one point during his tenure the Korean economy grew by an annual rate of over 9% (Kim & Vogel 2011). Operating a macroeconomic policy agenda of successive "Five-Year Plans," Park ran a centralized, authoritarian regime that implicitly followed the example of post-war Japanese economic development with respect to investment in strategic industries. Since Korea's greatest natural resource was its labor supply, the Five-Year Plans primarily focused on developing domestic industries, from textiles, to heavy and chemical industries, and—toward the end of Park's regime—the nascent electronics industry. All of these industries were export-oriented, and Park used preferential, low-interest commercial loans from foreign banks to prop up the *chaebol*, which had been formed in large part thanks to Park's first Five-Year Plan (Jung 2004).[23]

Looking toward Japan—not only a symbolic rival for Korea, but also East Asia's greatest economic superpower in the late twentieth century—and implicitly following the Japanese development model, Park and his advisors recognized that electronics manufacturing and telecommunications would be the two most important industries to develop if Korea wanted to compete in the global economy. In 1975 Park issued a directive calling for all of the different

23 Dong-Hyeon Jung describes how the 1962 Five-Year Plan enabled the formation of the *chaebol* as follows: "There were already some big business tycoons who had emerged in the fifties. They rose in close collusion with the government and achieved a dominant position in the production and distribution of basic commodities … The government gave special treatment in the distribution of imported raw materials and commodities to a few favored industrialists and business families, enabling them to reap windfall profits at public expense. Similarly, special bank loans, allocation of US dollars at favourable rates of exchange, and capital sums imported in connection with foreign aid programmes, were made available by the government to those entrepreneurs who supported the corrupt government [sic]" (2004:299-300).

sectors of public administration to adopt computer technology as a demand creation instrument. The directive was codified in 1978—a year before Park's assassination—in the "Framework Plan for Computerizing Administrative Process" and the "First Phase Master Plan for Computerization of Public Administration." This legislation and the projects that it spawned created the initial legal and technical frameworks for building Korea's information society.

The Park era represented the origin of Korea's modern dirigiste state, characterized by a lack of democratic freedoms, a close working relationship between government and business, and the state's willingness to take the lead in fostering demand for new technologies. These trends would be sustained in the succeeding phases of Korean informatization. A longitudinal perspective on Korean history would suggest that the state's role in setting national economic policy has become more decentralized after Park. However, the cooperative relationship between the public and private sectors that characterized informatization in the 1990s bore some resemblance to and drew inspiration from the Park era, especially with respect to the cyclical structure of Five-Year Plans, now "rebranded," so to speak, as Master Plans.

1980s: Laying the foundations for the KII

Another military coup brought General Chun Doo-hwan to power in 1980. Chun generally followed the example set by Park when it came to political repression and dirigiste economic policy. However, his administration also made important changes to the telecommunications industry and helped promote the development of technologies that would create the material conditions of possibility for the KII. Under Chun the government began to invest heavily in scientific research and development, stressing its importance for Korea's long-

term economic growth in his policy speeches by making it clear that "emphasis [would] be placed on the promotion of scientific and technological education in support of the development of a highly industrial society and on training in good citizenship" (Chun 1984:43). These statements speak to the holistic vision of the economic and social transitions that the Chun administration proposed, as well as its ethical entailments on performing "good citizenship." In other words, the goal was to equate "Koreanness" with advanced technological capacity, and in so doing promote the image of a Korean modernity.[24]

The shift in policy emphasis was outlined in a new Five-Year Plan in 1981, which set a goal for doubling the size of the electronics sector while focusing efforts on developing the semiconductor, computer, and electronic switching industries. In their comprehensive history of Korea's "digital development," Myung Oh and James F. Larson (2011) point to specific developments in the 1980s that were vital to what they call the Korean "telecommunications revolution," two of which are especially important for building the material and bureaucratic "rails" on which the KII would ride: the development of a time-division exchange (TDX) electronic switching system, and the establishment of the Korea Telecommunications Authority (KTA) and the Telecommunications Policy Office.

In the 1970s Korea suffered from an underdeveloped telecommunications infrastructure that had resulted in an enormous backlog for fixed line installations, with only 2.8 million lines for a population of nearly 36 million. Chun's administration launched a new telecommunications policy in 1980 calling for the construction of a so-called "information welfare society," which would provide universal telephone services to all Koreans regardless of social class or location.

24 There are parallels between the symbolic association of advanced technology and Koreanness and how an Indian advertising agency that Mazzarella observed sought to equate "Indianness" with "world-class" (2003:36).

This vision became the Public Switched Telephone Network (PSTN), which would be Korea's first truly digital telecommunications infrastructure. But building the PSTN would have been impossible without TDX. TDX technology affords the transmission of electronic signals across the "backbone" of a telecommunications infrastructure, i.e. the individual telephone lines that connect to switching stations. Developing the technology necessary for the TDX system and implementing it nationwide was, to that point, the largest infrastructure development project in Korean history. The TDX project was motivated by desires "to save costs, the inability to match supply rates with increasing demand through imports only and the raising [of] indigenous technological capabilities to reduce foreign dependency" (Choung, Hameed & Ji 2012:777). Creating domestic TDX capability was crucial to Korea's entrance into advanced telecommunications as it obviated the need to import such technology, and "because switching technology required sophistication in communications, computers and semiconductors, the project had a profound and synergistic effect on the entire electronics industry in South Korea" (Oh and Larson 2011:30).

The PSTN project was completed in 1987, at which time there were an estimated 10 million fixed telephone lines in Korea. The government heralded this as the beginning of a "one telephone per household" era. The decision to invest in TDX had been a controversial one, with many politicians and business leaders fearing that it would be a waste of time and resources. However, the success of the project proved that Korea was capable of such an extensive and complex undertaking, an example that would help influence the decision to build the KII a decade later. Another key lesson from the PSTN project that would also be applied to the KII was that ambitious early development of telecommunications technologies could help prevent

service supply crises from arising in the first place.

Reforming the telecommunications industry's institutional organization was just as important as the development of TDX, if not more so. The Chun administration began decentralizing control over the telecommunications industry by establishing the KTA in December 1981, a move that would eventually result in the complete privatization of Korea's largest telco—Korea Telecom (KT)—by the early twenty-first century. Although the KTA still had a monopoly over the Korean telecommunications industry and remained a state-owned enterprise, its decision-making apparatus was nominally separated from the government. In 1982 the Telecommunications Policy Office was created within the Ministry of Communications, another indication of the increased political attention being given to telecommunications. This Office had the authority to grant licenses for new telecommunications providers—thereby creating a legal framework for opening up the industry to competition—set pricing guidelines for provision of services, and propose new laws to regulate the evolving telecommunications industry in response to global trends. Alongside these new agencies were two laws passed in 1983—the "Basic Act on Telecommunications" and the "Telecommunications Business Act"—which set minimum requirements for firms wanting to provide telecommunications services in Korea.

1987 was a landmark year not only for Korean society, but also for Korean telecommunications. Large-scale protests against decades of authoritarian government ultimately culminated in the election of Roh Tae-woo, who promised democratic reforms in his "June 29 Declaration."[25] Through the political and social upheaval, plans continued for the promotion and

25 A significant factor in the pro-democracy movement was Seoul's hosting of the 1988 Summer Olympics, which was in many ways Korea's symbolic "coming out" party on the global stage. The Olympics also provided an opportunity for growth of Korean electronics and telecommunications as the scale of the event necessitated infrastructural upgrades (Oh & Larson 2011:42; Mansourov 2005:24-25). Roh's election was in actuality a

development of Korean IT, which along with democratization had become symbolic of Korea's modernization process. That year the "Framework Plan for the National Basic Information System Network" (NBIS)—also known as the "National Backbone Network Project"—was implemented, creating networked information databases for the real estate, automobile, and residential business sectors. The Framework Plan has also been credited with promoting the expansion of public information infrastructures and the early development of electronic government—or "e-government"—which would be a crucial driver of informatization in the 1990s. Furthermore, 1987 saw the establishment of the National Computerization Agency (NCA)[26] to be in charge of Korean IT policy and technical support, as well as the "Software Development Promotion Act" which was intended to encourage software startups and training of software engineers. The NCA would be responsible for the KII project in the following decades, while the promotion of software development foreshadowed an important government-led stimulus strategy at the end of the 1990s.

1990s: The informatization era begins

Whereas Korea's IT policy in the 1980s was focused on computerization, the 1990s ushered in the age of informatization. Informatization was at the forefront of national technology policies around the world in the 1990s as talk of "information superhighways"[27] was becoming

compromise as the two most prominent political figures who had opposed Park's and Chun's dictatorial rule—Kim Young-sam and Kim Dae-jung—split the vote, enabling Roh (another former general) to be elected (Chang 1999:36). Both Kim Young-sam and Kim Dae-jung would later be elected President, with the former holding the distinction of being Korea's "first democratically-elected President."

26 The NCA's stated mission was to "support the *fast* implementation of the National Basic Information Systems (NBIS) which are expected to induce an advanced information society" (1994:ii, my emphasis). The NCA changed its name to the "National Information Society Agency" (NIA) in 2007, an indication that informatization was being framed as a process involving more than just computers.

27 Perhaps the most prominent example was then-U.S. Senator Al Gore's "High Performance Computing and Communication Act" of 1991, which called for the construction of a National Information Infrastructure in the United States. Incidentally, the origin of the phrase "*electronic* superhighway" is often credited to the Korean

commonplace in political speeches and in the news media. Building an information society was perceived in Korea as being essential to competition with the most advanced global economies, and would only become more important approaching the twenty-first century. At the outset of the 1990s Korea was lagging behind Europe, North America, and other East Asian countries in terms of computer use and the development of telecommunications, thereby inspiring so-called "catch up" strategies for informatization that were similar to the Park and Chun-era Five-Year Plans.

Constructing a national information infrastructure was given top priority by the Kim Young-sam administration beginning in 1993. The informatization era began in earnest with the launch of the "Integrated Administrative Services Network," made possible by the completion of the Computerization Master Plans of the 1980s and the continued development of the NBIS network. In August of 1993 there was "a strong statement by the government to construct a *super-speed* information network system" (NCA 1994:11, my emphasis), the first formal announcement of plans to build a Korean information superhighway. These political initiatives were accompanied by a significant decrease in the price of PCs, leading to an increase in the installation of personal computers. The total size of the domestic PC market grew by 10.2% between 1992 and 1993, totaling 733,000 units and KRW 784 billion[28] (about US$978 million at the time). This brought the total estimated number of PCs in Korea to 3.05 million, a rate of about one PC per fifteen people (NCA 1994:49). However, most of those PCs were purchased by businesses as prices remained too high for households.

In 1994 the Ministry of Communications was reorganized and renamed the Ministry of

video artist Paik Nam-june, who used it in reference to advancement in telecommunications in a presentation to the Rockefeller Foundation in 1974. At the time, Paik had been living in the United States for a decade.

28 KRW is the abbreviation for South Korea *won*, the country's official currency.

Information and Communication (MIC), further underscoring the government's promotion of informatization. The MIC's policymaking powers were extended to include industrial policies that previously had been the domain of the Ministry of Trade, Industry, and Energy and the Ministry of Science and Technology, and to oversee everything related to Korea's growing IT sector, making it one of the most powerful parts of the Korean cabinet. Kim Young-sam designated the "High Speed Network Development Commission"—a panel of experts operating under the authority of the Prime Minister and twelve cabinet-level ministers—to draft the "High Speed Broadband Network Infrastructure Development Plan." That Plan provided the conceptual foundation for the KII project, and set what was, in retrospect, a rather modest goal of constructing an information superhighway that converged voice and data transmission by 2015. On the industry side in 1994, Korea Telecom (KT)—having changed its name from the KTA in 1991 and undergoing slow privatization—offered the first commercial Internet service in Korea via an Integrated Services for Digital Network (ISDN) network. However, without widespread public demand for Internet services the ISDN was more a symbolic development than a truly practical innovation.

Kim Young-sam also appointed the "Presidential Commission on the 21st Century," a think tank charged with developing aggressive, future-oriented economic and technology policies. In 1995 the Commission made several key suggestions and predictions regarding informatization:

> "Korea will become technologically advanced only through expansion of [research and development]. Imitation will not work in the future. Basic sciences will require heavy investment, because technology is the fruit of scientific discoveries … Korea's key industries, such as machinery, automobiles and electronics, will jump onto a higher plane by the beginning of the 21st century. By 2010, high technology will begin to usher in new industries, with advancement in the information and communications sector most pronounced. Technological innovation leading to small-scale, diverse production will further

> consolidate the position of the information industry. Regional centers will then be connected to the ISDN to complete a nationwide information system. For all this to function efficiently Korean computer usage must be widespread [sic]" (1995:20-21).

As this statement makes clear, the government's vision for informatization was holistic; this was not to be merely an isolated development to improve Korea's economic growth rate, but rather "a process fundamentally affecting [every] aspect of society" (NCA 1996:6).

The KII: Actualizing Informatization

The "Basic Plan for the Korea Information Infrastructure" was proposed in late 1994 and adopted in 1995 with the passage of the "Framework Act on Informatization Promotion." The Act laid out the government's strategy for implementing the Basic Plan to create a high-speed IT network infrastructure comparable to those planned by other nations, such as the United States and Japan. The goals of the Basic Plan—to complete the KII by 2015—were in line with the High Speed Network Development Commission's proposals[29] and reflected what Korea understood its IT capabilities to be vis-á-vis other countries at that time.

The Framework Act included two provisions that would be crucial for the subsequent evolution of the KII and Korean information policy: the creation of the "Informatization Promotion Committee" and the "Informatization Promotion Fund." The former was placed under the control of the Prime Minister and included the Minister of Finance Economy, who served as the vice-chairman, and twenty-three additional members drawn from all three branches of government. The role of the Committee was to evaluate, adjust, and implement the Framework

29 From the NCA's 1996 Informatization White Paper: "The goal of Korea's information infrastructure is the construction of a high-speed and high-capacity 'information superhighway' by the year 2015 so that all information and communication services by voice, data, video and text will be provided easily, reliably, securely, and costeffectively … The construction of the national information superhighway will make telecom services universally available to all, bringing about a society oriented to human values with a higher quality of life [sic]" (1996:13).

Act and to work with regional and local governments. The establishment of the Informatization Promotion Fund was in some ways even more important as it set guidelines for how the KII would be financed. The Fund included: capital investments from government and telco operators; a reserve fund created under a previous telecommunications law; the proceeds generated from the operation of the Fund itself; and money borrowed from other sources if necessary. With the Framework Act, the Committee, and the Fund in place, Korea had established the necessary legal, institutional, and financial mechanisms for successfully constructing the KII, which ultimately would surpass the TDX network as the largest infrastructure project in Korean history.

In order for the KII project to succeed, there needed to be cooperation among three key groups: policymakers, IT businesses, and the public at large. While policymakers had shown willingness to pursue aggressive interventions for decades, and the more or less cooperative relationship between government and business created an environment with adequate supply for the domestic market and for export, the public needed not only the desire for high-speed Internet connections but also literacy with the Internet and computers. Policies were designed to address the public, making access to the Internet as affordable, easy, and universal as possible,[30] and promoting IT education, especially among disadvantaged groups. Providing affordable access in particular was controversial. Initially there was little agreement between the government and the telcos with regard to the profitability—and, by extension, the practicality—of expanding the KII to the scale that the government ultimately desired, i.e. approaching universal coverage. As Seok Ho-ik—former director of IT development at the MIC—recalled: "At the time when [the]

30 In this respect the macro-vision for the KII reflected the earlier aspirations that the government had had for the PSTN.

Information Highway Development Project was launched, many people were asking 'So we need to build a highway? Wouldn't it be useless if there are no vehicles on the road?' … However, if the plan was not made in the large scale at the time, how would we have handled the explosive growth of the high speed internet service demand from 1998 to 2000? [sic]" (quoted in Lee et al. 2007:51).

The KII project was designed to provide *broadband* Internet services. Broadband is an abbreviation of "broad bandwidth," which describes the speed at which packets of digitized information—measured in bits—can be transmitted via a channel. Broadband Internet differs from earlier Internet services in three fundamental ways: in terms of speed, availability, and power (Oh & Larson 2011:66-67). Dial-up Internet—the primary mode of access before broadband—maxed out at speeds of around sixty kbps (kilobits per second). By contrast, the OECD currently defines broadband as a minimum bit-rate of 256 kbps.[31] However, "to much of the world today, including virtually all internet users in Korea, such slow speeds are a thing of the past [sic]" (Oh & Larson 2011:67).[32] In terms of availability, a broadband connection can be understood as being "always on," as opposed to dial-up connections which must be reinitiated with every new login. Finally, broadband affords greater computing power than does dial-up because of the simple fact that it affords simultaneous access to networks by a comparatively greater number of users and applications. In other words, "more than just a technological

31 Korea's Internet speeds are nearly 100 times the OECD's minimum rate. According to Akamai Technologies' "State of the Internet Report" for the third quarter of 2014, Korea registered the highest average Internet connection speed in the world at 25.3 Mbps. Korea's peak connection speed—which is more indicative of Internet users' experiences in Seoul—was 74.2 Mbps, which ranked third behind Hong Kong (84.6 Mbps) and Singapore (83 Mbps) (2014:22).

32 A Korean man in his early twenties told me about being surprised by how slow his Internet connection was when he visited family in Connecticut for several months in 2010. He even joked about how it made him angry and frustrated to experience such slow speeds—likely in the fifteen to twenty-five Mbps (megabits per second) range—since he was accustomed to a connection approaching or even exceeding fifty Mbps in Seoul.

network, broadband is an ecosystem comprising various elements that depend on high-speed connectivity to interact in different ways" (Shin & Kweon 2011:375). The language of "ecosystems" entails thinking about broadband not just as a tool for telecommunications, but also as a platform that enables applications and services to run on devices connected to the network, thereby demonstrating the realized potential of broadband.

At the material level, building the KII consisted of replacing copper-wire telephone lines to buildings with fiberoptic cables, as well as upgrading low-speed asynchronous transfer mode (ATM) switches to higher speeds. In the project's first year, 909 kilometers of fiberoptic cables and 3,602 kilometers of 2.5 gigabits per second (Gbps)-capacity optical cables[33] were laid, in addition to an expansion of the existing telecom networks via 30,000 new ISDN lines and 404 high-speed switches. While the NCA was put in charge of developing the plan for building the KII, the actual construction of the network infrastructure was contracted to KT and DACOM, a private telco that had been created in 1982 at the behest of and with an investment outlay from the government before eventually being purchased by the LG group, one of Korea's largest *chaebol*. Neither KT nor DACOM were in total agreement with the government's objectives for the KII at the start. As DACOM's former executive vice-president Cho Chae-yeon recounted later:

> "There were criticisms within the company with regards to this project. The worry was that although there was clear revenue, [DACOM's] debt to government will only accumulate in the end and there were also concerns about unclear demand and business expansion after the completion of network development. However, after the year 2000, the high speed national network project turned out to be the most profitable business for DACOM" (quoted in Lee et al. 2007:46).

33 There is a significant difference, however, between the total network's speed capacity and an individual user's connection speed. The former is much greater than the latter because it is a measurement of the total available capacity for every user using that channel at any given moment. Connection speed measures the information download and upload speeds for any individual device that is connected to the network.

The government and the telcos also disagreed as to who exactly owned the KII. The MIC and the NCA held the view that since the government had made the initial capital investment in laying the fiberoptic network, then public administration should be allowed use of the network at 10.2% of the standard rate. The telcos protested that this would mean a decrease in their profit margin—reducing service revenues by just over 80%—since at the time the government was by far the largest client using the KII. To address this problem, the MIC and NCA relinquished their claims to ownership over the infrastructure and the telcos agreed to charge government agencies only 60% of the standard rate: "In other words, the financial support provided by the government to the telecommunication companies for building [the] national network was off-set with the discount provided by the telcos to government and public institutions for the usage of the network" (Lee et al. 2007:46). The so-called "Off-Set Pricing Policy" was implemented in 1996, temporarily solving the problem of how to make the KII economically feasible for both the government and the telcos.

Construction of the KII progressed in 1996 as network nodes and access points across the country were connected via 155 and 622 Mbps networks,[34] and an additional 5,500 kilometers of fiberoptic cables were wired into offices and homes (NCA 1996:16-17). By the end of 1998, eighty cities were networked with a total of 17,884 kilometers of fiberoptic cables, 289 optical transmitters, and seven ATM switching systems, which marked the completion of the backbone network. That same year the NCA announced a revised completion date for the entire KII by 2010 (NCA 1998:12-13). However, by that point Korea's long-term goal of "leading in informatization" was in danger as the East Asian financial crisis forced a reevaluation of policy

34 Gwangju, Jeonju, Jeju, Changwon, Busan, Daegu, Daejeon, Seoul, Suwon, Incheon, Chuncheon, and Cheongju were the 622 Mbps nodes, with 10 additional 155 Mbps access points being established in 1995 and 58 more in 1996; the Seoul and Cheongju nodes were also connected via a 2.5 Gbps network.

and public investment.

Crisis and Coincidence: Online Games are Serious Business

IT policy evaluations and white papers often represent Korean informatization as a smooth, comprehensive process: government agencies proposed Master Plans and drafted policies, the telecommunications industry followed these policy directives (or was otherwise coerced into doing so), and the public adopted new technologies and integrated them into their daily lives. A similar sort of glossing appears representations of compressed modernity that do not adequately account for social inequalities or labor strife in their historiographies. In reality, Korea's modernization—and informatization in particular—have been turbulent processes laden with coincidences, challenges, and adjustments. The IMF crisis was one such moment that challenged the "Miracle on the Han River" narrative of sustained economic growth and "provided the momentum for an epistemological turning moment, which has allowed [Koreans] to recognize the 'unsuccessful' aspects, and approach the South Korean development as a model of crisis and contradiction … [and] as a basis for, simultaneously, rapid successful growth and 'sudden crisis'" (H. Y. Cho 2000:408). Whereas in retrospect the IMF crisis has become emblematic of Korean resiliency and a key moment in the development of Korea's information society, at the time it called into question all of the received wisdom about dirigiste economic policy and informatization itself. What is more, the IMF crisis inadvertently created an opportunity for online games and gaming to flourish, and so in a sense it is integral to the "origin story" of Korean online computer gaming culture. But despite the salience of the IMF crisis in emic accounts of Korea's online gaming history I want to avoid overdetermining its role in the

pragmatic history of Korean informatization. Rather, I would like to suggest that the IMF crisis as an incident that haunts this history has symbolic value that is equal to or greater than its influence on business or policy decisions.

The collapse of the Thai *baht* in July 1997 led to massive currency and stock market devaluations across Southeast and East Asia and set in motion the events that would lead to the IMF crisis. In November the Korean stock market lost nearly 20% of its overall value, Moody's Investors Service downgraded Korea's credit rating from A1 all the way to B2 by December, and the Korean *won*'s value vis-á-vis the U.S. dollar dropped from 890 in July to nearly 1700 by the end of December. Some of the largest Korean firms—such as Daewoo Motors—failed outright and were sold off either to *chaebol* or to foreign companies. Ultimately the IMF and other international financial institutions granted Korea a $58.4 billion loan—the largest sum ever granted to a single country—that was attached to a structural adjustment program[35] ordering reductions in state expenses and particularly in public investment in failing banks and *chaebol*.[36]

One of the most visible effects of the IMF crisis was the laying off of thousands of Korean workers.[37] These displaced workers turned to private entrepreneurial projects, investing

35 Inkyu Kang argues that the conditions that the IMF placed on the loan with respect to privatizing utilities accelerated the privatization of KT (2014:56-57).

36 Korea successfully paid back the entirety of this loan three years ahead of schedule, in August 2001. The event is commemorated in the Bank of Korea Museum with a letter from the IMF chief to Kim Dae-jung and the Bank of Korea president congratulating them on the early repayment, which remains unprecedented to this day. In this way, even Korea's economic recovery from the crisis was accelerated, or "compressed."

37 A humorous anecdote related by Kwang-Yeong Shin: "In January 1998, right after the beginning of the financial crisis, one newspaper in Korea succinctly described the dreadful picture of the IMF era; 'On everybody's lips is the word, layoff. The International Monetary Fund (IMF) is spelled out as "I M Fired"'. For those who were dismissed, IMF really meant 'I M Fired.' For those who survived from mass layoff, IMF referred to 'I M Fine.' However, for rich people, IMF meant 'I M Flourishing.'" (2000:427). The scene in Seoul and other large Korean cities was simultaneously comedic and tragic, as this Korean-American blogger explains: "For a time, there was a period of true anomie. Hiking trails around Seoul were suddenly filled with middle-aged hikers in a suit and dress shoes with a briefcase. Because these men were laid off but could not quite let their families know, they dressed up in the morning and decided to take a hike instead. Parks similarly filled up with able-bodied men, sitting around with nothing to do. Suicide rate spiked up, as some people simply could not take it any more. In 1995, 11.8 people out of 100,000 died from suicide. In 1998, the same number increased to 16.1" (Source: http://askakorean.blogspot.com/2011/08/imf-bailout-of-korea-during-east-asian_30.html, accessed March 20,

what savings they had into small business start-ups. Among these projects were PC *bang,* small businesses that were essentially rooms filled with computers, providing customers with a computer terminal and Internet access for a minimal hourly fee. As Florence Chee and Dal Yong Jin explain:

> "Employees laid off during the economic crisis became the main participants in growing Korea's Internet industry. Many middle managers, who had worked for large computer and information companies, … also looked toward smaller private businesses … A major entrepreneurial activity since [1997] has been starting up a PC bang, which highlights the trend toward small-scale IT enterprise to offset economic fallout [sic]" (2008:47).

Izumi Aizu has elsewhere called the emergence of the PC *bang* an "'accident' of economic crisis and over-supply" (2002:12), emphasizing the coincidental and contingent character of this development.

When they started appearing in 1997, the first PC *bang* were little more than computer showrooms in electronics stores.[38] Some of the computers in these stores were connected to the KII in order to demonstrate broadband Internet services. At a time when PCs and household broadband connections were still prohibitively expensive for most Koreans, these locations served as convenient portals to the Internet. Early PC *bang* were therefore sites where many Koreans became exposed to the quickness and convenience of broadband for the first time, places that "[enhanced] the perceived ease of use and perceived usefulness of the Internet" (Oh et al. 2003:275). In this way, the "PC *bang*, as the broadband showroom, became the important driving force behind the transition to high-speed Internet, as it became part of the information economy" (Jin 2005:513). The NCA acknowledged the importance of PC *bang* not only in

2015).

38 One of my friends—a Korean man who was in middle school during the IMF crisis and PC *bang* boom—remembered waiting with friends for hours in line at one of these stores just to have a chance to play his favorite online game for at most one hour if he was lucky. Since PCs and game software were relatively expensive at the time, these stores were akin to video arcades as sites that specialized in a specific leisure activity.

promoting the use of the KII, but also in the creation of a distinctly Korean IT culture, stating that "the phenomenal boom in [the] Korean version of Internet café, called Internet PC-Bang, closely follows the world-record rise in Korea Internet users … Internet PC-Bangs, unique to Korea, are now drawing [the] attention of global Internet communities [sic]" (2000:11).

Another significant effect of the IMF crisis was longtime opposition figure Kim Dae-jung's election over the incumbent party's Lee Hoi-chang at the end of 1997. The election was held on December 19, just as the most severe effects of the crisis were being felt. The Kim Young-sam administration had repeatedly denied in public that the economy was in trouble ahead of the rapid devaluation of the *won* in late 1997.[39] A shortage in foreign currency—namely U.S. Dollars—had meant that many Korean firms were unable to repay the loans that they had borrowed from foreign banks to underwrite global expansion projects, which Kim Young-sam's *segyehwa* policy had encouraged as a means to accelerate development.[40] Kim Dae-jung was able to mobilize the Korean public's dissatisfaction with the perceived over-expansion of the *chaebol* and government mismanagement in the late stages of his campaign and ultimately play upon these sentiments to achieve victory.

Faced with a potentially devastating recession, Kim Dae-jung's administration seized upon venture capital as a keystone in its economic recovery strategy (see Chung 2003:29-32), particularly encouraging investment in IT start ups and software companies. In February 1998,

39 Although the crisis had begun in July with the devaluation of the Thai *baht*, and signs of trouble were evident in Korea before then, it was not until November of 1997 that public discussions began taking place about the need for an IMF loan, which then became reality in December (H. J. Cho 2000).

40 Critiques of rampant institutional corruption among the *chaebol*, rising inflation, and increases in foreign debt and trade imbalances existed long before 1997 (e.g. Kim 1994 [1991]). *Chaebol* in particular had come under increased public criticism in the 1990s as Korean society moved away from the Park and Chun eras. The Kim Young-sam administration had begun the process of loosening the ties between government and business in 1997, but these reforms alone could not stave off the crisis itself. As Nancy Abelmann writes, "the IMF crisis, christened on the eve of Kim Dae Jung's presidency, would signal a final blow to public tolerance for state-corporate collusion" (2003:7).

the administration announced that "the public sector [would] take the lead by promoting greater use of information systems and information technology, thereby simplifying work processes and trimming surplus labor, and thus *accelerating* the restructuring process" (NCA 1998:5, my emphasis). One of the reasons that Korea had been hit especially hard by the IMF crisis was that the *chaebol* concentrated industry in too few hands, leaving these companies more vulnerable to financial shocks. Instead, the government promoted small, specialized firms—especially in the growing IT sector—that would be more flexible in any potential future crises.[41]

Between 1997 and 2002, Korea's IT production as a share of total GDP nearly doubled, from 16.7% to almost 32%, a growth in raw value from KRW 75.5 trillion (about US$60.4 billion) to KRW 189.1 trillion (about US$151.5 billion).[42] Although the majority of Korea's IT production was then—and continues to be[43]—equipment, the software industry made significant contributions as well. The "Software Industry Promotion Act" passed in January 2000 made provisions for the infrastructure and professional training necessary to help improve Korea's software industry. It also gave tax breaks to software companies, made loans available via the "Korea Software Financial Cooperative," and created the Korea Software Industry Association as a regulatory agency comprised of business operators. Although the software industry

41 IT has continued to be a resilient sector of the Korean economy, especially following the 2008 global financial crisis. Between 2007 and 2009 when the Korean GDP's growth rate declined, the IT sector accounted for its highest rate of contribution to GDP growth since the IMF crisis (26.1% in 2008, 42.9% in 2009). This ratio has since fallen to 16.7% in 2013 as Korea's economy improved (MSICTFP/NIA 2014:4).

42 The share of IT production as a percentage of total GDP remained hovering around 30% until 2008, when it dropped to around 22.4%, totaling KRW 288.2 trillion (about US$236 billion). Though the IT industry has grown steadily in volume, its share of total GDP had dropped to 9.9% by 2013. I estimated the value of the Korean *won* in U.S. dollars from 1997 to 2002—as documented by the U.S. Federal Reserve—http://www.federalreserve.gov/releases/h10/hist/dat00_ko.htm, accessed March 20, 2015—by averaging the highest and lowest values for each year. Sources: 2003 NCA Informatization White Paper; 2005 NCA Informatization White Paper; 2010 NIA Informatization White Paper; 2013 NIA National Informatization White Paper.

43 As of 2012 equipment accounted for over 90% of Korea's IT production (NIA 2013:107), and had remained consistently around that figure for a decade (NCA 2002:55).

developed a variety of products and services, games—particularly online games—quickly became the most successful Korean software exports. Since 1998 the government has encouraged Korean game developers to demonstrate their products at international game expos, hoping to promote "Korea" itself as a brand in global computer gaming.

The Kim Dae-jung administration identified games as a "strategic industry" (Kang 2014:64),[44] and game development was consistently the fastest-growing segment of the Korean software industry in the years following the IMF crisis. Government support for game developers actually predates the IMF crisis and Kim Dae-jung as the MIC had allocated over US$2 billion for software development—US$3 million of which was specifically designated as seed money for Korean game developers (Stewart 2004:9)—in 1995, at the same time that the Framework Act for the KII was being implemented. Digital contents development service—the category into which game software falls—has accounted for between 4% and 6% of total software production since 2001; games alone account for nearly 2%. Since 1999 games have accounted for no less than 25% of all digital contents, reaching a high of 57.8% in 2004, and the number of Korean game companies increased from 694 in 1999 to nearly 3000 by 2005. The total value of game software production has risen from KRW 62.1 billion (about US$52.36 million) in 1999 to KRW 389 billion (about US$318.3 million) in 2008. However, where the Korean game industry has had perhaps its most significant impact is in exports, the value of which rose from US$180.2 million (21.6% of total software exports) in 2004 to US$767.97 million (46.3% of all software exports) in 2007. Games surpassed film and television exports—which had long been the staples of the so-called Korean wave (*hallyu*) that dominated East Asian

44 To wit, from the NCA's 1999 Informatization White Paper: "The government will provide special supports to venture businesses initiated by universities and research centers in the fields of IT industries, such as *game*, animation, video and disc production" (1999:10, my emphasis).

media in the late 1990s and early 2000s—in 2005, and by 2009 they accounted for over 50% of all Korean cultural exports. Primarily due to the popularity of Korean games in China and elsewhere in Asia, Korean online games accounted for 33% of the global online game market as of 2004 (NCA 2004:24), and had captured the largest individual share of this market by 2007 (NIPA 2009:8). While other sectors of the software industry have shown slowing—and even negative—growth rates, digital contents development service has shown steady annual growth rates "thanks to the expansion of the educational contents market and robust performance of the game market led by online games" (Mansourov 2005:43). An additional effect of investment in the game industry was that "many unemployed were given jobs because much manpower was needed to digitize the large amount of data needed for multi-media products" (NCA 1999:28). The government once again demonstrated its support for game developers and Korean online gaming culture by passing the "Game Industry Promotion Act" in April 2006, which was designed "to contribute to the development of the national economy and the improvement of the quality of the cultural life of the people through the promotion of the game industry and the establishment of a healthy game culture" (Game Industry Promotion Act 2006).[45] And even more recently, "In December of 2008, the Korean government announced that it would invest $242.2 million in the game industry through 2012 in an effort to raise annual exports to about $3.5 billion" (Oh & Larson 2011:146).

It is no exaggeration to say that online games were crucial to Korea's economic recovery from the IMF crisis. Korean online gaming culture would not have been possible without the

45 The Act defines games specifically as "video products" and further states that individuals "may play a game by making use of data processing technology, such as computer programs, or similar, or a mechanical device for making good use of leisure time, raising the effect of learning and physical exercise incidental thereto" (Act No. 7941, 2006). Note the connections that are drawn between games, education, and health, a nexus that is important to understanding the management strategies for so-called online game "addiction."

availability of high-speed Internet connections through the KII. Moreover, the popularization of PC *bang* and online games—particularly *StarCraft*, which was released in 1998 at the height of the IMF crisis and PC *bang* boom—helped to create public demand for broadband subscriptions:

> "Starcraft was introduced to the online game market in 1998, boosting demand for high speed broadband as opposed to slower dial-up connections to the internet. There was also a reciprocal influence in that the introduction of low, flat-rate ISP pricing for broadband internet contributed greatly to the popularity of Starcraft and other online games. Multiplayer online games require speed in order to give a realistic sensation of simultaneous interaction online with many other players [sic]" (Oh & Larson 2011:145)

A study conducted by the United Nations' International Telecommunication Union (ITU) in 2003 found that "the impetus for growth [of broadband subscriptions in Korea] was greater speed in handling online games" (Lau et al. 2005:356).[46] The complementary relationship between information infrastructure and online gaming culture persists to this day; in a 2012 survey of Korean Internet users, 87.5% said that they use the Internet for playing online games, the second most frequently reported activity behind information searches (92.3%) (NIA 2013:91).[47] In the late 1990s and early 2000s, online games appeared to the great saviors of informatization, and by extension of Korean modernity.

46 Jin makes a similar argument, writing that "broadband has stimulated an increase in the demand for entertainment and network games … Without high-speed Internet, the boom in entertainment-related content and online games could not be plausible" (2005:513).

47 Games have held a position of importance for Korean computer users since the early days of informatization. In a 1997 survey, 31.6% of respondents said that they used PCs for playing games—a percentage that increased to 81.5% for children between six and nine, and 77.2% for elementary school-aged students. Games were the second most frequently reported use category after document preparation (36.3%) (NCA 1998:43, Table 14). Note that the 1997 survey only accepted single responses, while the 2012 survey accepted multiple responses.

Crisis, Compression, and Conditions of Possibility: Institutional and Environmental Factors in post-1997 Informatization

The legal infrastructure for informatization

The IMF crisis generated large scale revisions to Korea's informatization policies. In his first year as President, Kim Dae-jung created the "Informatization Strategy Meeting," a group of IT experts who could complement the already existing Informatization Promotion Committee in generating long-term plans for informatization. Whereas the Committee was operated under the authority of the Prime Minister, the Meeting—which convened on an interval basis—was chaired by the President with participation from the Prime Minister, cabinet-level Ministers, and experts from academia, NGOs, and private businesses. As a result of the first Meeting, the "Korean Council Information Culture Movement" was created in June 1998 to help transition the Korean public into the use of IT, including goals of having a one-to-one PC-to-person ratio reminiscent of the Chun era PSTN. This rethinking of informatization strategy led to the announcement of the second Master Plan of Informatization Promotion—"Cyber Korea 21"—in 1999. Cyber Korea 21 was designed to improve Korea's economic competitiveness in the twenty-first century and "to *accelerate* the overall restructuring of the country through earlier deployment of the informatization to conquer the current economic difficulties" (NCA 1999:8, my emphasis).[48] In this way the shift in policy was pitched explicitly in the language of speed. If the IMF crisis had temporarily "decelerated" Korea's informatization process, then Cyber Korea 21 would "re-accelerate" that process. The Plan's concrete goals included: expanding the KII's

48 The NCA declaration continues: "The first strategy of building the information infrastructure is to strengthen support for creating a *faster* and upgraded network so that anyone can use the information superhighway services at any time anywhere" (1999:9, my emphasis). The statement illustrates the related themes of acceleration, ubiquity, and universality that would persist as guiding principles of Korean informatization in its subsequent phases.

existing backbone network to connect an additional 144 areas of Korea with fiberoptic cable and installing more high speed ATM switching devices; improving Internet and computer literacy, as well as providing training programs and facilities for workers in the new knowledge economy; and subsidizing start up software, IT venture, and digital media industries.

In 1998, just as Korea was experiencing the worst economic effects of the crisis, broadband Internet services via cable and asymmetric digital subscriber line (ADSL) services were introduced as they could now be delivered via the KII backbone, which was completed that year. Prior to the introduction of household broadband, "[the] majority of internet service in residences were accessed through telephony modems and there often were news reports about absurd phone bills in the daily newspapers [sic]" (Lee et al. 2007:50). The first high-speed Internet services were not much more affordable; the average monthly household subscription—estimated to be around US$200—"was attributed to the high initial installation cost, since ADSL modems and the related equipment and systems were not locally manufactured" (Hwang 2007:14). In order to drive subscription prices lower, Kim Dae-jung's administration drafted legislation that promoted private competition in the telecommunications market, which had been dominated by KT's monopoly for decades but had recently been liberalized through legislative reforms during the Kim Young-sam era. The legal definition of broadband was crucial to how the government facilitated this opening up of the market:

> "Broadband internet service was initially classified by the Korean government as a value-added service, and therefore was free of regulation regarding entry and pricing. This encouraged several full service providers to enter the market; setting retail prices at levels low enough to encourage dial-up users to switch to broadband [sic]" (Oh & Larson 2011:88).

Furthermore, the government awarded different kinds of service licenses to different firms so that no single company could gain an absolute advantage over the other. For example, Thrunet—

a business consortium that had been created in 1996 under the auspices of DACOM—was the only company licensed to lease out Korea's cable infrastructure for the provision of broadband services. As a result of this preferential licensing, Thrunet could leverage its monopoly over cable to offer low-cost services that competitors like KT and Hanaro[49] could not.[50] Following a strategy similar to Park and Chun era industrial stimulus strategies, the government granted Hanaro and Thrunet access to low-interest bank loans in order to make the rollout of broadband services more profitable for these smaller companies that did not have the built-in customer base that KT did. And to prevent KT from gaining too great an advantage—given that it was far and away the largest and most profitable Korean telco—the MIC prohibited KT from using profits from its other ventures to subsidize its local broadband services. In this way, competition was designed into the early days of broadband policy and services.[51]

49 A startup that had been created in 1997 after the MIC's announcement that it would license one competitor to KT in the domestic telecommunications market.

50 The leveraging of access to different technological infrastructures led to an interesting confrontation between the MIC and the Ministry of Commerce and Industry (MCI), although it was not widely publicized at the time. As Oh and Larson explain: "Thrunet had been created after it was announced that the government would license one firm to lease out cable infrastructure. Of the 100 or so companies that joined the Thrunet consortium, the largest shareholder was KEPCO (Korea Electric Power Company), the state-owned energy company. When Thrunet commenced [broadband] services it leased additional capacity from KEPCO" (Oh & Larson 2011:80). However, "Around 1980, KEPCO installed fiber throughout its network, gambling that once it had the infrastructure, the government would be forced to allow KEPCO to use it more productively. This was interesting, given that KEPCO was fully government-owned and under the jurisdiction of the [MCI]. In the meantime, KT had created its own fiber networks with government support, partly financial. A dispute ensued when both KEPCO and KT applied for a license to lease fiber to telecom carriers. From a capacity standpoint … KT's infrastructure was sufficient, while KEPCO's was redundant. However, both KT and KEPCO were fully government owned at the time, and although [MIC] was pitted against MCI, they could not engage in a public battle because that would have revealed that MCI had allowed KEPCO to take matters into its own hands with taxpayers' money" (Kushida & Oh 2007:494, footnote 41).

51 In the long term, neither Hanaro nor Thrunet could compete with KT, especially after it became fully privatized in 2002. Thrunet attempted to merge with Hanaro in 2004, but was eventually purchased by its competitor in 2005. SK Telecom—a division of the SK Group, one of the largest Korean *chaebol*—in turn purchased Hanaro in 2007 ahead of deregulation of the Korean telecommunications industry the following year that allowed telcos to offer bundled services (i.e. telephone, cable TV, and Internet) for the first time. Presently, KT, SK, and LG—which eventually purchased DACOM and Powercomm, another telco startup—are the largest mobile and broadband providers in Korea.

Informatization promotion strategies

Although the legal frameworks described above were put in place in the hopes that competition would keep subscription rates low, public demand did not meet expectations and unreliable service led to many consumer complaints, just as the telcos had feared (Lee et al. 2007).[52] Thrunet became the first Korean telco to offer household ADSL subscriptions in 1998, followed by Hanaro and KT, both of which entered the broadband services provision market in 1999 (although KT would not launch its full-scale ADSL service until 2000). In order to help boost subscription rates, Cyber Korea 21 mandated strict price limits, lowering the cost of a household connection to around KRW 50,000 per month (about US$43 at that time) (NCA 1999:24). The government also implemented a "willing-to-pay" price specifically for low-income households. KT initially refused to implement the willing-to-pay provision; as Seo Sam-yeong—the NCA president in 1999—remembered:

> "KT was very pessimistic even during the initial period of launching ADSL. I believe it was because KT had its own opinion and visions for the internet [sic] service business … No matter how good the government feels an idea is and make it into a policy, if the operators feel that it lacks profitability, they don't have to participate in the business" (quoted in Lee et al. 2007:50).

KT was also displeased that the government had made its complete privatization contingent upon its implementation of the "Declaration Pertaining to Korea Telecom's Guarantee in Providing Public Service," mandating that KT expand construction of the KII so that broadband services would be provided to *all* Koreans, an obligation that would expire in 2005. Although KT feared that this, too, would cut into its profit margins, the company completed the construction of high-speed network infrastructure in all small villages (defined as a community with at least fifty

52 Surveys conducted in 2000 found that the majority of complaints (52.7%) about Internet service were due to slow connection speeds. However, this number had decreased by 10.5% from 1999 and the NCA noted that "difficulty of using the Internet due to environmental factors [was] showing a decreased trend" (2001:41).

households) by the end 2002, and expanded the network to all rural districts between 2004 to 2005. This decision may not have made sense for KT in the short term for ensuring a return on its investment in the KII construction project, but it was crucial to the government's goal of providing universal high-speed Internet services and avoiding the so-called "digital divide," i.e. a situation where only the urban, middle-class population enjoyed reliable access. Fears of a digital divide persist in Korea to this day and numerous policies have been designed to "close the gap," but the situation would have been undoubtedly worse had the government not mandated that KT fulfill this obligation.[53]

In 1999, the government launched a number of demand-creation initiatives, including the "PC Distribution Project for Every Household" and the "Internet PC Project." Under the terms of the latter project a "Computer Savings Fund"—operated by the Postal Service—was created to provide loans to consumers who wished to purchase low cost PCs for their homes. An estimated 40% of low-income, rural households purchased their home computers using this service (Hwang 2007). Another initiative later that year—the "Cyber Building Certificate" project—encouraged real estate developers to upgrade their properties' wiring. The idea was that commercial and residential buildings outfitted with the necessary infrastructure for broadband Internet would be desirable for new businesses and tenants, encouraging other developers to upgrade their own buildings' specifications in order to compete. Most importantly, real estate agents could charge more to rent apartments in buildings certified by the program.

The Cyber Building Certificate initiative was especially effective in Korea given its population density—another constitutive feature of the country's "compressed" qualities. Korea

53 As of 2014, Korea had the highest broadband adoption rate in the world at 96%, and also the highest "high" broadband—defined as connections greater than 10 Mbps—adoption rate at 81% (Akamai 2014:23).

is a mostly mountainous country, and over 60% of the land is undeveloped. Since Korea is slightly larger than the state of Indiana and yet has a population of around 50 million, the lack of developed land necessitates that the vast majority (83%) live in cities. An estimated 40% of all Koreans live in high-rise apartment buildings in complexes with hundreds of other households. Crucially, "the telephone facilities inside these complexes are not owned or operated by [KT] … but by the real estate developers or the communities themselves" (Aizu 2002:15). Therefore, if Hanaro or Thrunet wanted to offer their broadband services to a particular building, then they needed only to contract with the building's owner rather than trying to convert every tenant away from KT. This leveled the playing field between the smaller Internet service providers (ISPs) and the former state monopoly. Buildings could also be rewired more easily in Korea than elsewhere because of the proximity of most Korean households to individual telecommunications exchanges: "The average distance of a customer from a telephone exchange is 2.2 km, with 95% of customers located within 4 km of the target range" (Lau et al. 2005:351), the most effective range for ADSL (Jin 2005).

Complementing the legal, economic, and environmental initiatives in this second phase of informatization were computer and Internet literacy projects. The "Public Education Project" mandated that every Korean public school be networked and that students receive instruction in the use of computers and the Internet. By the end of 2000, every elementary, middle, and high school had Internet service free of charge. Furthermore, university entrance examinations were changed so as to include an evaluation of the prospective applicant's computer and Internet literacy, reinforcing the necessity of becoming knowledgeable about IT. Attempts had been made during the Kim Young-sam era to educate the public at large by financing "community access

centers" (CACs)—public spaces where anyone could come to access the Internet for free—in neighborhoods all over the country. The IMF crisis temporarily put construction of these centers on hold, and "in 2000 only 45 Local information centers, 25 Internet plazas (in the local post offices) and 16 public computer education centers existed throughout the country, most of which were under funded and poorly supported" (Stewart & Choi 2003:63). However, by that time PC *bang* had supplanted CACs as more comfortable, better managed alternatives, and so the government made interventions in schools the focus of its educational outreach.[54]

The most ambitious educational initiative during this phase was the "Ten Million People Internet Education" project, which the Kim Dae-jung administration launched in July 2000. The project specifically targeted "disadvantaged" populations—defined as "housewives, elderly people, the disabled, the unemployed, farmers and fisherman, and soldiers" (Park et al. 2003:173)—and provided these groups with Internet education sponsored by the government and conducted at CACs for discounted fees, and free for low-income citizens. The public response to the government's training program was so overwhelming that it was later expanded. Ultimately 13.8 million Koreans had participated in some sort of informatization education training by the end of 2002. Besides being an engine of demand creation, the project also "gave the unemployed meaningful IT training that could lead to employment" (Forge & Bohlin 2008:299). In other words, the Ten Million People project was designed not only to educate information consumers, but also the information workers in the new, IT-centric Korean economy.

As a result of these initiatives and the ongoing expansion of the KII, Korea boasted the

54 Plans to restart the CAC project were made in February 2002 when the Informatization Strategy Meeting proposed building at least one "public Internet plaza" in every *-eup*, *-myon*, and *-dong* (administrative divisions roughly equivalent to "town," "township," and "neighborhood") in Korea (NCA 2002:2). However, with the improvement of household Internet and the concentration of PC *bang* everywhere from Seoul to smaller suburbs and villages these plazas were made obsolete.

highest rate of household broadband subscriptions in the world by 2001. With this achievement, international organizations like the ITU began to cite Korea as a global leader in IT. In a prepared statement to the seventh Informatization Strategy Meeting in February 2002, Kim Dae-jung offered his own assessment of Korea's status in terms of IT:

> "Based on the result from establishing the world's best information infrastructure such as high-speed Internet during the hard time of economic crisis, Korea has become one of the most advanced and fastest-growing nations in informatization, while it was late in industrialization … We have to reinforce our efforts towards informatization in order to create wealth in the era of knowledge and information and grow solidly … So far we have exerted ourselves to establish the [world's] best informatization infrastructure. Now it is time to focus on raising national competitiveness and quality of life based on the established infrastructure" (NCA 2002:4).

Kim's remarks parroted those of the 1995 *Chosun Ilbo* slogan: "slow to industrialize, but let's lead in informatization." In less than a decade, and in spite of—or perhaps thanks to—the IMF crisis, informatization and Korea's place among the world's most advanced information societies had gone from slogan to reality.

From "Catching Up" to "Already Arrived": Ubiquity and the Ethical Information Society

Korean public policy in the 1980s laid the foundation for informatization, leading to the KII project and popularization of the Internet in the 1990s. Beginning in the early 2000s and continuing to the present day, Korea has been *managing* informatization—dealing with both its positive and negative consequences—and promoting the image of a "mature" information society.[55] The third and fourth Master Plans for Informatization Promotion—2002's "e-Korea Vision 2006" and 2008's "u-KOREA Master Plan—emphasized facilitating convergence and ubiquity[56] rather than establishing infrastructure as the goals for informatization's next phases.

55 One of the five "Goals for Informatization" in the NIA's 2008 White Paper was "'Cutting-edge Infrastructure for Digital Convergence' to Become a Mature Country" (2008:13).

56 In this context, "convergence" refers specifically to *broadband* convergence. In 2004, the government began

Kim Seang-tae—then president of the NIA—declared that Korea was experiencing a "new informatization paradigm shift … toward pragmatism and creativity" (NIA 2008:3). These policies represented a change not only in approaches to IT infrastructure—from expansion to improvement, from wired to wireless—and models of governance—from dirigisme to facilitating legal support for private industry—but also in how Korea imagined its place in the world vis-á-vis IT. The policy evaluations of the late 2000s and early 2010s refer to a Korea that no longer needs to play "catch up," but rather has already arrived at a position to lead the next global innovations in IT.

There are parallels between the shift in discourse around informatization and a contemporaneous shift in talking about other emblems of Korean modernity. Writing about Korean Christianization, Harkness (2013b) notes that in Korea an integral part of the Christian aesthetic had been one of aspiration to a universal model, but had over time shifted to promotion of a distinctively "Korean" Christianity that could be simultaneously a worldwide Christianity. Harkness relates this change in qualitative emphasis to macro-political discourse about Korea's place in the world,[57] especially in the past two presidential administrations. Upon becoming President in 2008, Lee Myung-bak announced that Korea was no longer striving for

plans for the "Broadband Convergence Network" (BcN), essentially an upgrade to the KII that would "[allow] seamless and safe use of quality-guaranteed multimedia services regardless of time and place, under which communication, broadcasting, and the Internet are converged" (NIA 2008:48), thereby streamlining communication and content delivery. Construction was completed in 2010 and the BcN became "the world's highest level of IT infrastructure, delivering 100 Mbps High-Speed Internet services to 13.37 million households and 1~2 Mbps wireless internet services to 29.55 million subscribers [sic]" (NIA 2011:7). Convergence was also the foundational principle for "ubiquity," i.e. the dissemination and integration of IT into the physical and social environment through new devices and wireless services. In other words, "a user can access and work on the same information, in the form of video, documents, spreadsheets or e-mail from a variety of devices, in any location and while moving" (Oh & Larson 2011:14).

57 Harkness also argues that some of the pushback against "striving" is symptomatic of the exhaustion engendered by *bballi bballi munhwa*: "*Ppalli ppalli* means, literally, 'quickly, quickly.' The phrase can be used as a directive to do things rapidly and was commonly heard during the decades of Korea's swift modernization, when everybody's sense was that there was no time to lose. Like a voice fatigued by too much pushing, many Koreans feel a general sense of exhaustion from decades of striving" (2013b:228).

advancement, but had already become advanced. As Harkness writes:

> "This state of striving is organized by a chronotope of advancement … But under the powerful sorting influence of this chronotope of advancement, striving itself has come under scrutiny. Whereas to strive for modernity was once a valid, indeed desirable, aspiration, more and more this disposition is looked down upon as a relic of Korea's past. That is, for a country that purports to stand 'shoulder-to-shoulder with advanced countries,' to *try* to be a leader, to *try* to appear advanced, to *try* to be an equal is to admit that one is not yet a leader, not yet advanced, not yet equal" (2013b:226).

In other words, Korea could never be modern so long as talk of advancement, development, or striving continued to dominate discourse.

Discourse on informatization underwent a similar transition during this period. The ITU's yearly statistics on ICT development provided supporting evidence to claims that Korea was now a model for the rest of the world rather than a "developing" information society. Korea has consistently been ranked first[58] in many of the ITU's categories, such as average broadband connection speeds and household access to the Internet. In the latter half of the 2000s, Korean informatization policy's focus shifted from capacity-building to improving the information society both materially and ethically. Lee's administration attempted to institute media policy reforms—including regulation of online activities—many of which were motivated by moral arguments about "civility" and visions of a "healthy" online culture. Lee's media reforms were attempts to manage and in some cases restrict "undesirable" information practices at the policy level as a means of dealing with the culture—including online gaming culture—that was made possible by the KII.

The ethical turn in informatization is itself symptomatic of the ubiquitous information

58 Denmark replaced Korea atop the ITU's ICT development index for 2013 after Korea had been at the top since 2010. The 2014 report also notes that Korea has the highest fixed-line broadband speeds in the world and the highest percentage of households with Internet access. In assessing the information business and policy climate in Korea, the report states that "the focus of operators and policy-makers has shifted from access to wireless services to improving quality and *speed*" (2014:47, my emphasis).

society concept: The Internet is part of everyday life in Korea, making it more difficult to distinguish between online cultures and simply *culture* (if such a distinction ever really existed in the first place). The ubiquitous character of the KII in 2015 makes infrastructure even more invisible. The world *is* the network. Or, rather, there are more access points to the KII, more devices for accessing it, and more products and services running on top of it than ever before. In a sense, the ubiquitous information society is fully *decompressed*, blurring the boundaries between the offline world and seemingly unlimited online space. At the same time, convergence represents the continued acceleration of IT culture and the literal compression of information into one channel. It is not just about the merging of different types of information transmission, but also about the intersections and symbioses of different infrastructures and technologies. In another sense, then, the ubiquitous society is even more *compressed* than its predecessors as once separate socio-technical domains are now overlapped, i.e. "converged."

Of Games and Governance

The fifth Master Plan for Informatization Promotion was announced in 2013 at the beginning of Park Geun-hye's presidency.[59] Like the previous two Master Plans, this one continues the turn away from capacity-building and toward ubiquity of the KII[60] and improvement of Korea's information society, with greater emphasis on facilitating a "creative economy." The Plan was accompanied by the launch of the "Plan for Contents Industry

59 Park is Park Chung-hee's daughter. Her election ensured that the conservative party would remain in power, and was also symbolic of a return to "old-style management of political affairs" (Sohn & Kang 2014:138) and of continuity with Korea's modernist political origins.

60 In 2011—prior to Park's election—the Seoul municipal government announced an investment of US$44 million in expanding the city's wi-fi network and making access freely available almost anywhere by the end of 2015 (AFP 2011). KT had previously made its wireless broadband (WiBro) services available on every subway line in Seoul and many highways across Korea in 2008 (Cho 2008).

Promotion," which provides continued support for Korean media companies—including game developers—in order to maintain Korea's competitiveness in cultural contents exports (NIA 2013:12-13). Just as they were in the immediate aftermath of the IMF crisis, online games remain a key component of Korean informatization in the present day.

The status of Korean game companies in relation to society at large has changed dramatically in the past two decades. Once a boutique industry with small, flexible firms, the game industry is now a mainstream Korean business sector with its own advocacy organizations —such as the Korea Game Developers Industry Association and the Game Culture Foundation— and increased power and influence over Korea's economic health. Recently, the evolution of game companies' corporate structures that are controlled by family interests has led some observers to compare them to *chaebol* (Yoon 2015). Despite changes in direction and focus, Korea's macroeconomic strategies have retained key structural features from the Park Chung-hee era, and informatization has been no exception.

Government support for the digital contents industry and promotion of online games presents a conflict for modes of contemporary governance in Korea. While sustaining Korea's economic growth depends to some degree on a strong domestic market for games, Korean online gaming culture has recently come under increased scrutiny due to perceived negative social and public health effects such as online game "addiction." The government finds itself having to negotiate how best to maintain the economic benefits of the game industry through policy interventions while at the same time attending to public welfare. This seemingly antagonistic relationship between business and health concerns around online gaming culture has exposed fissures in the Korean cabinet, and has inspired public debates about the normative expectations

for IT-related practices and behaviors in an advanced information society. At the center of such debates are strategies for managing online gamers whose behaviors are "out of synch" with the normative model of "healthy" Internet use in Korea's information society chronotope. If informatization has been the most recent iteration of Korea's compressed modernity, then these inconsonant online gaming socialities are located at the metaphorical edges of that process, miscalibrated with the pace and expectations of information society.

Contextualizing this current phase of informatization, Dr. Park described an accompanying shift in pragmatics of governance and in conceptions of the government's responsibility to Korean citizens. "A long time ago in the 1960s," he told me, "Park Chung-hee emphasized the agriculture industry. And the second stage was promoting the textile industry, then heavy and chemical industry, and after that the electronics industry. After the electronics industry, information technology and the software industry were promoted by Kim Dae-jung." But according to Dr. Park, that dirigiste model of Five-Year and Master Plans was no longer effective, or even necessary. "Today, I don't really think that the government promotes the software industry," he continued. "Today we have big conglomerate companies such as LG and Samsung, and now they can lead the *world* trend. So we don't need to push them to do this or to do that anymore." In other words, Korea does not need to strive for the promise of the 1995 *Chosun Ilbo* slogan anymore because it has already arrived as a global leader in information.

Situating Korean Online Gaming Culture Offline

May 10, 2012: Super PC Bang[61] was located on the second floor of a commercial building in Seoul's Hooam-dong neighborhood, accessible via an entrance on a narrow street that climbed the hill toward Namsan Park. Unlike other PC *bang* with their brightly-colored, illuminated placards, Super PC Bang was an unassuming place whose modest sign was easy to miss if one was not looking for it. At the entrance there were several posters advertising the latest and most popular online games in Korea: *FIFA Online 2*, *Freestyle Basketball*, *TERA*, and *Aion* among many others. All along the stairwell up to the second floor were signs boasting equipment with the "best specifications" (*choi-go sayang*), including high-speed Internet connection speeds, powerful processors, and top quality graphics cards.

Stepping inside the room I was met immediately by two distinct sensory experiences: one sonic, a blend of hands striking keyboards and clicking mouses, the sounds of the games that customers were playing, and the low hum of electronics and muted conversations; and the other olfactory, the smell of stale cigarette smoke and ramen noodles. Compared to other PC *bang* that I had visited, Super PC Bang was rather well-lit. It did not appear like a dungeon so much as an office or salon, although all of the windows were papered over to block out light from the outside. Nearly two hundred computer stations filled the room, arranged in rows and divided into two sections—the non-smoking area in the front, and the much larger smoking area in the back—by a floor-to-ceiling, transparent partition made of thick glass. Although the partition was intended to contain the smoke, a door between the two areas was always open and did little to stop the smell of cigarettes from wafting towards the front.

61 In the interest of protecting my informants' identities I have changed all of the names of PC *bang* in this chapter except where noted. I have, however, done my best to preserve the generic naming practices for these places.

It was 12:30 PM and a few customers were already spread throughout the PC *bang*, mostly in the smoking area. Some customers were alone at their stations—eyes fixed on computer screens and fingers flying across keyboards—while others sat in clusters of two or three, chatting, laughing, and occasionally hurling jovial insults at one another. Most were deeply engrossed in their gaming activities and seemed oblivious to the movements of the other customers and PC *bang* staff. A middle-aged man in a baseball cap whom I often saw there was slumped over asleep in his chair, snoring loudly while the monitor at his station displayed images from the online game that he had been playing.

Bong-hyun—my dependable companion in the world of Korean online gaming—and I made our way to our usual section of the smoking area. We looked for and found seats next to a man whom we affectionately called "Mr. Legend," a pensioner in his early sixties who was well-known among Super PC Bang's regular patrons. An ashtray filled with cigarette butts and a growing stack of empty paper coffee cups lay to one side of his keyboard. Mr. Legend smiled as we approached him, lighting a fresh cigarette. We exchanged friendly greetings, and Bong-hyun inquired about his activities so far that day in *Lineage II*, the massively multiplayer online role-playing game (MMORPG) that all three of us played and in which Mr. Legend was presently engaged. The section was not yet full, but many of the "usual suspects" were already there.

After logging onto our computers, Bong-hyun and I visited the front desk attendant and pre-paid for seven hours at the membership rate of 5,000 KRW (a little less than US$4 at the time). Bong-hyun purchased an instant coffee from the machine by the entrance and brought it to Mr. Legend. Except for a few breaks to visit the bathroom or to purchase a drink from the front desk, Bong-hyun and I remained at our stations playing *Lineage II* for the next seven hours. Mr.

Legend left around 5:30 PM—as was his custom—and bid us goodbye, saying that he would see us the next day. Customers continued to trickle in, and by 6:00 PM every one of Super PC Bang's stations was occupied. Bong-hyun and I eventually logged off a little before 8:00 PM, exiting into the darkness of the night that had arrived without our having realized it. We began the trek back to Naesu-dong—the neighborhood in which we both lived, about a thirty minute walk from Hooam-dong—at a leisurely pace, chatting about what we had accomplished in the game that day. Bong-hyun left me at the entrance to my apartment building where we made plans to meet the next morning, looking forward to another day of online gaming at Super PC Bang.

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This describes a typical day during the time I spent between 2012 and 2013 as a participant observer at over twenty different PC *bang* located primarily in Seoul, but also in the cities of Incheon, Busan, and Ulsan. PC *bang*—literally "PC rooms"—are the Korean variant of Internet cafés, allowing customers to rent a powerful desktop computer with a high-speed Internet connection for an hourly rate of around 1,000 KRW (a little less than US$1). Although PC *bang* facilitate a wide range of computing tasks, the overwhelming majority of customers come to these places to play online games; in fact, an alternate name that Koreans sometimes use for them is *geim bang* ("game rooms"). Like many public and semi-public leisure spaces in Korea, PC *bang* are open twenty-four hours per day. It often seems as if every block in a Korean city has a PC *bang*, and they can be found in suburbs and villages as well thanks to the reach of the Korea Information Infrastructure (KII).

PC *bang* began appearing between 1997 and 1998 during a critical phase of Korean

informatization, and were indispensable to the eventual success of that process. They were an unanticipated but welcome complement to the government's informatization promotion policies as they became sites for showcasing the KII's capacities—and building demand for high-speed Internet services—as well as places where many Koreans honed their Internet and computing skills. As an indirect consequence of the upheaval in the Korean labor market brought about by the IMF crisis, PC *bang* are symbolic sites of the interrelated processes of compressed modernity and flexible sociality. And as the "spiritual home," so to speak, of Korean online gaming culture, PC *bang* are anchor points for the development of new socialities of IT use that form around the interplay between online and offline dimensions of Korean online gaming chronotopes.

My guide to PC *bang* was Bong-hyun, a man in his early thirties who was introduced to me by his mother, a shopkeeper near my first apartment in Seoul. When I met him, Bong-hyun had just recently received a bachelor's degree in electrical engineering from the prestigious Korea University after completing his compulsory military service[62] and working briefly as a car mechanic. At the time, he still lived at home with his parents and two siblings. His parents were pressuring him to find a job and move out, but he had had very little luck finding employment thus far. Bong-hyun said that the job search was a great source of stress in his life, and that the only times he really felt relaxed were when he went to PC *bang* and played online games, specifically *Lineage II*. He had been frequenting PC *bang* off and on since he was a high school

62 All healthy Korean men between the ages of eighteen and thirty-five must serve in either an active or non-active duty capacity in one of the four branches of the Korean military. Active duty terms last between twenty-one and twenty-four months, while non-active duty postings can last for as long as thirty-six months. Many men, like Bong-hyun, choose to do their military service in between completing high school and enrolling in university. None of the Korean men I have met have ever spoken fondly about their military service, with many telling me that it was the worst period of their lives. However, friendships made in the military are often lifelong. More than one gamer told me how they had formed friendships with their fellow soldiers on the basis of a shared passion for computer games, another indication of the importance that online gaming has for socialization in Korea, especially among men.

student in the late 1990s during the PC *bang* "boom." Although his family had a computer at home and a high-speed broadband Internet connection, Bong-hyun preferred PC *bang* because his parents could not monitor his activities there. They disapproved of his playing games, considering them a distraction from his job search.

When I told Bong-hyun about my research, he became excited and planned what he called a "PC *bang* tour" through different neighborhoods in Seoul. During this tour he introduced me to Super PC Bang, which was then his current favorite. Even though it was not located near his home, Bong-hyun preferred this particular PC *bang* because of its high quality equipment, low prices, pleasant atmosphere, and the friendships that he had developed with some of the other customers, most notably Mr. Legend. Bong-hyun had bestowed this unofficial title upon Mr. Legend as a sign of respect for his seniority, as well as his apparent indefatigability and passion for playing online games. Mr. Legend could always be found at Super PC Bang from mid-morning to late afternoon, rarely deviating from his routine. His constant presence marked him as a Super PC Bang regular, and as I discovered over the course of my fieldwork that every PC *bang* has a community of loyal patrons like Mr. Legend who regularly spend long hours there playing online games on a daily or near daily basis.

Although I collected data from more than twenty different PC *bang*, I did the majority of my participant observation at four locations in Seoul: Super PC Bang in Hooam-dong; Azure PC Lounge in Naesu-dong; and Stylish PC Zone and Cielo Game Room, both in Changchun-dong. By embedding myself in these four specific PC *bang* over prolonged periods of time I was able to identify regular customers and record their patterns of behavior, as well as build rapport with the gamers whom I met there. In so doing, I also developed my own routines and became a

recognizable figure at each of these sites.

PC *Bang* in Social and Historical Context

PC *bang* have been an integral feature of Korean information culture since the late 1990s, both as expressions of that culture and as engines of technological innovation and infrastructural expansion. But beyond their historical role in Korean informatization, PC *bang* occupy the same social domain as other spaces of Korean "*bang* culture" (Song 1997; Kim & Yi 2002), a phrase that refers to leisure activities that are located in a variety of different semi-public spaces called *bang*, the Korean word for "room." Given that outdoor spaces are relatively scarce in large Korean cities and that living spaces are typically cramped, leisure and socializing often take place inside of a *bang*. In addition to PC *bang*, *bang* culture also includes *noraebang* (literally "singing rooms," Korean karaoke businesses that are divided into several individual rooms), *manhwabang* ("comic book rooms," small lending libraries where people go to rent and read graphic novels), DVD *bang* (similar to *noraebang*, where customers can rent a DVD to watch in a private room, and also where people occasionally go to have sex), and *jjimjilbang* (literally "steam rooms," public saunas and baths that customers sometimes use an alternative to hotel accommodations when traveling).[63]

PC bang*'s predecessors*

Among my interlocutors and in academic literature (e.g. Jin & Chee 2008, Huhh 2008), PC *bang* are most often talked about in relation to *dangu-jang*, or billiards halls. *Dangu-jang*

63 This list is not exhaustive, but these are arguably the most common types of *bang* in contemporary Korean society.

typically occupy one floor of a high-rise commercial building and contain several billiards tables that customers can rent at an hourly rate. Yeong-gi—a man in his early thirties—told me, "My father's generation went to *dangu-jang* after school. These days it has changed. My friends go to PC *bang*." Yeong-gi and others explained that *dangu-jang* and PC *bang* are both popular leisure sites for young Korean men in particular. They both afford opportunities to be among friends, to engage in friendly competition, and to smoke cigarettes. Moreover, they are spaces for the performance of Korean hegemonic masculinity,[64] which is an important constitutive feature of the socialities that characterize both places. *Dangu-jang* and PC *bang* clientele are by no means mutually exclusive, either; on several occasions I accompanied the same informants to both PC *bang* and *dangu-jang*.

Orakshil[65] (video game arcades) are another historical antecedent to PC *bang* that were fashionable in the 1970s and 1980s,[66] before the construction of the KII, the popularization of the Internet, and the emergence of Korean online gaming culture. When Bong-hyun was in elementary and middle school PC *bang* did not yet exist, and so throughout his adolescence he liked to go to *orakshil* with his friends to play arcade games. Yeong-gi—who was only a few years younger than Bong-hyun—recalled how he also used to visit *orakshil* before the

64 My informants were always quick to distinguish *dangu* from *pokket.* The former refers to four-ball billiards while the latter is commonly called "pool" in North America. Occasionally both activities will be housed in the same room, but more often than not these games are divided into entirely separate businesses. Furthermore, they are gendered activities: *dangu* is a "man's game," while *pokket* is played by women.

65 *Orakshil* literally means "entertainment room" or "recreation room," explicitly denoting these establishments as leisure spaces. Occasionally the modifier "*jeonja*" ("electronic") was added to *orakshil* to emphasize the type of entertainment that they offered.

66 It is difficult to pinpoint when video arcades started appearing in Korea because many of them grew out of illegal pinball and slot machine rooms that were, by necessity, underground establishments. The website Hardcore Gaming 101 has an excellent comprehensive history of Korean gaming that notes how *orakshil* were the targets of police raids in the early 1980s until legislation in 1983 created a legal distinction between video arcades and illegal gambling houses. Stories like these illustrate how digital gaming in Korea has long been problematized and made into the object of political intervention (Source: http://www.hardcoregaming101.net/korea/part1/korea1.htm#fn12b, Accessed April 28, 2014).

introduction of PC *bang*. One time his mother tracked him down at an arcade near his home, dragged him back to their apartment, and beat him with his father's billiards cue, continuing to beat him even after the cue had broken in half. But when PC *bang* started to appear in his neighborhood, Yeong-gi found that it was easier to hide his gaming activities from his mother's watchful eye. "She never beat me for going to PC *bang*," he remembered. "Actually," he added, "I tried to lie. I told her 'I am studying hard,' but I only went to PC *bang*." *Orakshil* still exist in Korea today although their numbers are far fewer than PC *bang*.

PC bang *in decline*

Ever since my first visit to Korea, people have been predicting the demise of the PC *bang* (e.g. Shim & Kim 2011; Nam 2014). High-speed household Internet connections are now more prevalent than ever in Korea, and are often just as fast and convenient as those at PC *bang*. The proliferation of mobile devices and wireless connectivity options have rendered some of the services that PC *bang* offer—such as web-surfing, chatting, and even casual gaming—obsolete for potential customers.[67] Furthermore, recent legislation targeting PC *bang*—including new rules about food preparation, age-based restrictions on Internet access, zoning laws that prohibit building PC *bang* near schools, a ban on hiring minors, and a ban on smoking in public places (the last of which went into effect after the conclusion of my fieldwork—has greatly affected people's everyday engagements with online games and with offline sites for playing games.

67 Several people—including doctors—emphasized to me the increasing popularity of mobile games in particular as influencing the changing face of digital gaming in Korea. As one young man in his twenties told me, "If I'm playing computer games I think 'Oh, it's been five hours? I need to turn off my computer.' So *then* I play with this," as he held up his mobile phone. I usually found Bong-hyun playing a mobile phone game whenever I met him in the mornings, killing time as he waited for me to arrive. What is more, gamers told me that their parents —who had not been interested in computer games, and some of whom even disapproved of them strongly—were regular players of mobile phone games, notably the *Anipang* series that was nearly ubiquitous in Korea in 2012.

These restrictions reflect the role that PC *bang* play in contemporary public debates about health and welfare in Korea, and more specifically in relation to anxieties about Internet and online game "addiction." Briefly celebrated for the contributions that they made to accelerating informatization in the late 1990s,[68] PC *bang* have since become problematic features of Korea's information society, places that are perceived as seedy, dirty, and filled with ignominious characters.

Moreover, as sites that are primarily associated with play and games, PC *bang* are connected to qualities of frivolity and a lack of productivity. Mr. Legend told me that he thought Korean parents these days disliked PC *bang* because they lured children away from their studies, as Yeong-gi's story demonstrates.[69] In a society where education is not only of enormous social and cultural value but also a lucrative business (Lee & Brinton 1996; Lee et al. 2010; Park & Abelmann 2004; Seth 2002; Byun et al. 2012; Sorenson 1994), anything that distracts from study is typically met with immediate disdain. To many in the older generation it seemed that PC *bang* and online games were now doing the job of raising Korean children; according to Mr. Legend, games were fine for someone else's child, but not for one's own. This represents a shift in

68 In its annual white paper on informatization from 2000, the National Computerization Agency—the governmental organization in charge of developing the KII—represented PC *bang* as a positive index of Korea's flourishing information society, recognizing the central role of online games in the process: "The phenomenal boom in Korean version of Internet cafe, called Internet PC-Bang, closely follows the world-record rise in Korea Internet users. At first, online games like Starcraft brought the young gamers to Internet PC-Bang where they can enjoy low priced, high speed, LAN-based Internet access. Now it becomes common place for users across age, region and income to surf the cyberspace for e-mailing, chatting, online stock trading, data searching and so on. Internet PC-Bangs, unique to Korea, are now drawing attention of global Internet communities. Especially online game firms and their distributors envision a lucrative business pocket [sic]" (NCA 2000:11).

69 On a few occasions I witnessed middle-aged women enter the PC *bang* where I was doing observation, frantically scan the room, and then leave minutes later. I did not speak to these women, and so I have no way of knowing for sure what they were doing or who they were looking for, but Bong-hyun agreed with my hypothesis that they might be looking for their wayward children. By contrast, I also observed multiple incidences of parents bringing their young children—e.g. elementary school-aged—to a PC *bang,* and then arranging for the staff members to look after them while the parents were busy doing something else in the vicinity of the PC *bang*. In these situations the PC *bang* functioned almost like a day care. Whatever qualms some people had about PC *bang*, others seemed to regard them as safe and secure spaces.

perception of the role of the Internet and computers for education as well. As Dr. Paik—the psychiatrist who advises the government on management strategies for online game addiction—explained to me, "In the very beginning [of informatization] mothers encouraged their kids to learn the computer. And they were so proud: 'My little three year-old kid, he can type! He must be a scientist!' But the reality was he just got trapped by games." Once parents realized what their children were using computers for, the association of informatization with progress became more complicated: IT could facilitate personal and social advancement, but it could also be a vehicle for diversion from education and, potentially, for social deviance.

Although it is true that the number of PC *bang* has fallen in recent years—from a peak of around 27,000 in the early 2000s to less than 15,000 in 2014[70]—they are still a vibrant part of Korea's urban topography and social landscape. My interlocutors cited several reasons why PC *bang* remain viable businesses in Korea: they provide access to reliable computer equipment and Internet connections; they offer convenient services such as document printing and scanning at affordable rates; their climate control systems make them warm places in the winter and cool in the summer; and, most importantly, they are places where people can gather to be around their friends and acquaintances.[71] PC *bang* are important in the daily lives of Korean online gamers for other reasons as well, including gaining access to game software and hardware without having to purchase them, taking advantage of special promotions built into games that can only be unlocked by logging on from a PC *bang*, and the simple fact that PC *bang* are places where they can be around others who love games and gaming as much as they do.

70 By some estimates, between 3,000 and 4,000 PC *bangs* had gone out of business every year since 2008 (Shim & Kim 2011).

71 Florence Chee notes that this function of PC *bang* is "especially important because [in Korea] entertaining one's friends is rarely done in the home" (2006:231). While sociocultural explanations like this are no doubt relevant, it is also important to relate customer preferences to the material conditions of compressed modernity, i.e. the cramped living spaces for many Koreans that force socializing outside of the home and into *bang*.

Despite their sustained popularity among loyal customers, in contemporary Korea PC *bang* are places at the margins of society, "other spaces" that are a residual consequence of compressed modernity and out of synch with its trajectory and tempo. They are are defined by the centrality that online gaming has for the people who frequent them, but are also influenced by offline social conventions that are dominant in Korean society at large. In other words, PC *bang* fall within the meso-scale chronotope that situates online gaming culture offline. Furthermore, they are sites where the contestations between compressed modernity and traditional cultural mores and social institutions—most notably the family and the economy—are performed in relation to the temporal aesthetics of online gaming culture and their ethical entailments on gaming practices and behaviors.

"Other Spaces"

Heterotopias

PC *bang* exemplify what Michel Foucault called "heterotopias," places that are "outside of all places, even though it may be possible to indicate their location in reality" (1986:24). They are simultaneously destinations and points of disembarkation. Customers come to specific PC *bang* to be among friends and acquaintances and to enjoy the aesthetic experiences that those particular places afford, but also because they are access points for entry into dozens of virtual places in online games. In this sense they fulfill one of the characteristics heterotopias that Foucault identifies: they are "capable of juxtaposing in a single real place several spaces, several sites that are in themselves incompatible" (1986:25). The online and offline worlds that

constitute Korean online gaming culture are incommensurable at a fundamental level: Being in both places at once requires virtual bodies acting as proxies for physical ones, mediated by computers and Internet connections.

But PC *bang* are heterotopic not only as sites of multiple, overlapping places, but also because they are characterized by an alternative temporality. Foucault argues that heterotopias are linked to "heterochronies" insofar as "the heterotopia begins to function at full capacity when men arrive at a sort of absolute break with their traditional time [sic]" (1986:26). For some customers, PC *bang* are leisure spaces where time spent is compartmentalized with respect to other tasks, while for others they become central places of activity around which all other daily schedules are organized. For the latter type of customer, "PC *bang* time" is not wholly congruent with the rest of Korean social time; it does not separate into sequences ordered by an external temporal metric, but rather flattens into an endless duration in which one hour merges with the next, and so on and so forth. This temporal aesthetic of "endlessness" is facilitated by the fact that PC *bang* are open twenty-four hours per day (cf. Park 2011 on Seoul as a "24-hour city").

Additionally, PC *bang* customers straddle heterogeneous tempos of activity; while their bodies remain mostly sedentary in the offline space of the PC *bang*, their virtual proxies online often move at breakneck paces. Gamers' hands and fingers mediate the gap between these contrasting, embodied tempos, flitting across keyboards while the bodies that they are attached to sit almost motionless. The result is a juxtaposition between quickness and slowness, individually embodied and inscribed across the online-offline gap.

Heteroptopias and online gaming socialities

The heterotopic characteristics of PC *bang* engender corresponding online gaming socialities. Florence Chee has argued that PC *bang* are "third places," i.e. places "that are neither work nor home, but are places of psychological comfort and support" (2006:230).[72] They are places outside of all other Korean social realms in which customers have opportunities to build relationships both offline and online. PC *bang* afford social interactions that fall into three categories distinguished by degrees of durability: 1) interactions among groups of friends and/or couples who visit PC *bang* together; 2) interactions among customers at the same PC *bang* or different PC *bang* mediated by online games; and 3) interactions among the community of regulars that populate every PC *bang*. With respect to the last category in particular, their interactions—like the ones between Bong-hyun and Mr. Legend—are often facilitated entirely by inhabiting the same offline spaces and do not extend outside of the PC *bang*. Rather, they are situated in and associated with specific times and places, and as such they are constitutive features of normative gaming socialities at this chronotopic scale.

However, participation in offline social interaction is not the default sociality for all PC *bang* customers; in fact, it is not even the primary mode of engagement for the *majority* of them. Save for brief interactions with PC *bang* staff and occasionally with other customers, most of the customers whom I observed kept to themselves. This quality of self-individuation has come to represent online gamers and gaming in Korean popular culture and in mass media, contributing to the stigmatization of PC *bang* as disreputable sites of social decay. Such representations are

72 Chee borrows the concept of third places from the sociologist Ray Oldenburg (1991). She also argues that online games "are more of a 'fourth place,' situated within the third places of PC bangs [sic]" (2006:231). While her distinction certainly resonates with the heterotopic characteristics of PC *bang*, I would argue that online games are either complementary third places or part and parcel of the "third place-ness" of PC *bang* since for the majority of customers the two are ineluctably—and phenomenologically—linked in practice.

bolstered by news stories of individuals who have died while in the midst of marathon gaming sessions. Although these incidents are rare, they help associate online gaming at PC *bang* with images of social deviance. Korean political and medical discourses problematize PC *bang* and online gaming socialities on the grounds that they are "anti-social," and in so doing privilege a particular interpretation of what counts as "real" social interaction. At the same time, definitions of normative versus non-normative gaming socialities are recursive, taking on different valences at different chronotopic scales.

PC *bang* demonstrate simultaneously the promise and pessimism of Korean informatization. They are sites where the flexible sociality that accompanies Korea's compressed modernity unfolds, and where gamers evaluate themselves and other gamers according to calibration with the aesthetic and ethical entailments of normative gaming socialities. As new socialities develop through practical engagement with online games, traditional cultural mores regarding social interaction are resurgent. Crucially, the people, practices, and places that constitute Korean online gaming culture are evaluated in part according to assessments of the tempos activity and interaction around games.

PC *bang* Aesthetics

December 20, 2012: "This is the place the everyone pursue his pleasures at his convenice [sic]." The message, printed in big, black, stenciled letters on the paneling at the end of a row of computer stations, caught my eye as I waited for *Lineage II* to load. It was similar to other messages posted throughout Cielo Game Room, not only in tone but also in its grammar and spelling mistakes. This particular Cielo franchise had just recently opened in the basement of a

building only three blocks from my apartment in Changchung-dong, and was part of a large PC *bang* chain that had several other locations around Seoul. Like the decorations on the faux-brick walls, the tchotchke displays on shelves around the room, the minimal interior lighting, and the climate controlled air, these messages were part of Cielo's aesthetic "package." All of these elements combined to convey the sense that Cielo Game Room was a place for relaxation and escape, set apart from the frenetic tempo of *bballi bballi munhwa* in the world outside of the PC *bang*.

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A PC *bang*'s aesthetic design is an important factor in the comprehensive experience that it offers to its customers. One can, of course, expect to find similar—if not identical—décor at franchises that belong to the same PC *bang* chain, but there is also a remarkable degree of thematic consistency even among different chains and individual operations. These aesthetic features not only express the qualities of the PC *bang*'s brand, but also contribute to the overall mood that a PC *bang* seeks to inculcate among its customers. The ambience of a typical PC *bang* is similar to the "sensory atmospherics" identified by Natasha Dow Schüll (2012) in her ethnographic account of Las Vegas casinos. Schüll describes how casinos employ specific aesthetic strategies—managing odor, temperature, color schemes, sound, lighting, etc.—so as to "powerfully modulate patrons' 'experiential affect,' not only helping to usher them to machines, but to immerse them in the zone and keep them there" (2012:46). While PC *bang* designs are nowhere near as complex as in casinos, they exhibit many of the same features, especially with regard to lighting. Every PC *bang* that I visited either had no windows, or windows that had been covered in newspaper, painted over, or otherwise rendered opaque. Additionally, many PC *bang*

maintain very low interior lighting schemes. The effect is twofold: Customers are unable to gauge the passage of time from semiotic factors in the outdoor environment—e.g. shadows, the light of the sun, etc.—and the relative darkness inside the PC *bang* helps to lull customers into a state of relaxation that aids their immersion in "PC *bang* time." Controlling light levels is just one of an array of aesthetic techniques that contributes to an alternate temporality inside PC *bang*, a phenomenological time that contrasts sharply with the often frantic pace of activities at other chronotopic scales, namely inside online game worlds and in Korea's information society, which is dominated by the aesthetic and ethical prescriptions of *bballi bballi munhwa*. Despite the presence of literally high-speed Internet connections and fast-paced game contents, PC *bang* are places where customers can experience "slowness," however uneasy and contradictory that slowness may seem when taken with the surrounding environments.

Writing on the wall, simulated nature

Texts like the ones at Cielo contribute to a PC *bang*'s aesthetic features. Texts appear on PC *bang* walls, on the paneling running along the outside of a row of stations, and on the transparent dividers between smoking and non-smoking sections. Sometimes they are part of the wallpaper, and other times they were decals which over time have been partially defaced, leaving incomplete words and phrases. Significantly, all of these texts were printed in English, never in Korean.[73] When I would point out a piece of text to my gaming companions and ask them what

73 It is possible that posting English sentences indexed a form of cultural capital, further emphasizing the PC *bang*'s position as a distinctly modern space within Korean society. PC *bang* were not unique in this respect as English words and phrases—often with the same kinds of grammar and spelling errors—can be found in coffee shops, *noraebang*, and restaurants, especially foreign chains. Besides signs labeling smoking and non-smoking areas, bathrooms, and emergency exits, the only posted Korean text that I encountered in a PC *bang* was in Yeongdeungpo-dong. A piece of A4 paper was affixed to one of the pillars in the smoking area with a message notifying customers that they could be asked to leave the PC *bang* if they disturbed the other patrons.

they thought about it, none had any reaction beyond a wordless affirmation or perhaps a brief snicker; they did not appear to place any importance on the meaning of the texts themselves. For them, texts like these were just one more element in a PC *bang*'s decorative pastiche; their referential function was less irrelevant. Still, despite indifference and/or lack of comprehension from PC *bang* customers, these texts contributed to the "experiential affect" of the space—to borrow Schüll's phrasing—insofar as they conveyed aesthetic qualities of serenity, convenience, and nostalgia.

PC *bang* texts fell into two categories: original messages and quotes from existing sources. Original messages were most often addressed to customers, describing the sort of aesthetic experience one could expect from a particular PC *bang* chain. For example, the Fruit Brand Vitamin Nature Internet Café[74] chain displayed the following message at its franchise locations: "'Fruit' brand contains refreshing of cool atmosphere where you can feel image of fresh fruit full of vitamin … Our brand got to be made with theme of vitamin's importance and we intend to become tonic like vitamin which is always necessary to you … With deep appreciation for you customers visiting 'Vitamin', we promise to becomes your convenient lounge with always best service [sic]." In addition to the text quoted at the beginning of this section, Cielo franchises also laid claim to providing a "space that is colorful and present atmosphere according to customer's life-style harmony [sic]." Both of these chains sought to emphasize their PC *bang* as spaces of relaxation and convenience, disconnected from the hustle and bustle of *bballi bballi munhwa* in the world outside.

Quoted texts were drawn typically from song lyrics and poetry, always European or

74 This is the real name of the chain, written in English on its logos inside of the room. However, the sign outside of the PC *bang* read "*Bitamin*" ("Vitamin") in *hangeul* letters: □ □ □

American in origin. A PC *bang* in Seoul's Anam-dong neighborhood that I visited with Bong-hyun featured excerpts from Robert Frost's "Neither Out Far nor In Deep" (e.g. "The wetter ground like glass/ Reflects a standing gull"), while the opening stanza to Henry Wadsworth Longfellow's "A Psalm of Life"—"WHAT THE HEART OF THE YOUNG MAN SAID TO THE PSLAMIST: Tell me not, in mournful numbers/ Life is but an empty dream!/ For the soul is dead that slumbers/ And things are not what they seem"—was posted on the window dividing the smoking and non-smoking areas at a PC *bang* in suburban Bucheon under the heading "Naturalism."[75] The use of Frost juxtaposes the natural environment in literary form with the artificial, man-made qualities of the PC *bang*, while Longfellow's words (perhaps unwittingly) help to emphasize the PC *bang* as a heterotopia in relation to the rest of Korea's information society chronotope, a place where "things are not what they seem."

As part and parcel of a cohesive aesthetic package, PC *bang* texts cannot be interpreted apart from the drawings, paintings, prints, and material objects that they often accompany. The most prevalent examples of PC *bang* artwork are those that incorporate images and icons of outdoor environments. Sometimes these are urban or peri-urban scenes: a row of quaint apartments overlooking a cobblestone street, an outdoor café, couples and families riding bicycles together, or children flying kites. More commonplace, though, are depictions of bucolic landscapes filled with clouds, the sun, flowers, trees, fruit, and animals (e.g. butterflies, cats, horses, deer). All of these landscapes are generic rather than indexing specific locations in the offline world.

The outdoors theme also appears in the choice of material objects situated throughout

75 These examples are not unlike the poetry that can be found—in Korean—printed on the glass between doors on subway platforms along some of the more recently built subway lines. Such poems are usually the work of famous Korean poets, writing about family, nature, and the like, but there are also a few that are Korean translations of famous poems in foreign languages.

many PC *bang*. Some have plastic floral arrangements placed on shelves or in small alcoves set into the walls. Others have fake potted plants located near the entrance or at the front desk. Azure PC Lounge in Naesu-dong had one of the more elaborate simulated environments of any PC *bang* I visited: an imitation bamboo forest at the back of the room with "leaves" crafted from shiny green foil.

PC bang *aesthetics and online gaming socialities*

A cynical interpretation of PC *bang* aesthetics would emphasize their seductive qualities, such as how Fruit Brand's stated intention to "become … like [a] vitamin which is always necessary [for] you" adopts the language of addiction. Taken with complementary "sensory atmospherics"—such as low lighting and obscured views of the outdoors—there is certainly something to be said about how PC *bang* might entice customers into staying for as long as possible by distorting their sense of time's passage and of the world outside of the room's simulated environment. Bong-hyun voiced as much to me, believing that Super PC Bang's design choices were intentional, tactical decisions made in the interest of retaining customers and having them buy more time. Even though if this were true it would make Bong-hyun complicit in his own coercion, it did not appear to bother him, nor did it make him question whether or not to continue patronizing Super PC Bang.

Beyond questions of commercial strategy, however, these aesthetic features contribute in equal measure to the sociality of PC *bang*, and by extension to how these places and their customers are evaluated in relation to Korean information society in general. By signaling PC *bang* as sites for relaxation and withdrawal from the outside world, these places become

associated with a sense of idleness, devoid of any productivity. When integrated into the PC *bang*'s entire sensory atmospherics they contribute to an experiential affect of "slowness" that further insulates these sites and their customers from the perpetual acceleration of Korean information culture, articulated as *bballi bballi munhwa*. Moreover, PC *bang* aesthetics underscore the heterotopic and paradoxical characteristics of these places: they are fundamentally part of the "high-tech" built environment—vanguard spaces of Korean informatization—yet they incorporate icons of the natural world into their decorative schemes. At the same time, the fact that these natural world elements are always simulacra reinforces the artificiality of the spaces in which they appear, complementing the artificiality of the online game environments with which PC *bang* customers engage.

Smoking

June 7, 2012: Bong-hyun and I had just finished lunch in Hooam-dong and were headed up the street toward Super PC Bang to settle in for the afternoon when we passed by a group of three high school-aged boys. They were laughing loudly, playfully hitting each other, and smoking cigarettes as they walked along the sidewalk. Bong-hyun suddenly became silent, his face registering a look of disgust. After they had passed he turned to me and said, "I want to hit them! They are so rude!" I did not understand what the boys had done to warrant such a reaction, and asked Bong-hyun to elaborate. He explained that boys their age should not have been smoking in the street where anyone could see them. Bong-hyun said that he and his friends would never have been so brash when they were high school students; they would only smoke cigarettes in the alleyways off of major pedestrian streets like they were "supposed" to. Bong-

hyun's opinion was one that I had encountered before among my Korean friends who would turn away from their *seonbae*—people who were older than they were—while smoking cigarettes as a sign of respect. However, I thought, had the boys been smoking inside Super PC Bang, would Bong-hyun even have noticed? And if so, would he have had the same reaction?

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PC *bang* are strongly associated with smokers and smoking. Ventilation systems embedded in the ceiling prevent clouds of smoke from hanging in the air, but they cannot completely keep the smell from lingering and diffusing throughout the entire room. One of the primary reasons that Bong-hyun visited PC *bang* was that he could smoke there without fear of punishment from his mother, who disapproved of his habit and from whom he tried to keep it a secret. He carried a bottle of Febreze in his backpack whenever we went to PC *bang,* and would spray his clothes everyday as we departed in an attempt to mask the odor. The smell of cigarette smoke not only indexed his having smoked, but also having been in a PC *bang*.[76] For Bong-hyun, then, the PC *bang* was a space where he could temporarily escape from his familial relations and the expectations that were placed upon his behavior, specifically with respect to smoking.[77]

Although health concerns are encouraging more and more Koreans to give up smoking,[78] it remains a commonplace practice that often accompanies socializing and leisure activities.

76 An American friend of mine who taught EFL in Ulsan told me that one of his students reported being scolded by his mother for "smelling like a PC bang," i.e. like cigarettes. The same friend also told me of how two boys in one of his classes carried changes of clothes in their backpacks specifically so that they could go to PC *bang* and then change into clean clothes before returning home, thereby disguising their visit.

77 Florence Chee encountered a similar sentiment among her interlocutors. A university student with whom she spoke echoed Bong-hyun's attitude about PC *bang* and smoking, describing the PC *bang* as more comfortable than his home. "Comfort," Chee notes, "as he sees it is most likely his ability to smoke elsewhere and escape the constraints of intergenerational friction he feels living with his parents as a 27-year-old man" (2006:232, fn 5).

78 In 2006 the Ministry of Health and Welfare estimated that nearly one-quarter of Koreans were smokers (24.6%), and that over 45% of all Korean men smoked, compared to less than 3% of women (Park 2006). These numbers may have been even higher because of self-reporting biases, especially among women. Recently the government and NGOs have launched several public health initiatives aimed at reducing the smoking population through education, and although it is still a widely accepted behavior smoking is slowly becoming more marginalized.

During my fieldwork legislation mandated that there must be segregated smoking and non-smoking areas, yet the barrier separating the two was usually open and thus smoke drifted throughout every part of the room. As a non-smoker myself I always looked for available stations in the non-smoking area first unless I happened to be with an informant like Bong-hyun who was smoker. Regardless of where I sat, after I had spent a full day conducting fieldwork at a PC *bang* my clothes were inevitably saturated with the odor of cigarettes. For other customers like Mr. Legend, being able to smoke while playing games without having to leave one's station was an attractive feature that PC *bang* afforded them, adding to the general convenience of these spaces for avid gamers.

Even when businesses did try to enforce rules about smoking customers often ignored them. For instance, I saw a partially defaced "No Smoking" sign affixed to the bathroom door at a PC *bang* in Yeongdeungpo-dong with an empty tin coffee can filled with cigarette butts lying directly below it. In June 2013—after the conclusion of my fieldwork—an amendment to the National Health Promotion Act went into effect banning smoking in all public places, including PC *bang*. However, PC *bang* owners were loathe to enforce the ban, fearing that they would lose customers who were accustomed to smoking while gaming. Commenting on the new law, a twenty-six year-old man quoted in the *Korea JoongAng Daily* said "I patronized PC rooms rather than using the PC in my home since I could smoke freely in there. I guess now I've lost the reason to visit PC rooms [sic]" (Kim 2013).[79] His attitude is representative of many PC *bang* customers and only reinforces the associations among PC *bang*, online gaming, and smoking.

79 Source: http://koreajoongangdaily.joins.com/news/article/article.aspx?aid=2978100, Accessed May 18, 2014.

Gender, age, and social conventions

The status of smoking in PC *bang* reveals how these spaces and the interactions that occur within them are ineluctably linked to normative models of sociality, especially their entailments for gender, age, and the maintenance of social relationships through exchange. PC *bang* are sites where conventional social practices are reproduced, but also challeneged. Examining the practice of smoking at these sites reveals significant aspects of PC *bang* sociality, as well as how online gaming and the places where it takes place are positioned within contemporary Korean information society.

Korean social taboos stipulate that smoking "must be done with people of relatively equal social status, defined in terms of age, sex, and freedom from asymmetrical power positions in kinship, bureaucratic, or other hierarchical structures" (Dredge 1980:30).[80] Smoking is also an icon of Korean masculinity: Just as "juniors" are not supposed to smoke in front of their "seniors,"[81] it is generally considered offensive and disrespectful for women to smoke in public, especially in front of older men.[82] Gender performances with respect to smoking inevitably inflect PC *bang* sociality, but in somewhat unexpected ways.

PC *bang* are overwhelmingly homosocial spaces: Over 80% of the customers whom I observed were men. When I asked the men whom I played games with to speculate as to why

80 C. Paul Dredge's analysis comes from his fieldwork experiences in the 1970s in what was then the primarily rural Jeolla provinces. Although times have changed and smoking is becoming less socially acceptable, many of his insights—particularly those about gender, age grades, and social status—are still relevant in contemporary Korean society.

81 This hierarchical system of respect between juniors (*hubae*) and seniors (*seonbae*) is primarily defined by relative age, but also extends to social status and positions within bureaucratic organizations.

82 Dredge writes that "it is not acceptable for women to smoke at all until they are widows or grandmothers … and even then only the most wizened of old women smoke publicly in the presence of males" (1980:29). He does acknowledge, however, that even in the 1970s these social constraints placed upon gender were becoming more relaxed in Korean cities. However, a 2010 opinion piece published in *The Korea Times* relates the story of an older Korean man striking a female Japanese exchange student across the face when he encountered her smoking at a bus stop (Specht 2010). Stories like this indicate that smoking in Korea is still a gendered practice, especially with respect to public spaces.

there were so few women at PC *bang*, they reproduced clichéd narratives about gender and online gaming, e.g. "girls don't like violent games" or simply "girls don't like games." Women gamers, on the other hand, cited the prevalence of smoking as a reason for why they avoided PC *bang.* Mi-jeong and Ji-eun—two self-described "*sonyeo-paen*," or e-sports "fan girls," in their early twenties—said that while they loved playing online games they never went to PC *bang* because of the overpowering smell of cigarette smoke.[83] Jeong-kyeong—a woman in her late twenties—acknowledged that she was unusual among her female friends not only because she liked playing games, but also because she sometimes went to PC *bang.* She said that her friends preferred to spend their leisure time socializing in places such as coffee shops because they were generally cleaner and brighter than the dank, dark, smoke-filled PC *bang*. Though she disliked the smell of cigarettes, the computers were so powerful and the Internet connections so reliable at PC *bang* that they superseded any displeasure she experienced from people smoking around her. These testimonies reflect previous research about PC *bang* which found that "many women disliked the smoke filled atmosphere and the dirty and dark conditions of some PC-Bangs [sic]" (Stewart & Choi 2003:74). For the women gamers I met, smoking was part of the complex of PC *bang*'s aesthetic features that made them feel uncomfortable. But it is important to recognize how their reactions are as much the product of personal tastes as they are reflections of how smoking contributes to the overwhelmingly masculine character of PC *bang*. If smoking is a "man's" activity and PC *bang* are closely associated with smoking, then it stands to reason that PC *bang* are sites where women might feel unwelcome—or even unsafe—precisely because they are perceived to be male-dominated spaces.

83 Some men, too—especially younger men—also complained about the smell of cigarettes in PC bang. A twenty-one yearl-old gamer and non-smoker told me, "PC *bang* have many better games and the speed is fast, but the smoking room is bad for your health. Your clothes catch the smoke of the PC *bang*, and parents don't like that."

However, PC *bang* are also spaces where social conventions about gender and smoking are more flexible than in other public places. As Yeong-gi told me, "My ex-girlfriend was a smoker. In Korea, old people think that women smokers are not good. If she wants to smoke, usually she goes to PC *bang*." Many—though certainly not all—of the women whom I observed at PC *bang* were smokers, which would appear to contradict the customs regarding smoking, gender, and public places. The fact that female smokers could feel secure smoking and did not experience retribution for doing so is indicative of PC *bang*'s ambiguity as neither completely public, nor completely private spaces, as well as a contributing factor to their heterotopic characteristics. PC *bang* are open rooms where customers can observe and interact with each other if they so choose, yet there are also limitations on visibility by virtue of the opaque dividers between individual stations. Even so, there is certainly nothing approaching total privacy for customers. Yet the sociality of PC *bang* helps to constitute a sense of privacy—or at the very least limited visibility—within an otherwise public space.

Women may also have felt more comfortable smoking in PC *bang*—or secure in these spaces at all—when they were accompanied by their romantic partners.[84] While the majority of women whom I observed were individual customers (51% of all observed instances, compared to 64% of men), women were more than five times as likely to be with their partners than were men (31% to 6%). Although I also observed groups of women customers unaccompanied by men—

84 The rather narrow, heteronormative definition of couple that I am working with here is informed not only by my observations of PC *bang* culture but also by Korean mass media—especially advertising and business promotions—and youth culture practices. Many Korean restaurants will offer a "couples menu" with special discounts, and movie theaters advertise "couple packages." Perhaps the most visible indexes of Korean coupledom are "couple rings" and "couple shirts"—or even sometimes entire outfits—that young Koreans wear in public to signify their status as a couple. Korean clothing manufacturers have even formalized this practice by producing shirts with words or phrases that match and/or refer to one's partner, e.g. "This is my boyfriend/girlfriend" accompanied by an arrow pointing toward the partner, who must be positioned appropriately. Keeping in mind this impoverished definition, it was not uncommon to see couples at PC *bang* at all hours of the day, but particularly in the evenings and on weekends. In fact, during these periods the PC *bang* became a sort of "date spot," just like restaurants, bars, cafés, or movie theaters might be.

and, even more rarely, mixed-sex groups—they accounted for only 18% of all instances that I observed. Many of the women who were in couples were also smokers, and they could be assured that they would not be rebuked for smoking so long as they were seated next to their partners. Moreover, being with their male partners afforded them an increased sense of security within the male-dominated space of the PC *bang*.

"Invasions": Tempo, Age, and Groups in PC *bang*

During the summer of 2012, Bong-hyun and I eventually fell into a daily routine organized around Super PC Bang. We met in the late morning on weekdays at the coffee shop on the ground floor of my apartment building, walked the forty-five minutes from Naesu-dong across downtown Seoul to Hooam-dong, ate lunch, and then made it to the PC *bang* between 12:30 and 1:00 PM. Super PC Bang was never crowded at this time, although we could always expect to see the "regulars" spread throughout the room. Some, like Mr. Legend, left the PC *bang* to find lunch elsewhere while others ordered their meals to be delivered to their stations, not wanting to pause their gaming activities. As the afternoons progressed, however, the stations began to fill up and the decibel level inside the room rose considerably. Beginning in the early afternoon, it seemed as if customers arrived in waves every hour or so. By 6:00 PM nearly every station in the PC *bang* was occupied. Bong-hyun jokingly referred to these waves of new arrivals as "invasions." He reasoned that the after-work crowd who started arriving at 5:00 PM and continued throughout the early evening were clocking in for their "second jobs," a claim that he made only somewhat facetiously. By the time we left—usually between 7:00 and 8:00 PM—there was nary an empty seat to be found, and some customers were even hovering behind

stations waiting for a spot to become free.

These "invasions" punctuated the daily tempos of the PC *bang*. Since all PC *bang* are open twenty-four hours per day, customers can come and go at their leisure, frequently leaving only to return a few hours later. Some customers spend all day at PC *bang*, and on rare occasions multiple days consecutively. I observed that the majority of customers (65%) spent one to three hours at any given time (45% of customers alone spent one to two hours).[85] PC *bang* are busier at certain times of day than they are at other times. According to Gametrics—a PC *bang* analytics service operated by MediaWeb, a Korean company that also sells PC *bang* management software —4:00 PM is the peak hour for PC *bang* usage, when over 60% of stations are being used at PC *bang* across Korea.[86] Gametrics also notes large spikes in the usage rate between noon and 1:00 PM (from 33% to over 40%) and again between 1:00 PM and 2:00 PM (from around 42% to just over 50%). Usage rates remain between 50% and 30% until 2:00 AM, when they progressively fall to a low of just over 10% at 8:00 AM before rising again.[87]

85 I divided the number of hours that individuals and groups of customers spent at PC *bang* into fifteen different time grades: less than one hour, one hour, between one and two hours, two hours, between two and three hours, three hours, between three and four hours, four hours, between four and five hours, five hours, between five and six hours, six hours, between six and seven hours, seven hours, and between seven and eight hours. The most frequent duration for any individual time grade that I observed was between one and two hours (27%), while the rarest was between seven and eight hours (less than one-tenth of a percent). As a general rule, customers were highly unlikely to spend more than three consecutive hours at a PC *bang.* There are several variables that bias my sampling method. First, I spent the majority of my observations in non-smoking areas where customers were generally less likely to remain for a long time; the customers who spent the longest time at PC *bang* always sat in the smoking areas and were more likely than not to be smokers themselves (they also tended to play more open-ended game genres such as MMORPGs that have no defined beginnings, middles, or ends). Second, I only recorded the comings and goings of customers in my immediate vicinity. Since PC *bang* are large and I was also simultaneously conducting participant observation in a MMORPG world it was difficult for me to keep up with even this considerably smaller percentage of PC *bang* clientele. Third, I never spent more than eight consecutive hours at a PC *bang*, and usually I spent only five hours on any given day. Therefore I was unable to account for customers who may have been there for longer periods of time and did not include them in my calculations. Furthermore, I only included observations of customers whom I witnessed arriving and departing, which eliminated a large number of customers whom I saw doing one but not the other. Finally, with only a handful of exceptions, I always visited PC *bang* between the late mornings and early evenings and so I was unable to account for the habits and behaviors of customers who frequent PC *bang* at other times of day.

86 My own observations indicated that in some PC *bang* this ratio is much higher, even approaching 100%.

87 All of these figures are based on national averages that Gametrics calculated for Friday June 6, 2014. The numbers were slightly higher for the same time period when only considering the city of Seoul, with 62.85% of

Gametrics' usage rate data correlate with the daily tempo of activities outside of PC *bang*. Korean elementary, middle, and high schools stagger their release times throughout the afternoon, with younger students being dismissed before older ones. After each school dismissal, PC *bang* typically experience an influx of schoolchildren, particularly in the non-smoking areas. Many of these younger customers are still wearing their school uniforms, making them easier to identify. After 5:00 PM—at the conclusion of the working day for most Korean companies—there is usually another large wave of new customers, typically men between their late twenties and mid-forties wearing business suits and carrying briefcases. In Bong-hyun's opinion this is the busiest time for PC *bang*, and it was one of the reasons that he preferred to arrive earlier so that he would be assured of finding a station in a section to his liking. Cheol-soo—an automotive mechanic in the armed forces in his mid-twenties—had a different perspective, claiming that late nights were the best time to visit PC *bang*. In fact, he told me that I could only learn about "real PC *bang* culture" at night. On the few occasions that I visited a PC *bang* late at night—i.e. between midnight and 4:00 AM—I did observe a number of customers, some in their thirties and forties but many more in their late teens and early twenties. However, I never saw PC *bang* as busy during late nights as they were in the afternoons and early evenings. Additionally an "expulsion" of sorts occurred around 10:00 PM as most PC *bang* imposed a curfew on underage customers at that time.

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stations being used at 4:00 PM, and 62.93% at 5:00 PM. Additionally, in Seoul the usage rate at any given time never dropped below 11.91% (at 8:00 AM). These figures have fallen since my fieldwork period; by comparison, for June 6, 2012, usage rates peaked at 68.46% at 4:00 PM (72.53% at 5:00 PM just for Seoul) and never fell below 12.63% (13.52% for Seoul). (Source: http://www.gametrics.com/pcbangtrics/pcbangdata/Pcbangdata_Main.aspx, Accessed June 7, 2014).

Age grades and groups

PC *bang* tempos also correlate with customers' age grades[88] and the likelihood that they will be in groups.[89] Younger age grades are the customers most likely to be part of a group rather than arriving alone or with a romantic partner. In my observations, elementary school students were in groups 73% of the time, compared to 55% for middle and high school-aged customers. The likelihood that customers would be in a group diminished progressively with older age grades: 25% of customers in their late teens and twenties, 13% of those in their thirties, 9% in their forties, and 7% in their fifties.[90] Customers in their thirties were the age grade most likely to be part of a couple (10% of the time), followed by those in their late teens and twenties (8%). Although previous research has cited the desire to be among friends as one of the primary reasons that customers prefer PC *bang* to playing games at home (e.g. Chee 2006; Chee & Smith 2007; Stewart & Choi 2003; Jin & Chee 2009; Huhh 2008), my observations revealed precisely the opposite, with individual customers accounting for 62% of all observed instances, compared to 31% for groups of two or more people and 7% for couples. Undoubtedly my data were influenced by the times of day that I frequented PC *bang*; had I restricted my observations to only late afternoons and evenings I may have drawn a similar conclusion about the prevalence of

88 Except in cases where I knew the customers personally I had to estimate ages based on a variety of semiotic indicators such as school uniforms, style of dress, hair color and style, the look of one's face, etc. Given that PC *bang* customers skew young on average, I included more divisions for customers under the age of thirty while I divided customers in their thirties and above into decade-long age grades. The resulting age grades were: elementary school-aged; middle and high school-aged/early teens; late teens and twenties; thirties; forties; fifties; sixties; and over sixty.

89 I defined a "group" as two or more customers arriving at the PC *bang* together, or in some cases joining a group of customers who were already at the PC *bang*. These customers differed from individuals—who usually kept to themselves, but sometimes interacted with other customers—and from romantic couples. Furthermore, I categorized pairs of customers who were not obviously a romantic couple as "groups" instead.

90 Customers in their sixties were actually in groups 24% of the time, but this was due to an extremely small sample size (four observed instances out of a total of seventeen times that I observed customers belonging to this age grade). I only observed one instance of customers over sixty, and they happened to be in a group as well.

groups.[91] Younger customers may be more likely to visit PC *bang* in groups since they have comparatively more opportunities to meet up with their peers in institutional settings outside of PC *bang* and travel there together. School-aged children in particular come directly from nearby schools or stop by PC *bang* together in between courses at private after-school academies (or sometimes in lieu of going to these academies at all).

Another factor that helps explain the prevalence of young people in PC *bang* is the freedom of access (or lack thereof) that children have to PCs in their homes. Hyeon-myeong—a university student in his early twenties—recalled that when he was an elementary school student he much preferred to go to PC *bang* than to play games at home. "At that age I liked PC *bang*," he said. "I liked to play *StarCraft* with my father, but there was only one computer in our house so I couldn't play with him. For *StarCraft* you really need two computers."[92] Although in contemporary Korea many households have a PC and a high-speed, broadband Internet connection, this does not necessarily mean that children have unfettered access to online games at home as their parents may closely monitor their computing activities.[93] Dong-ryul—a twenty-one year-old university student and avid e-sports fan—added that "PC *bang* are better because in the home you can't play games for a long time," acknowledging that his mother in particular rebuked him for playing games too often as she felt that they distracted him from his studies. Moreover, PC *bang* afford groups of young friends the opportunity to play together, each using

91 It is also possible that customer behaviors may have changed considerably over time and that the players who most often frequent PC *bang* in contemporary Korea are more socially isolated than customers were in the past.

92 Hyeon-myeong was my the only gamer I spoke with who reported that his or her parents also liked to play computer games, let alone that they were part of family activities. Certainly some of this is due to the fact that computer games only became popular in Korea relatively recently, and I expect that as the first generation of gamers continues to age there will be more individuals who share an interest in games with their parents.

93 It is not only computers but also televisions that children have little control over in the home. Jin-soo, who works for the Korea e-Sports Association, believed that this was an important factor in explaining why video game consoles never became popular in Korea. "Many people who want to play consoles don't have enough time to play because they are spending daytime in school and evening time at the academy, and then their parents are watching television," he told me. "They don't have any *right* to play consoles."

his or her own PC. In the home, where multiple PCs would be a luxury for most families, this is simply not possible.

Age, group, and genre

Hyeon-myeong's statements illustrate another important aspect PC *bang* customer activity: the correlation among game genres and titles, age grades, and the likelihood that players will be part of a group. In my observations, customers in their late teens and twenties represented the majority of players in most genres and titles, which is not surprising given that they accounted for 45% of the total number of customers that I observed. There were only two genres that did not fit this pattern: children's games—which were dominated by elementary and middle school-aged customers—and "casual" games. Casual games include card games such as poker and *go-stop*[94] and strategy board games like *baduk.*[95] Over 67% of all casual game players were in their forties or older; that ratio rose to 70% for *go-stop* players and 92% for *baduk* players. The first-person shooter (FPS) game *Sudden Attack*—the fifth most popular title overall, accounting for 6% of all games played—was popular with customers across several age grades.[96] While customers in their late teens and twenties still represented the largest percentage of players (47%), elementary, middle, and high school-aged customers accounted for 42% of players, the smallest degree of variation between these age grades for any title or genre. Some of the discrepancy among age grades was due to the restrictions placed on certain game titles by

94 Also known as *godori*, a popular Korean card game that is often a vehicle for gambling. Since all gambling in Korea is technically illegal, online *go-stop* is played just for fun or to accumulate proprietary game currencies.

95 Also known as *go*, an ancient Chinese board game played with black and white tiles. Professional *baduk* matches are televised in Korea, but only offline matches, not online games.

96 Incidentally, the most popular game title was *League of Legends*, a multiplayer online battlefield arena (MOBA) game that accounted for 20% of all games that I saw people playing and 16% of all PC *bang* activities. The overwhelming majority of *League of Legends* players were young (70% in their late teens and twenties, and 27% elementary, middle, or high-school-aged) and male (95%).

Korea's Game Rating Board. For example, *Lineage II* was restricted to players nineteen years of age and up, while *Sudden Attack* and the *FIFA Online* soccer simulation series were rated for players thirteen and above.[97]

However, a more significant determining factor than rating restrictions was a shared preference with one's peers for certain titles and genres. Even though genres like MMORPGs afford opportunities for social interaction and participation in group activities online, I was more likely to see PC *bang* customers playing competitive genres—such as sports and FPS games—in offline groups. While individuals represented the overwhelming majority of casual game (82%) and MMORPG players (69%), action adventure/fighting games (57%), FPS (52%), and sports games (52%) were dominated by groups of players and couples. The offline group interactions that coincided with playing these games—e.g. exchanging high fives, cheering, and hurling insults at each other—appeared to enhance customers' enjoyment of the activities. The latter three genres tended to be most popular with elementary, middle, and high school-aged customers, who—as noted above—were also more likely to be playing in groups.

Evaluating Online Gaming Socialities According to Offline Behaviors

May 9, 2012: After a day spent at Super PC Bang, Bong-hyun invited me to a barbecue party in Anam-dong at his friend Seong-yool's *oktap-bang* (a studio apartment located on the roof of a small residential building). Their friend Kyeong-joon—a fellow classmate in the electronic engineering program at Korea University—joined us as well. All three men shared an

97 These ages are calculated according to the East Asian tradition for determining age; they would be eighteen and twelve respectively in the United States. There are institutional mechanisms in place to help ensure these restrictions since every Korean game portal requires players to enter their national identification numbers in order to register for a game account. However, many Korean children know their parents' ID numbers and use them to bypass these restrictions.

interest in online games, but to vastly different degrees. Just a few years earlier, Seong-yool had spent all day, every day playing MMORPGs and selling the game items that he collected, but he had since quit games entirely and was about to begin an engineering job in Daegu. Kyeong-joon said that he did not really like playing games at all, but that if his friends invited him to a PC *bang* then he would sometimes play *FIFA Online* since he was a soccer fan. Of the three Bong-hyun—who also happened to be the eldest—was the only one who still played games on a daily basis.

As Seong-yool tended to the beef spareribs on his charcoal grill, Bong-hyun and Kyeong-joon took shots of *soju*. The alcohol loosened them up, and soon they were exchanging friendly barbs with one another. Bong-hyun told his friends about my research and our ongoing PC *bang* tour. Seong-yool exclaimed "He [Bong-hyun] is good for you to talk to. He's a *geim pye-in*!"

Seong-yool and Kyeong-joon burst into laughter as Bong-hyun blushed, looked at his feet, and smiled. "No, I'm not a *pye-in*," he countered. "I'm just a *geim maeniak*." His friends continued their gentle ribbing, but it was all in good fun and Bong-hyun took no serious offense.

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Geim pye-in and *geim maeniak* are two Korean online gamer subjectivities that my interlocutors identified by evaluating other gamers' practices and behaviors against normative expectations for gaming socialities. These evaluations articulate around correlating social interaction with place, and gaming practices with time. Korean online gamers are evaluated—by their peers and others—according to the degree to which they are socially isolated. PC *bang* play an important role in these evaluations: They are places where socializing can happen, yet remain at the margins of mainstream society.

Pye-in, maeniak, *and* jookdori

Bong-hyun's insistence that he was not a *geim pye-in* but rather a *geim maeniak* reveals one of the ways in which online gaming socialities are evaluated as more or less normative within the offline chronotope of Korean online gaming culture. *Pye-in* is a pejorative slang term that denotes someone who is perceived to have "thrown away" his or her life in the pursuit of a given activity. The word itself is a compound of two Sino-Korean (*hanja*) characters: *pye*, which describes something that has been "discarded" or has "become stale," and *in*, which simply means "person."[98] *Pye-in* is used in various contexts to describe individuals who exhibit two interrelated characteristics: patterns of socially-isolated activity—e.g. "study *pye-in*" (someone who only studies, always alone) or "TV *pye-in*" (someone who watches television all day long)—and passionate interests that border on obsession—e.g. "Naruto *pye-in*" (avid fans of the Naruto cartoon series) or "Girls' Generation *pye-in*" (fans of the Korean pop music group Girls' Generation). *Geim pye-in* are individuals for whom online games are the object of their obsessions, or who spend the majority of their time playing games.[99] My interlocutors defined a *geim pye-in* as an individual who "doesn't eat, doesn't sleep, and all night long is playing games."[100]

As a general rule, *pye-in* is not a reflexive term, except as a form of self-derogatory

98 In *hangeul*: 폐인, and in *hanja*: 廢人.

99 Yeong-gi told me that he believed specific online games were well-suited for the *geim pye-in* subjectivity. "There are too many *pye-in* these days because of *Lineage*," he said, citing the popular Korean MMORPG. The open-ended structure of *Lineage* invites players to extend their playing time *ad infinitum*, and it is this pattern of sustained play that in part characterizes *geim pye-in* behavior.

100 I asked my interlocutors if they personally knew anyone whom they would categorize as a *geim pye-in*. Dong-ryul said that mostly he had only heard stories, but that he remembered one of his classmates in high school who stopped coming to school one day, raising concerns among the teachers and administrators. Dong-ryul heard a rumor that when the teachers confronted the student's parents about his absence they learned that there had been argument about the boy's preoccupation with gaming and that he had run away from home. For four days he spent all of his time in PC *bang* and *jjimjilbang*. Dong-ryul added, "At that time I thought 'Game addiction [sic] is scary!'"

humor. By contrast, the *geim maeniak* label—a transliteration of the English words "game" and "maniac"[101]—denotes an engagement with online games that is evaluated as "more" normative. *Geim maeniak* enjoy playing online games as one among other hobbies and whenever possible play on a daily basis, but their lives do not necessarily revolve around gaming. They typically have other obligations—to school, a job, or family—that restrict how long they can spend playing games. Calling oneself a *geim maeniak* is more akin to saying "I am a sports fan" or "I like comic books" than it is to identifying with a subjectivity like *geim pye-in* that Korean society at large considers deviant at best and pathological at worst. Crucially, *geim maeniak* isolate themselves from their offline social networks, but rather carry on deep and meaningful relationships with others often based on a mutual appreciation of online games.

Geim pye-in and *geim maeniak* are closely related to another category of Korean online gamer: the PC *bang jookdori* and/or *jooksooni*. These names combine the verbal phrase *jookchigo itda*—"to stay shut up indoors" or "to remain in one place"—with the noun particle *dori* (an antiquated slang word for "guy") or *sooni* (the female equivalent of *dori*).[102] They describe individuals who are "just hanging around" a particular establishment such as a nightclub, bar, billiard hall, café, restaurant, or—in this case—PC *bang*. Customers are assigned these labels based upon evaluations of their behavior and its correlation with a place and duration: They stay rooted in one place, typically inside, for a prolonged, uninterrupted period of time. Like *pye-in*, *jookdori* and *jooksooni* are pejoratives that can be extremely offensive in some contexts. None of my informants would ever apply these labels to themselves, but they would

101Transliterating English loanwords like these is a common practice in Korea that is sometimes called "Konglish." I have retained the transliteration rather than translating this phrase in order to emphasize its significance as an emic term in Korean online gaming culture (cf. Boellstorff 2003 on Indonesia's *gay* subjectivity).

102In *hangeul*, □ 그 □ and □ □ □respectively. None of my informants ever actually used the phrase "PC *bang jooksooni*," perhaps because of how uncommon it was for women customers to fit this description.

surreptitiously use them to describe other PC *bang* customers. For instance, during a visit with Bong-hyun and Kyeong-joon to a PC *bang* in Yeongdeungpo-dong one of the customers in the smoking area made a commotion, causing all of the men whom he was seated near to break into laughter and goad him into more outbursts. I was afraid for a moment that there might be an altercation, but Kyeong-joon assured me that these men were just "typical *jookdori*" and that the teasing was not malicious. Bong-hyun agreed with Kyeong-joon's evaluation, but he also cautioned me not to speak the word too loudly.[103]

Bong-hyun later explained to me how to identify PC *bang jookdori*. Usually, he said, they would look "dirty" and be staring slack-jawed at their computer screens. According to Bong-hyun, to qualify as a *jookdori* a customer would have to visit the same PC *bang* at least three days in a row and spend the entire day there—if not several consecutive days—without leaving. These customers typically arrived at the PC *bang* as individuals and played games separately from the other customers, but they were also likely to be well-acquainted and friendly with the other *jookdori* and *jooksooni* in the room. For example, Mr. Legend could reasonably have been labeled a *jookdori*—although even in our private conversations Bong-hyun never called him this because of his respect for the man—and though he always arrived and left on his own he commanded respect from the other Super PC Bang patrons. For these sorts of customers PC *bang* were places around which their richest and most rewarding social interactions revolved. It is in this respect that they are distinguished from *geim maeniak*. Whereas gaming is a preferred

103I once found myself riding in an elevator with one of my neighbors who spoke English rather well and an older Korean businessman. She asked me how my research was going, to which I replied that I was spending most of my time in PC *bang*. I joked that perhaps I was becoming a *jookdori*, having just recently heard the word for the first time. I asked her if she could tell me what it meant exactly. She immediately blushed, giggled, and said that she would tell me later (although she never did). I had the distinct impression that she was embarrassed by my use of the word, especially in front of the stranger who was riding in the elevator with us, reinforcing my perception that *jookdori* could be offensive for some people.

hobby for *maeniak*, it plays a more central role in the social lives of so-called *jookdori* and *jooksooni*, as does, crucially, the PC *bang* itself.

Cheol-soo explained to me how PC *bang jookdori/jooksooni* differed from *geim pye-in*. Their gaming practices are remarkably similar with respect to the amount of time each invests in the activity, but whereas *jookdori/jooksooni* venture into the semi-public space of the PC *bang* to play games, *geim pye-in* remain isolated in their homes. Bong-hyun agreed with Cheol-soo's assessment, noting that we never saw "true *pye-in*" in PC *bang* because they never left their apartments. Among online gamers like Cheol-soo and Bong-hyun, the correlation of activity with place with respect to the public/private distinction was a critical factor in distinguishing normative online gaming socialities from non-normative or even pathological ones. Since one of the hallmarks of *bang* culture is that it brings individuals together in the same offline spaces, forgoing PC *bang* and preferring to stay at home marks *geim pye-in* as outside of the normative expectations for social interaction in Korea's information society chronotope as well. While *geim pye-in* carry on deep and meaningful relationships—some of which are only temporary and others that last for several years or more—with other players in online gaming worlds, this form of social interaction is interpreted as being somehow "less real" than offline interactions. Insofar as withdrawal from offline interactions and public or semi-public spaces is constitutive of *pye-in* behavior it is a gaming sociality that assumes pathological characteristics.

Evaluations of geim pye-in *in Korean society writ large*

A video art installation at the Gyeonggi Museum of Modern Art's "Art & Game" exhibition helped to illustrate to me how the *geim pye-in* sociality relates to Korean social norms.

The installation was titled "Lead Me to Your Door"[104] by the artist Mioon, and consisted of a large wooden structure in the shape of a head and torso with thirty small compartments set into it. A video monitor in each compartment ran a loop of scenes from inside a typical apartment in a Korean high-rise building. In one of the "rooms" stood a *geim pye-in*. He had temporarily stepped away from his computer and was staring out of a window. However, he could see only his own face staring back at him. This represented his isolation from the world outside of his door, and indexed his non-normative sociality.[105]

Bong-hyun's mother told me that *geim pye-in* are not bad people *per se*, but that they are unproductive, set poor examples for young people, and place burdens upon their families. Her opinion exemplifies how *pye-in* are defined and evaluated in relation to Korean social institutions, most notably the economy and the family. Their situation is similar to the Japanese *otaku* and *hikikomori* socialities. *Otaku*—a label used to describe fans of anime and manga in particular—are similar to the sense in which *pye-in* denotes passionate interests bordering on the obsessive, while the *hikikomori*, "a sedentary homebody who, retreating into himself [sic], rarely ventures outside at all" (Allison 2009:99), is comparable to the capacity for *pye-in* to index extreme social isolation. As Anne Allison argues, in the context of Japan's so-called "Lost Decade" "scrutiny has been given to youth who, once the promise of Japanese modernity, have

104The heading attached to the piece in the "Art & Game" exhibit guide—*Dangshin-eun moo-eoseul wihae segye-reul hwalyonghashina*?—translates as "What are you making use of in this world?" which denotes the relationship between social interaction and concepts of productivity.

105Lee Hae-joon's award-winning 2009 film *Castaway on the Moon* (*Kim-ssi Pyoryugi*, or "*The Adventures of Mr. Kim*" in Korean) offers another representation of the *pye-in* lifestyle in Korean popular culture. The protagonist finds himself marooned on an islet in the middle of Seoul's Han river and eventually enters into an unlikely romance with a *pye-in* woman—who is depicted as being "addicted" to CyWorld, a Korean social networking site—who can see him from her apartment where she spends all of her time. The film deals with themes of social and physical isolation in the context of Korean modernity. Furthermore, it reinforces the perception of face-to-face interaction as normative sociality; even though the female lead spends all of her time on a social networking site (what could be more social than that?), her withdrawal from offline spaces of interaction marks her sociality as non-normative.

been held up as a source—or at least a sign—of all its postmodern problems. Decried for their very unproductive stance towards jobs, labor and the future, youth are chided for such behaviors as migratory work patterns … and the propensity towards leisure and fantasy indulgences (*otaku*)" (2009:97). Furthermore, the extreme cases of *hikikomori* "[emblematize] a sense of social fissure and solitude that is growing in the country at large and is linked, both literally and figuratively, to home" (2009:99). Like *hikikomori* and *otaku*, *geim pye-in* represent the consequences of spatiotemporal reorganization brought about by compressed modernity and its entailments on sociality. While social interaction can take place across the online-offline divide —and online gamers embody multiple, fragmented subjectivities as a general rule—the specific places and times of social interaction still matter greatly to how socialities are evaluated.

Although the presence of *jookdori/jooksooni* in the semi-public space of the PC *bang* negates their potential for being *geim pye-in*, it does not automatically mean that they and their behaviors are evaluated to be part of a normative gaming sociality. In other words, being "alone together" (Ducheneaut et al. 2006; Turkle 2011; Shen 2014) while playing games in a PC *bang* does not "count" as offline social interaction; as Yeong-gi explained to me, "If I say that I went to a PC *bang* alone, people think 'that's too bad.'" Furthermore, PC *bang* and *jookdori/jooksooni* are often associated with the most high profile cases of non-normative online gaming socialities and Korea's supposed online game addiction epidemic.

Conclusion

In the nearly two decades since their first appearance, PC *bang* have become emblems of Korea's information society that resonate on a global scale. They not only helped acculturate

people to the Internet and the impressive potential of information technology, but also introduced online games to an entire generation of Koreans, becoming places where new subjectivities of information and new socialities developed around games and gaming. While once they may have represented the exciting promise of Korea's IT-centric future, nowadays PC *bang* are associated with some of the most problematic aspects of online gaming for contemporary Korean society. With every new report of people expiring in the midst of multi-day gaming sessions and parents neglecting their children in favor of PC *bang* the perception of these places and the customers who frequent them as being metaphorically "out of synch" with the rest of Korean society is further strengthened. As a result PC *bang* have become the targets of legislation that seeks to correct the non-normative behaviors and socialities that are associated with them. The ongoing expansion of ubiquitous computing and wireless technologies have rendered the functional role that PC *bang* once played as gatekeepers of the Internet all but obsolete. Seok-min, one of my oldest Korean friends who came of age during the PC *bang* boom said it best: "I didn't know people still went to PC *bang.* When I was in high school I used to go there with my friends to play *StarCraft*, but now if I go inside a PC *bang* I don't know what to do! So I just leave."

At the same time, PC *bang* are also remarkable places where the spatiotemporal reorganization of Korean social relations brought about through compressed modernity can be witnessed firsthand. In this chapter, I have made an analytical separation between the gaming practices and socialities that characterize PC *bang* and online game worlds. In practice, however, this division was rarely so clear cut; in fact, the focus of my attention as an ethnographer was continuously oscillating between my surroundings in the PC *bang* and the virtual worlds of the online games that I was playing. The fact that these domains are imbricated with one another is

crucial to understanding the organization and relations of Korean online gaming culture chronotopes. In the next chapter I turn to the world of *Lineage II*, a popular Korean MMORPG, while drawing attention to where and when distinctions between offline and online are made salient and the techniques that players develop to manage their practices and behaviors across this gap.

Managing the Gap: The Temporal, Spatial, and Social Entailments of Playing Online Games

December 13, 2012: I was in my ninth month of playing *Lineage II* and was finally beginning to feel like an experienced player. When I logged on for the day I checked the Binet[106] server's party matching board and found several announcements for "big three" raid itineraries—Octavis, Istina, and Balok—all of which had been reset the day before and were therefore the most popular activities of the day. In situations such as these my character—a level 98 Othell rogue assassin—was in great demand because of his slowing dagger attack ability, a special skill unique to rogues that was necessary for defeating the Octavis raid boss. I had little difficulty finding a party to join, and soon my character was following the series of portals between the castle town of Aden and the Orbis temple where the rest of the party members were gathering in preparation for entering Octavis's dungeon.

Despite some troubles coordinating player responsibilities in the first leg of the raid itinerary that extended our time in Octavis's dungeon beyond the average expected time for that raid, our party successfully defeated Octavis and moved on to take down the Istina raid boss in short order. Finally, we trekked to the Crystal Caverns to confront the Balok raid boss, where we ran into trouble. Our first attempt at taking down the Balok monster failed, and the party leader was forced to issue a recall order, transporting everyone back to the staging area outside of the Balok's lair. We would have to wait there until the dungeon timer reset and we could attempt the raid again. At this point one of the other rogues in our party began to get worried.

"How long will this take?" the rogue addressed the party through *Lineage II*'s text chat channel. "I don't have much time left."

106I have changed the names of all identifiable persons and places in the interest of maintaining my interlocutors' privacy.

The party leader replied, "The party title was Oc-Is-Bal.[107] If you need to take a break, please return quickly." Although the leader did not make it explicit, this was a reminder to everyone that—according to the unwritten social conventions of the *Lineage II*-playing community—once a player had joined a raiding party, then he or she had an obligation to complete the planned itinerary no matter how long it took.

"My child is at kindergarten," the rogue elaborated, "and now it is dismissal time." It was around 2:30 PM at this point. If everything went smoothly with our next attempt at the dungeon, we should have been able to complete the Balok raid in about ten minutes, followed by a brief intra-party auction to divide the spoils from all three raids. By my conservative estimate we still had around fifteen minutes more of playing time.

None of the other players replied to the rogue's message about needing to pick his or her child up from kindergarten. After a few more minutes of waiting, the anxious rogue made another inquiry about how much longer we would have to wait. By this time another player was also getting impatient and chimed in, complaining about being busy. Before anyone could reply, the dungeon instance reset and everyone's attention was focused once again on Balok. This time we were successful and defeated the monster in about seven minutes. The itinerary took a total of sixty-eight minutes to complete, which was longer than the fifty minutes that the "big three" raid itinerary usually lasted, but understandable given our trouble with Octavis and Balok. We did not hear any more complaints from the rogue player, who presumably logged off and rushed to the kindergarten to fetch his or her child. After dividing the items and game currency that we had collected from the three raids, the party leader thanked us for our hard work—typing

107A common abbreviation that *Lineage II* players used to refer to the "big three" raid itinerary, taking the first syllable from the names of the three raid bosses ("□ /□ □/□ "in *hangeul*).

"*Sugohasheosseoyo*" (literally "You have worked hard") into the chat channel—and the party dissolved.

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This was a typical sequence of events during my time as a participant observer in *Lineage II*—a popular Korean massively-multiplayer online role-playing game (MMORPG)—that illustrates the confluence of different spheres of social interaction, attention to offline and online spaces, and overlapping temporalities of lived experience that bear upon the practice of playing online games in Korea. The exigencies of games like *Lineage II* present players with dilemmas that are attendant upon everyday social interactions. Online game players assume multiple subject positions simultaneously, inhabiting online and offline spaces that can never be fully commensurable. Furthermore, gamers must calibrate their practices according to the demands imposed by various external temporal metrics—such as personal timetables, work and school schedules, and the structure of the game itself—as well as the phenomenological temporalities of performing different in-game activities. Players must devise strategies and learn skills necessary for managing problems that arise in the course of coordinating activities in both online and offline environments. In other words, playing online games in Korea is not simply a matter of accomplishing straightforward goals within the games' structures, but also about "managing the gap" betwixt and between online and offline social contexts. This sort of management entails calibrating one's practices and behaviors with sets of normative expectations for gaming socialities across multiple chronotopic scales of Korean online gaming culture.

Ordinarily the social, spatial, and temporal divergences that characterize online gaming do not impinge upon play, but rather complement each other, remaining in the background of

player experience. But in moments like in the story above, the congruence between offline and online realities—the maintenance of which is critical to the immersive fantasy of games like *Lineage II*—is disrupted and fissures between these realms of experience are made visible and immediate to players. By voicing the predicament about needing to fetch his or her child from kindergarten, the anxious rogue momentarily called attention to events and obligations in the world outside of *Lineage II*. The rogue's dilemma also introduced a conflict between the temporality of gameplay—as determined by cumulative abilities of individual players and their characters, as well as the structure of specific game activities like raids—and the schedule of the rogue's offline life; just because our playing time was lengthened due to the wait for the Balok instance reset, this did not mean that the restrictions imposed by the kindergarten's timetable suddenly disappeared.

Learning to effectively manage one's simultaneous presence in both online and offline environments—as well as movement within sometimes contradictory, sometimes intersecting temporalities—are crucial skill sets that Korean online gamers develop alongside the physical skills necessary for playing games. Despite futurist protestations to the contrary (e.g. Lester 2011) the division between offline and online realms of experience—sometimes rendered as virtual and "real" worlds—is the most significant phenomenological dimension of playing online games (cf. Golub 2010). At present, online gamers cannot physically enter online game worlds; they can only access these spaces via the mediation of the proper technical devices, the infrastructures that support them, and in many cases through the use of a virtual body proxy or some other form of digital representation.[108] Tom Boellstorff argues that as life in information

108In many North American contexts, the virtual bodies that players control in MMORPGs like *Lineage II* and other virtual worlds are often called "avatars" (e.g. Taylor 2006; Pearce 2009; Boellstorff 2008). However, among Korean online gamers these bodies are called "characters," which is a designation that is sometimes used outside of Korea as well (e.g. Nardi 2010). Korean online gamers transliterate the English word "character"—

societies becomes increasingly mediated by online activities,

> "spatially and temporally specific social realities are no longer limited to the physical world; the processes of moving through space and establishing common grounds can now take place online as well as offline. Confronted with multiple embodiments, and thus with indexical *fields of reference* that are multiple in a new way, we thereby face the virtual as an emergent set of social realities that cannot be straightforwardly extrapolated from the physical world" (2012:52, emphasis in original).

Like many other activities involving networked digital media, online gaming entails both synchronous and asynchronous interaction. Accompanying the spatial division between offline and online places—however perforated and shifting that boundary may be at any given moment—is a division between external temporal metrics and phenomenological temporalities, i.e. subjective experiences of the passage of time while playing games. The places and tempos that characterize online games do not obviate those that are significant offline, even if they do not always rise to the level of immediate experience. The result is not a collapse of the division between offline and online, but rather a continual reworking of that boundary that resists consummation. As Boellstorff suggests, this situation presents players with emergent social realities that do not have any clear historical precedents.

Encountering *Lineage II*

Lineage II was developed and published in 2003 by NCSOFT—one of the largest Korean online game companies—as a sequel to 1998's *Lineage*,[109] arguably the most popular MMORPG in Korean history and a game that played an important role in helping to grow Korean online gaming culture in the late 1990s (see Huhh 2008). Bong-hyun, my guide to Seoul's PC *bang*, introduced me to the game, which he had been playing off and on in the nine years since its

e.g. *kkaerikteo* (□ □ □)—or use the abbreviation "*kkaerik*" (□ □).

109Although, within the game's internal chronology *Lineage II* is technically a prequel.

initial release. When I met him in April 2012 he had just recently returned to playing the game every day. Bong-hyun's renewed interest in the game was due in part to NCSOFT's decision at the end of November 2011 to make the "Goddess of Destruction" chronicle[110] "free to play," meaning that anyone with a NCSOFT online membership could play the game via the *Lineage II* web portal without having to purchase the game's software or a monthly subscription. This made playing *Lineage II* at PC *bang* all the more appealing, as one only needed to find a place with the game installed on its computers (I never visited a PC *bang* without *Lineage II* as one of its options).

Interlocutors: the clan, and the Binet server's regulars

Bong-hyun helped me set up my NCSOFT membership and *Lineage II* account, walked me through the steps of character creation, and asked his clan master to invite me to join their "clan," a formal association of players within the structure of the game. Players are given incentives to form and join clans, such as special abilities that non-aligned characters cannot acquire and access to community resources. Bong-hyun had never actually met any of the other clan members in person although he had belonged to the clan for several months. The others lived in and near Busan, Korea's second largest city, located in the southeastern region of the country. At my urging, Bong-hyun and I traveled to Busan in late June 2012 and met with our clan master—"Sweet Brother"—his wife, and another young married couple who were fellow clan members. Both couples had initially become acquainted online in *Lineage II*, and as their

110In its history thus far, *Lineage II* has gone through four major phases called "chronicles." The chronicles are further subdivided into "chapters," each of which represents a new "patch," or software update. With respect to online games specifically, patches typically entail the introduction of new game contents, e.g. areas, characters, items, abilities, features, etc. Patches are also one way for players to organize the history of an online game into separate iterations. In the twelve months that I was a participant observer in *Lineage II*, I played the third chronicle—the "Goddess of Destruction Tale"—in two different chapters, "Tauti" and "Lindvior."

romances developed they had met up offline. Sweet Brother's wife had even relocated to Busan from her home in the northwestern Gyeong-gi province to be with her husband. These four often got together on the weekends to play *Lineage II* together at different PC *bang* around Busan and in the nearby city of Gimhae. Our clan was not as strict as some others with respect to a hierarchy of roles within the group, nor did Sweet Brother require us to perform a certain quota of game activities per week. If several clan members happened to be online at the same time, then we sometimes tried to organize a group activity like a raid or a group hunting expedition. Otherwise, the clan was simply a loose association of friends and provided an outlet for socializing and discussing the not only the game but also what was happening in our daily lives offline.

On multiple occasions, I also encountered several individual players on the Binet server whom I was able to recognize by their characters' names. Although I did not forge relationships with any of them that were as strong as those with my fellow clan members and PC *bang* customers, there were a few who remembered my character and would remind me of activities we had done together. I was perhaps more memorable because my character's name —"Shichiro"[111]—was uncommon among Korean *Lineage II* players. Many players asked me if I was Japanese since there were a few players on the Binet server who were located in Japan, but when I disclosed my identity as an American anthropologist this marked me as even more of an outlier within the *Lineage II* community.

111Because of my character's association with my fellow clan members as well as his rather unique and identifiable name, I have chosen to give my character a pseudonym in order to protect my interlocutors identities. My character's actual name was a *hangeul* transliteration of a character's name in a popular American cartoon series, which—like the name Shichiro—was of vaguely Japanese origin.

The game's basics

Lineage II is similar in style and structure to other MMORPGs (e.g. *EverQuest*, *World of Warcraft*, *Ultima Online*, etc.). The game is set in a virtual world comprised of two continents—Aden and Gracia—and bears the familiar tropes of a medieval fantasy epic such as castles, monsters, and magical characters. Players use keyboards and mouses to move their characters around the virtual world's three-dimensional space from a third-person perspective located behind the characters. *Lineage II* is a persistent virtual world, which means that it does not "disappear" if an individual player logs off or shuts down his or her computer. Just a like a park or a building in the real world, the towns, fields, and dungeons in *Lineage II* are places that can be visited again and again. This persistence affords *Lineage II* players a sense of immersion in an alternative, fantastical reality.[112] *Lineage II*'s virtual world is hosted on several servers around the world, and is identical on each server save for the different individual characters that inhabit the space (a specific character can only belong to one server, although players may register different characters with different servers, providing that they have access to them).

Lineage II is open-ended insofar as it does not follow a strict narrative structure with a clear beginning, middle, or end. Players cannot "beat" the game by reaching the final boss or completing a final quest. The predominant aspects of gameplay that my interlocutors and I enjoyed were participating in group activities called raids and party hunts.[113] The groups of characters that carry out these activities are known as "parties," which are formed via the server's party matching system—a server-wide message board of sorts where players can advertise their

112There is an analogy to be made to the offline space of the PC *bang*, a business that is open twenty-four hours per day. In a sense, then, both *Lineage II* and PC *bang* are persistent social places not only ontologically, but also in terms of access.

113These are not the only *Lineage II* activities in which players can participate, but they are the ones that explicitly involve social interactions and therefore were of particular interest to me as an ethnographer.

desires to form a party and recruit the necessary members. Raids involve between one and four parties of seven characters each, depending on the difficulty of the raid. These raiding parties fight their way through a special area of the game world called a "dungeon" and battle a powerful non-playing character (NPC) known as a "raid boss." Party hunts are less complex activities that require a group of seven characters to fight and kill NPC monsters in a given area for an agreed upon period of time, often two hours or longer. Completing raids and party hunts yields: "experience points" and "skill points" that make characters more powerful; special game items like weapons, armor, potions, spells, enchantments, etc.; and "*adena*," *Lineage II*'s currency, which can be used to purchase items in the game's marketplace.

Players can have up to six characters per *Lineage II* account, but all of my interlocutors had many more than six; for instance, Sweet Brother boasted that he had over seventy characters. Characters differ from each other by sex (male of female), "race" (human, orc, dwarf, elf, dark elf, or "kamael," a sort of human-angel hybrid), and "class" (knight, warrior, rogue, archer, summoner, enchanter, wizard, or healer), each of which have their own strengths and weaknesses and which correspond to personal gaming preferences. Although players could theoretically create as many characters as they wanted by registering for multiple accounts, the people I played with tended to use only four or five characters with any degree of regularity. I was something of an anomaly because I only ever played as one character: a male, dark elf rogue. Bong-hyun suggested that this would be an easier character class for a MMORPG novice like me because the controls were relatively simple and the rogue's role in raids and party hunts as a "damage dealer" was fairly straightforward.

Characters progress through levels—a process known as "leveling up"—from 1 to 99 by

accumulating experience points. As a character reaches higher levels, it becomes exponentially more difficult to advance to the next level as the number of required experience points increases each time; for example, it took me only four days and a little more than twenty hours of total playing time to raise my character from level 1 to 65, but another eight months and several hundred hours to reach level 99. Leveling up makes a character more powerful and affords him or her new opportunities for participating in group activities since raids and party hunts are restricted to characters within a specified level range, e.g. 85 to 90, 91 to 95, etc. Therefore, leveling up one's characters is among *Lineage II* players' primary goals for both practical reasons —since higher level characters can participate in popular group activities that yield more experience points and *adena*, and have a greater possibility of yielding rare game items—and symbolic ones—as reaching high levels indexes a player's dedication and investment of time and energy in the game, as well as his or her relative skills and experience vis-à-vis newcomers.

Finally, communication in *Lineage II* takes place via different "chat" channels. Voice chat is an option as it is in other MMORPGs—mediated by third-party software applications—but in my observations the voice channel was reserved only for the most complex game activities such as high-level raids that require detailed coordination among individual players. Players primarily made use of the various text-based chat channels, which are accessible via a window in the bottom left hand corner of the game's visual interface. There are five different chat channels: "all," which addresses all characters within a certain range and is also the channel through which NCSOFT issues system-wide announcements; "market," reserved specifically for negotiating the sale and exchange of game items; "party," facilitating communication that is only made visible to players in the same party; "clan," visible to all clan members, no matter their location within

the world of *Lineage II*; and "alliance," a channel for communication among clan members as well as members of other allied clans. Players can carry on multiple conversations simultaneously in different channels, and they can modify the chat settings to receive notifications from one channel in another channel, e.g. making it so that intra-clan communication also appears in one's party channel.[114]

All of the forms of communication listed in the previous paragraph are synchronous; in other words, players can only receive communications via these channels if they are logged in at the same time. If players wish or need to communicate asynchronously—i.e. with one or more players who are currently offline—then they can utilize the intra-server "mail" function, a system which allows players to compose a message to another player in a pop-out window in the game's interface, similar to composing an email. Players can also attach items and/or *adena* to the message, and so it is both a communication and delivery system. The recipient is notified of the message, and if he or she happens to be offline can open it the next time he or she logs into the game.

The Qualities of Social Interaction in *Lineage II*

March 15, 2013: "What I like most about *Lineage II* is that you're not alone." I had joined Sweet Brother, his wife, and their two month-old daughter for dinner at a seaside restaurant in Busan that specialized in grilled eel. In between turning the strips of eel on the charcoal grill set into our table, Sweet Brother reflected on his favorite aspects of online games,

114This setting does not, however, mean that the party is made privy to the clan's communications. Only members of the same clan may send and receive messages typed in the clan chat channel no matter where the notifications happen to appear. Additionally, players can send each other direct messages that are visible only to the sender and receiver, which are called a *kwitmal* ("private messages"). In order to send a *kwitmal*, players type a quotation mark into any of the five channels followed by the name of the receiving character and then the message. In effect, sending a *kwitmal* temporarily initiates a private channel between two players.

emphasizing the opportunities that they afforded him for social interaction. “You can play together, and you can meet new people,” he said. Indeed, it was through *Lineage II* that he had first met and began courting the woman who was now his spouse and mother of his child. Beyond the obvious impact that the game had made on his family life, he enjoyed being able to immerse himself in the social world of *Lineage II* and develop friendships with other players, some of whom—like myself—lived far away from his home in Busan. In his offline life, Sweet Brother operated an insurance business out of a small office tucked away on the second floor of a commercial building in downtown Busan. He did not have any employees, which meant that he spent most of his days alone in his office. Whenever he was not busy speaking with clients on the phone or preparing insurance contracts, he broke up the monotony of his day by logging onto *Lineage II* and playing with his clan members and the other players whom he had met in the decade since he had first started playing.

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Most social interactions in *Lineage II* are facilitated through participation in party-based activities. Besides clans, parties are the game's basic social unit. Most parties are *ad hoc* alliances of individual players who do not know each other outside of *Lineage II* and whose associations last only as long as the party activity. Working in a party is a necessity for many of the game's activities—defeating powerful enemies like raid bosses, for instance, is impossible for any player to accomplish alone—and so in this respect *Lineage II* encourages collaboration and social interaction. But beyond these instrumental reasons for interacting with others online, players also derive pleasure from the opportunities for socializing that they find through participation in the game. Even if players are alone in the offline space where they use their computers, they are, as

Sweet Brother put it, almost never alone online.

Although most intra-party interactions involve the tasks at hand—e.g. coordinating actions, giving advice about game items or spells, divvying up the spoils from a raid itinerary—players also use parties as fora for discussing all manner of topics, not all of which were directly related to *Lineage II*. Weather, in particular, is a common theme in many interactions; for example, during the monsoon season in June and July I often observed comments from party members who identified as being from the southern regions of Korea about the heavy rain that they were experiencing, while in Seoul the skies were sunny and clear. In moments such as these our collective recognition of being in multiple, disparate offline locations yet sharing an online space together underscored two important and related aspects of online gaming sociality: the partiality of information, and the asymmetry of experience.

Partiality and asymmetry

Intra-party interactions in *Lineage II* are shared experiences that are mediated by the game's environment, which, crucially, never changes. Players are continually made aware of the fact that their offline experiences are often considerably different by virtue of their in-game interactions, such as conversations about the weather. The social worlds that emerge through intra-party interactions are defined solely by what players are willing and able to share via the chat channel. Whereas context is always emergent through interaction (Goffman 1959), participants in offline situations have recourse to a variety of semiotic tools for guiding interpretation—e.g. gestures, tone, mood, etc.—that are either unavailable in online communication or must be signaled via different methods. The result is that online game players

must develop techniques and strategies for facilitating interactions in a context where online co-presence does not afford the same information to all participants that offline co-presence does.[115]

One way that partiality of information affects sociality in *Lineage II* is the difficulty that players face in determining important social identities. Consider the following incident that occurred when I had joined Sweet Brother for a raid itinerary. As we were waiting for our raiding party to populate, Sweet Brother and I monitored the clan chat channel. Soon one of our fellow clan members logged on, signaling his arrival with a simple greeting—"*Annyeong haseyo*" ("Hello")—to the rest of the clan.

"*Annyeong haseyo*," Sweet Brother replied. "It's been a long time. What are you doing now?" He then sent a party invitation request to the newly arrived clan member, who accepted and soon appeared on the list of party members on the left hand side of the game's visual interface.

Ordinarily this would have been an unremarkable interaction. However, on that day Sweet Brother happened to be logged on from his wife's *Lineage II* account and playing as one of her characters. It was a known fact within our clan that he did this from time to time, but by no means was it a regular occurrence. I knew that it was he who was controlling the character because he had indicated as much to me when he invited me to join the party. However, he had not indicated this to our fellow clan member.

"*Noona*, *annyeong*," the clan member said, employing the Korean pronoun that younger men use to address older women (*noona*). "Yes, it's been a long time."

"I'm not *noona*, I'm *hyeong*," Sweet Brother typed, correcting him and using the Korean

115I do not mean to imply that participants in offline interactions enjoy perfect symmetry of information. Rather, the information that is available for establishing the context(s) of interaction—which is crucial for the creation of shared experience—is qualitatively different in offline and online interactions.

word for “older brother” (*hyeong*).

“Oh! *Hyeong*, I'm sorry, haha,” the clan member replied. The clan member's misrecognition had been unintentional, and Sweet Brother had not taken offense, but this sort of confusion would never have happened in a face-to-face, offline interaction or even in a telephone conversation because Sweet Brother's identity would have been clear from his appearance and/or his voice.

In this specific interaction, the interlocutors were members of the same clan and thus more familiar with each other than most players. Among relative strangers, the difficulty of determining social identity is even greater, especially among Korean speakers, for whom age and gender are vitally important pieces of information that establish rules for choosing which pronouns and modes of address to use. Players cannot make assumptions about each other's age and gender identities by assuming an isomorphic relationship between character and player; *Lineage II* characters do not age, and male players often play as female characters, and vice versa. The clan member addressed Sweet Brother as “*noona*” (“older sister”) based on the information available to him and his subsequent inferences about his interlocutor. By using the word *noona*, he created a contextual framework for the interaction and also revealed his own gender (had this clan member been female, the pronoun would have been “*eonni*,” the name that younger women use to address older women). By correcting him, Sweet Brother provided the missing information and solidified the interactional frame moving forward regarding his and the clan member's genders and ages relative to one another.

Age is not only a factor in choosing personal pronouns, but also in conjugating verbs. In a conversation between familiars, or when addressing a younger interlocutor, the speaker will

typically use the informal register, e.g. "*Bballi wa*" ("Hurry up"). But among strangers or when addressing a someone older, the speaker will use the formal register, e.g. "*Bballi oseyo*" ("Please hurry"), where the verb "to come" (*oda*) is conjugated using the *shi* particle—indexing the formal register—and the polite form -*yo* verb ending. Because a player's age cannot be verified unless he or she makes this information available, the default mode of address in *Lineage II* communication online at minimum uses the polite form if it is not fully in the formal register. Bong-hyun explained that he always used the polite form when communicating with anyone he did not know offline because it was better to err on the side of caution so as to avoid causing offense unnecessarily.

Social conventions and communication practices in *Lineage II* illustrate the creative strategies that players develop for dealing with partiality of information, asymmetry of experience, and identity fragmentation across the online-offline gap. These strategies are part and parcel of the gaming sociality that emerges in the taskscape between online game chronotopes and the offline chronotopes where gaming takes place. Gamers must learn how to manage their everyday practices and interactions in online games in response to the spatiotemporal reorganization of Korean social life generated by and through informatization.

Suk-je **and Instanced Zones**

August 10, 2012: "*Annyeong*." Sweet Brother's greeting appeared in the clan chat channel, signaling his arrival online. I welcomed him with a conventional greeting, but kept it brief as I was in the midst of a Fortuna raid, battling wave after wave of zombies and skeleton warriors.

"Shichiro, hello," Sweet Brother replied. "What are you doing? Have you finished your *suk-je*?"

"Not yet," I told him. "I'm in the middle of doing Fortuna."

"How is it going?" he asked.

"It's difficult," I reported, adding two semi-colons—";;"—to the end of my reply, symbolizing droplets of sweat, a custom that *Lineage II* players used to index hardship.

"Work hard [*yeolshim-hi*]," he admonished me. I did not reply as I had reached a critical phase of the raid that demanded my full attention. Our party soon prevailed and moved onto the next step in our raid itinerary. An hour later—after we had completed the itinerary—I prepared to log off, typing my customary parting message into the clan chat channel: "*Jeo dora ol keo-ye-yo*" (simply, "I'll return [later]").

"Shichiro, did you finish your *suk-je*?" Sweet Brother asked, just as I was about to close out the game window.

"Yes, I did," I replied. "See you tomorrow."

"Thank you for your hard work," he said, and with that I logged off and left the PC *bang*.

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Suk-je (□ □) is the Korean word for "homework." Ordinarily it is used in the context of talking about school assignments, but among *Lineage II* players *suk-je* refers to all of the raids and party hunts that individual characters are eligible to attempt on a daily basis. Its usage in this context also reinforces the sense that, for some gamers, playing *Lineage II* is akin to a working a job with a schedule of allotted tasks.

A player's *suk-je* is comprised of various raid and hunt itineraries, and therefore changes

as one's character progresses to higher levels. For example, at level 95 my character's *suk-je* consisted of the 4-*jong* (or "4 kinds") itinerary—level 95 Kartia's Labyrinth, extreme Spezion, Guillotine Fortress party hunt, and Nornir—in addition to the Fortuna and ordinary Spezion raids, which were most often performed as separate tasks rather than as part of a larger itinerary. Once Shichiro had reached level 97, however, the 3-*jong* itinerary—Seed of Hellfire, Baylor, and Crystal Caverns—was added to my *suk-je*.[116] The sequence of activities in an itinerary was indicated by the order in the title of the party announcement[117] and followed informal conventions designed by players to maximize efficiency of playing time and party resources.[118] Itineraries themselves, however, could be attempted in any order. Ordinarily I would consult the Binet server's party matching service upon logging on and join whichever parties were currently available; sometimes that meant doing 4-*jong* first, and at other times 3-*jong*. While these itineraries were always part of my daily tasks, the "big three" Octavis, Istina, and Balok raid itinerary—and, after I reached level 98, the Tauti raid—supplemented my regular *suk-je* on Wednesdays and Saturdays. Therefore, players' *suk-je* operated on two intersecting temporal cycles—one daily and one bi-weekly—due to an organizational and programming principle in online games known as the "instanced zone."

116Occasionally I would see announcement for 7-*jong* parties, a combination of level 95 4-*jong* and level 97 3-*jong*. However, participation in a 7-*jong* itinerary entails a time commitment of approximately two hours, and therefore is not the most appealing option for many players. By dividing *suk-je* into shorter itineraries, players have greater flexibility in allocating their playing time. Furthermore, separating itineraries affords opportunities for interacting with different players.

117E.g. a 95 4-*jong* itinerary was sometimes rendered as "*Mi/Geuk/Gi/No*" (미/극/기/노) in a party announcement, using abbreviations for 95 Kartia's Labyrinth (95 ***Mi****gung*), extreme Spezion (***Geuk*** *Spasia*), Guillotine Fortress (***Gi****-yo-tin*), and Nornir (***No****reunil*). The order of these syllables communicated the order in which each phase of the itinerary was to be completed.

118NCSOFT's *Lineage II* homepage also contains suggested itineraries with descriptions of the activities involved. However, as a general rule, experienced players know the order of a given itinerary from having attempted it many times previously.

The temporality of instanced zones

"Instanced zones" (which *Lineage II* players call by their transliterated name "*inseuteonteu jon*," or "*in-jon*" for short) are a fundamental spatiotemporal characteristic of massively multiplayer online games. An instanced zone is a "copy" of a raid dungeon that is created every time a given party attempts that specific raid. For the duration of the raid, the members of the party are the only characters that appear in this space (besides the NPCs that populate the dungeon). Instanced zones are one of the mechanisms that MMORPG programmers employ in order to reduce player congestion and free up processing power for the game's server (see Nardi 2010:118-120). Since online games like *Lineage II* are shared spaces with populations that grow and shrink depending on the moment, when there are comparatively more individual players online at the same time activities within the game appear to "slow down" because of the demands being made on the game's server. By making use of instanced zones, play can proceed more smoothly and in a fashion that is more enjoyable for individual players.

In *Lineage II* each instanced zone has its own time restrictions that fall into one of two categories: zones that reset on an hourly or multi-hourly basis tied to when a character had last entered the zone, and zones that reset at a specific "real world" time. A player's ability to participate in instanced zone activities is structured by these reset cycles, as well as by restrictions placed upon individual characters. For example, a character can do the ordinary Spezion raid once every four hours, but can only participate in the Octavis, Istina, or Balok raids one time after their instances reset every Wednesday and Saturday morning and then never again until the next reset. Players can monitor their characters' statuses vis-à-vis instanced zone restrictions by opening a window in the game's interface that displays a list of the zones for

which the character is currently ineligible and the time remaining before that character's eligibility is restored. This list also serves as an informal "checklist" for one's *suk-je*.

The instanced zone system demonstrates how external, offline temporal metrics are constitutive factors of *Lineage II*'s temporality as they help to structure the rhythms and duration of players' daily engagements with the game. Problems can arise when a player joins a raiding party and has forgotten that his or her character is still restricted from entering one of that raid's instanced zones for several hours, in which case the player must issue an apology and withdraw from the party. Even though it is an understandable mistake, it is still considered bad manners among *Lineage II* players as it delays the other party members' entry into the raid dungeon until a replacement character can be recruited. In other cases, a player might volunteer that his or her character has only a short time remaining until the instanced zone restriction is lifted—e.g. "*in-jon 2bun*" ("in[stanced]-zone 2 minutes")—in order to alert the party leader and other members that there will be a short delay before the raid can begin.

Party hunts work somewhat differently in structuring a player's *suk-je* as they take place in non-instanced zones. Several hunting parties can occupy the same zone simultaneously, but each must stake out its own area within the zone in which to hunt.[119] Since there are not any restrictions on a character's ability to enter hunting areas, instanced zone constraints do not apply. However, these areas do afford opportunities to complete a "daily quest" (*ildan haru kweseuteu*, or "*il-kwe*" for short) for which a character must record a quota of kills for various

119For relatively large zones like Guillotine Fortress this is an easy proposition as there is enough virtual space for many parties to roam around hunting at that same time. The situation is different in the more constricted space of the Seed of Hellfire hunt, which can only accommodate around ten hunting parties at any given time. Therefore, players adopt an informal "reservation" (*yeyak*) convention by which newly arrived parties ask the members of parties that are already there how much time they estimate their hunt will last, and then wait until a spot becomes available.

enemy NPCs that spawn[120] in the hunting area. As the name suggests, these quests could only be attempted once every twenty-four hours. Therefore, while players might choose to join multiple party hunts over the course of a gaming session, they could only reap the experience points and *adena* awarded for an *il-kwe* once per character per twenty-four period.

Given the restrictions imposed by instanced zone restrictions and daily quests, *suk-je* consists of all the raids and *il-kwe* party hunts that a player's character—or, more likely, *characters*—are eligible for on any given day. In this way, *suk-je* is one of the primary organizing elements for participation in *Lineage II* and an informal metric by which a player can assess his or her own objectives for a gaming session. While completing one's *suk-je* does not mean that the gaming session must come to a close, it does provide a symbolic endpoint for a day's activities. Raids and hunts, itineraries, and *suk-je*, therefore, are joined in a hierarchical relationship that structures the tempo of players' participation online and must be calibrated with offline temporal metrics.

Nokada and *Lineage II*'s Phenomenological Temporality

May 2, 2012: I met Bong-hyun at 10:45 in the morning at his mother's dry goods store for the trek over to Super PC Bang As soon as we had passed out of sight of the store, Bong-hyun removed a cigarette from the pack in his book bag, and we stopped at a bench under some trees near one of the entrances to the Gwanghwamun metro stop.

120In video and computer games, "spawning" refers to the appearance of a character in an area of the game space. In *Lineage II* spawning occurs in three ways: 1) when a player first logs on, his or her character spawns in the area where he or she was at the most recent log off (when a player is logged off, his or her character disappears from the game world); 2) when a character transports from one area of the game world to another by any means other than walking, running, or riding a horse, then the character spawns in the subsequent location. This includes transport into, out of, and within instanced zones; and 3) when a NPC character is killed in a non-instanced zone, it re-spawns in a nearby location after a brief period, usually no longer than one minute.

"Shichiro," he said, calling me by my *Lineage II* character's name, a habit he had started recently. "What will you do today in *Lin-too*?"[121]

"I want to level up to 77," I said. "So, just hunting, I think." I had not been playing *Lineage II* for very long, but already I had learned that leveling up was the key to not only refining my game mechanics and skills but also gaining entry to the raids and hunts that I had watched Bong-hyun play. He, too, was eager for me to join him in these activities.

"Ah, *nokada*," Bong-hyun said wistfully, taking a long drag from his cigarette. "So boring. But you must!" He had recently taught me this word—*nokada*—as a way of describing the slow, laborious process of hunting NPC monsters for hours on end, all in the service of accumulating experience points. "Me too," he continued. "Alicia needs to be level 85." Alicia was an enchantress and one of Bong-hyun's auxiliary characters. For the past several days he had been working to level Alicia to this threshold so that she could receive a special enchanting skill that only characters at or above level 85 could learn.

Bong-hyun finished his cigarette and we continued on our way, discussing our plans for the afternoon. When we reached Super PC Bang, we greeted Mr. Legend (who was already there), settled into our seats at adjacent stations, and logged onto *Lineage II*. The day passed rather uneventfully. I spent the day hunting monsters in an area that Bong-hyun recommended, and he switched back and forth between doing the same with Alicia and going on raids with some of his more powerful characters. Eventually I logged off and began reviewing my field notes, adding in details while I waited for Bong-hyun to finish hunting with Alicia. Finally he yawned, stretched his arms out with fingers interlocked, and said, "OK, Shichiro, let's go home."

121"*Lin-too*" was shorthand for *Lineage II* that many Korean online gamers used—both in online text chats and offline conversations—to distinguish the game from its predecessor, the original *Lineage*. However, it was also common for players to simply use the name "*Liniji*" (*Lineage*) when the referent had already been made clear by context.

As we exited the PC *bang*, we saw that the sun had already set, and that the twilight was beginning to recede into night. “Huh!” Bong-hyun exclaimed with surprise. “It's dark already!” Without either of us fully realizing it, we had just spent eight hours inside Super PC Bang. Bong-hyun chuckled, remarking that to him it had only “seemed like three or four.”

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Nokada[122] is a Japanese loanword derived from the word *dokata*,[123] meaning “unskilled manual laborer.” *Nokada* translates into English as something akin to “rough work” or “physical labor,” and is most often used in Korea to refer to construction work and the day laborers who do it.[124] In the context of Korean online gaming culture it denotes long, sustained periods of play that are repetitive and tedious. *Nokada* is similar in form and function to styles of play that are common features of many online games, especially in the MMORPG genre. T.L. Taylor notes how the *EverQuest* players with whom she spoke described advancement through the game as “'the grind,' which is the experience of going through painfully boring or rote gameplay with slow advancement” (2006:76). Bonnie Nardi describes a similar phenomenon in *World of Warcraft* that her interlocutors called “farming”: “Farming referred to repetitive actions undertaken to acquire game materials such as killing the same monster over and over again. (The term *grinding* was also used)” (2010:98-99). Both Taylor and Nardi note that grinding and farming are demonstrations of the willingness that some players have to dedicate tremendous amounts of time and energy to game activities. Grinding, farming, and *nokada* are all styles of

122Written as ㄱ ᄋᆞ in *hangeul.* The use of *nokada* to describe online gaming practices is not limited solely to *Lineage II*. For example, in a response to a discussion thread about *nokada* on a Naver Knowledge message board a user going by the name cupid_j7 mentions that the word is used in reference to “killing monsters until one’s hands become sweaty” in *MapleStory*, a Korean MMORPG that is especially popular among children (Source: http://kin.naver.com/openkr/detail.nhn?docId=1400, Accessed March 18, 2014).

123 □ □ or ヶ ヵ ㇶ in Japanese script.

124Kim Mi-rye's 2009 documentary *Nogada* addresses both usages.

play that characterize particular online gaming subjectivities.[125] Since all three practices are characterized not only by repetition, but also, crucially, by duration, they come to define online game players and their behavior in temporal terms.

Nokada *in* Lineage II

In the context of *Lineage II*, the object of *nokada* is hunting and killing enemy NPCs for hours on end.[126] Among my fellow players it was an activity performed primarily in the service of leveling up one's character. Bong-hyun and Sweet Brother were eager for me to level Shichiro up to at least 85, as this was the threshold at which I would be able to join them for raids in which their characters could also participate. As they explained to me, leveling up would not only help me learn valuable game techniques, but also enhance my experience of *Lineage II* and afford me more opportunities for social interaction.

A typical *Lineage II nokada* session involves a single player, alone in one of Aden or Gracia's many hunting zones, fighting and killing enemy NPCs that continually "respawn," i.e. come back to life. Occasionally one might encounter other players in the same hunting zone also doing *nokada*. In my experience, whenever this happened the players passively acknowledged the presence of other players and did not interfere with their *nokada* or make any attempts to communicate. Rather, they simply staked out their own area of the hunting zone and restricted their movements within its imagined boundaries. For characters like mine that cannot cast their own defensive and offensive power-ups or healing spells, *nokada* is punctuated by periodic

125Taylor (2006) calls these types of players "power gamers." My informants sometimes used the term *geim maeniak* ("game maniac") to categorize themselves and their play.

126As a commenter on a Naver Knowledge message board explains it, "[*Nokada*] means a phase in a game of killing only monsters" (Source: http://kin.naver.com/qna/detail.nhn?d1id=13&dirId=130503&docId=122312174&qb=64W46rCA64ukIOydvOuzuOyWtA==&enc=utf8&section=kin&rank=2&search_sort=0&spq=1, Accessed March 28, 2014).

returns to nearby villages where characters can recuperate and use *adena* to purchase power-up items. The hunt continues in this fashion until the player grows tired of *nokada* and switches to another activity. Alternatively, some players—like Bong-hyun—perform relatively brief *nokada* sessions in order to "kill time" while they wait for raiding and hunting parties to populate, at which point they abandon the hunt and transport to wherever the rest of the party is assembling.

I learned about the virtues and necessity of *nokada* in *Lineage II* by watching Bong-hyun and Mr. Legend. Occasionally Mr. Legend would spend the entire day at the PC *bang* doing nothing but *nokada* (although he never actually used this term, preferring to say that he was "just hunting"). He approached the activity as if it were a chore, but not one that was wholly unpleasant. In fact, *nokada* allowed him to collect enough *adena* to purchase valuable items that he could subsequently resell on itembay.co.kr, an auction website where online gamers could sell virtual game items for real world Korean currency.[127] This was one of Mr. Legend's methods of supporting his *Lineage II* and PC *bang* activities. Bong-hyun took less delight in doing *nokada*, finding it dull and monotonous, but nonetheless crucial to his success in *Lineage II*. He told me that when he was younger he used to do *nokada* for longer periods of time—boasting that he once spent twenty-four uninterrupted hours doing nothing but hunting—but now he could not tolerate it for much more than four consecutive hours. Although *nokada* was certainly more boring for him than raiding, Bong-hyun maintained that it was a reliable method of gathering *adena*, which he needed in order to buy new items for his characters.

127Some North American and European MMORPG gamers engage in a similar practice, selling items and buying game currency on websites like IGE.com. For an extended discussion of the historical connections among MMORPGs, PC *bang* promotions, and "real-money trading" practices, see Huhh 2008:31-32.

Nokada *and temporality*

The phenomenological temporality of doing *nokada* contrasts sharply with more fast-paced *Lineage II* activities like raids and party hunts, both of which also have well-defined beginning and end points, unlike *nokada*. In this respect, *nokada* exhibits many of the same qualities as the concept of "flow" developed by the psychologist Mihaly Csikszentmihalyi, a mental state in which there is:

> "a sense that one's skills are adequate to cope with the challenges at hand, in a goal-directed, rule-bound action system that provides clear clues as to how well one is performing. Concentration is so intense that there is no attention left over to think about anything irrelevant, or to worry about problems. Self-consciousness disappears, and *the sense of time becomes distorted*" (1990:71, my emphasis).

This sense of temporal distortion that Csikszentmihalyi identifies as one of flow's characteristics resonates with Bong-hyun's surprise in the vignette above at how much time had passed while we had been doing *nokada* at Super PC Bang. However, *nokada* also contrasts with Csikszentmihalyi's definition of flow insofar as he insists that flow is an autotelic activity, i.e. that "doing flow" is not a means to an end but rather an end in itself. While this may be true for some *Lineage II* players, my informants talked about *nokada* strictly as an activity that they performed in the service of a higher order goal, namely leveling up and/or collecting items and *adena*.

Beyond the context of *Lineage II* and online game chronotopes, *nokada* also contrasts with the temporal aesthetics expressed as *bballi bballi munhwa* in Korea's information society chronotope. *Nokada* contributes to a gaming sociality that is pathologized in Korean medical discourse as online game addiction as it entails a player's inability to step away from the game. However, for *Lineage II* players, *nokada* is a normative aspect of their engagement with the

game, albeit one that most regard with mild disdain. In other words, whereas the practice of doing *nokada* is subsumed in online gaming behavior that is "out of synch" with a normative model of IT use in Korea's information society by virtue of its qualitative slowness and solitude, it is one of many activities that constitute some—though not all—normative gaming socialities.

Lag

July 17, 2012: When Bong-hyun and I arrived at Super PC Bang, Mr. Legend greeted us and began excitedly talking about a special event that was happening in *Lineage II* in a matter of hours. Earlier that morning he had read an announcement on the *Lineage II* homepage that the "Queen Ant"—a powerful raid boss—was scheduled to appear at a specific location in the game world at 2:00 PM sharp. Any character online when the Queen Ant appeared was invited to take part in a battle to defeat her. If she could be vanquished, each character would receive a game item apportioned at random from all of the possible potions, spells, weapons, armor and more that were available in the *Lineage II* universe. While most of these would no doubt be run-of-the-mill items, there was a slim chance that a character could receive an especially rare and valuable item, a possibility that inspired both Mr. Legend and Bong-hyun.

Just before 2:00 PM the official announcement of the Queen Ant's location came across the general chat channel. I directed my character to follow Bong-hyun's through a series of portals, eventually arriving in an open field under a blood-red sky in an area of the game world that I had never seen before. Hundreds of other characters had already begun to gather on the shore of a lake just below our arrival point. All of a sudden the Queen Ant appeared from a burst of light, towering over the assembled characters, who immediately circled around her and began

launching their attacks. As the battle progressed, the animation of the Queen Ant's movements as well as those of every individual character became "choppy," and I noticed that there was an uncharacteristic delay between my striking of the keys and the corresponding movements of my character. The resulting effect was a sense that the encounter was happening in slow motion. Although only about ten minutes had passed since the beginning of the skirmish, it "felt" much longer.

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What we experienced in the Queen Ant battle was "lag," a significant characteristic of *Lineage II*'s phenomenological temporality. In the context of digital computing, lag is the experience of delay between user input and the performance of a corresponding action in a software application. In other words, it is the disruption of an otherwise fluid temporality, experienced as a sudden slowness. Furthermore, experiencing lag re-inscribes the discontinuity of offline and online spacetimes. Whereas time in the offline world can be subjectively experienced as moving slowly—e.g. the old maxim "a watched pot never boils"—in the online world slowness can be held up to external measurement. In *Lineage II* and other online games, lag is a product of the relationship between external temporal metrics and the subjective, phenomenological temporality of gameplay.

Scholars of digital culture and computer science have recognized lag as a salient dimension of computer-mediated activities in a diverse range of contexts (e.g. Boellstorff 2008; Corcoran 1996; Savery & Graham 2013; Zhang et al. 2006; Ahmed & Shirmohammadi 2012). Not so long ago, lag was *the* defining characteristic of temporal experiences across the online-offline gap. In the pre-broadband era of dial-up connections, "waiting" was the default mode of

engagement with the Internet for most users: waiting for web pages to load, waiting for applications to boot up, waiting for packets of information to download, etc. As the digital artist Marlena Corcoran described the situation at the time, "Time online is perceived mainly as time wasted, time spent tapping fingers or multitasking while lag takes its toll" (1996:375). However, the reorganization of subjective temporality in the context of informatization—namely accelerated rates of data transfer—transformed lag from an accepted fact of online experience for Korean Internet users into an unexpected occurrence, something that signifies a problem rather than a normative state of affairs. In other words, "slowness" has gone from being the *de facto* mode of online activities to becoming an unfamiliar quality of that experience.

Lag in Lineage II

Lag was one of the most frequent complaints that players voiced about *Lineage II* in the game's chat channels. Lag could manifest in a variety of ways—mouse lag, keyboard lag, language lag, movement lag, graphics lag, etc.—and for a variety of reasons: because of equipment or hardware failure, because of glitches in the game's software, because of a slow Internet connection, or because of character congestion in non-instanced zones. Additionally, not all players experienced lag equally at any given moment. Sometimes lag affected only individual players, and at other times it affected every player present in a certain area of the game world, as in the Queen Ant battle described above.

Individual players primarily experience lag in *Lineage II* as a sudden transition in the flow of gameplay from their characters moving fluidly through the game space to an abrupt "choppiness." Typically this happens when players enter an instanced zone with a party. In these

situations, the character's movements as well as the movements of any NPCs appear to stop for a moment, then start again, only to stop once more, continuing along in this halting fashion until the problem either corrects itself or the player is forced to restart the game. While the other characters in the party move through the instanced zone without any trouble, a player experiencing this kind of lag will be noticeably late to encounters with enemies, usually reporting "*lek* ;_; " ("lag [crying eyes]") or "*lek* ;;" ("lag [drops of sweat]") in the party chat channel upon rejoining the group. Although in situations like this lag directly affects only one member of the party, its effects extend to the rest of the party because other party members have to adjust their play to that of the member suffering from lag. In other words, even when lag is limited to individual experience, it is constitutive of—and encroaches upon—the shared experience of social interaction in *Lineage II*.

Lag can also be experienced collectively, especially in non-instanced game zones where large groups of characters gather. In these circumstances, lag is not the result of a single faulty Internet connection, nor an individual computer's inadequate processing power, but rather a deficiency in *Lineage II*'s programming and the capacities of its servers. As opposed to individual lag, players can predict and anticipate the collective lag that occurs in events like the Queen Ant battle. As such, lag is a constitutive dimension of *Lineage II* sociality, a phenomenon that players know they may encounter and about which they can commiserate in chats.

Beyond the practical frustrations that lag arouses in *Lineage II* players, it is also a phenomenon that disrupts the immersive fantasy of *Lineage II*, challenging the phenomenological experience of synchrony between game time and offline time and revealing the spatiotemporal divisions across the online-offline gap. Additionally, when lag results from

problems with Internet connections it exposes the lack of *total* reliability that players can expect from Korea's information infrastructure. Just as infrastructures become most visible in moments of breakdown (cf. Star 1999), the discontinuity between online game temporalities and offline temporal experiences becomes most apparent in moments of disrupted synchrony.

Conclusion

Online gaming is a practice that requires players to act simultaneously within multiple spacetimes across the gap between online and offline worlds. In this way, it entails players interacting with a taskscape that falls across multiple Korean online gaming chronotopes. On the face of it, *Lineage II* is virtual place, an amalgamation of computer code and digitized images that exists outside of—or perhaps "beyond"—the offline world; it is a surreality. It is also subject to its own tempos and methods of accounting for the passage of time. However, through the daily practices of *Lineage II* players, this virtual place and the temporalities that characterize it are set in relation with the offline world places where those players are located—like PC *bang*, homes, offices—and the external temporal metrics that are relevant there. *Lineage II*'s world does not collapse into the "real" world, nor does it make any pretense of being an isomorphic representation of that world, spatially nor temporally. Rather, for the players who participate in it, *Lineage II* is a site for social practices and behaviors undertaken simultaneously in online and offline spaces, and according to concurrent tempos of experience. Sometimes the normative expectations for these practices are complementary and at other times they conflict, reinforcing the gap between online and offline while demonstrating how each constitutes the experience of online gaming in equal measure. Learning to move within and among the multiple spaces and

times of a game like *Lineage II* is an important skill that characterizes Korean online gaming socialities, and emergent subjectivities in the Korean information society more broadly.

Crafting Stars: e-Sports and The Professionalization of Korean Online Gaming Culture

February 14, 2013: Just before 6:00 PM, I climbed the stairs to the second floor of Yeong-sang High School in Seoul's Mok-dong neighborhood, home to GOM TV studios and the Global *StarCraft II* League (or "GSL" for short). The modest setting belied the GSL's status as the most competitive and prestigious professional *StarCraft II* tournament in the world. Four of the remaining sixteen pro-gamers in 2013's Season 1 tournament would be battling in a double elimination format for two spots in the quarterfinals. The matches promised to be exciting and closely fought, but even by the GSL's already lofty standards one of the match ups that night would be like nothing most *StarCraft* fans had ever witnessed before.

Before making my way onto the stadium floor, I exchanged my ID card at the reception table for some headphones and a portable receiver that would allow me to listen to "Tasteless" and "Artosis," two retired American pro-gamers who now work full-time for GOM TV as "shoutcasters," the name given to e-sports commentators. The "stadium" was more television studio or theater than sports complex, a space no bigger than a large classroom with seating for about fifty spectators, and some standing room for others. I found a seat among the aluminum chairs arranged in front of the "stage," which consisted of four enclosed booths facing each other, two on each side of the room. A large projection screen between the booths at the front of the room featured a live view of the game itself so that the fans could follow along with the action as the shoutcasters—three Korean men to the right and Tasteless and Artosis to the left of the fan seating—provided commentary.

Twenty-nine other fans had arrived before me, a relatively large group for this stadium, and considerably more than I had seen during the GSL's preliminary round matches in previous

weeks. Some had brought "*chi-eopeul*" ("cheerfuls") with them, homemade signs decorated with messages for the evening's competitors and some rather impressive drawings of *StarCraft II* units. If they were lucky, the GSL's television producers might feature their cheerfuls on the live broadcast during a cutaway from the action. Thousands more fans both in Korea and around the world were no doubt tuned in to watch online livestreams of the matches through GOM TV's website or one of Twitch.tv's e-sports channel, and still more would later pay to watch replays via GOM TV's video on demand service.

At 6:10 PM sharp the lights in the stadium lowered, the GSL's theme music blared over the audio system, and the four competitors walked to the middle of the stage and bowed to the audience before retreating to their booths to begin warming up. The night's first match between Jang Min-cheol, also known as SK_MC,[128] and Lee Won-pyo (StarTale_Curious), was not without intrigue, but it passed relatively uneventfully: In the best of three match, Curious took the first set in a little under ten minutes, and then the second in just over twenty minutes, dispatching the former GSL champion and advancing to the winner's match. The second bout would offer far more excitement.

Match 2 pitted Koh Byeong-jae (FXO_GuMiho), against Hwang Kang-ho (LG-IM_LosirA). GuMiho was, at the time, one of the strongest Terran players in the world, nicknamed "the towel Terran" because of the small towel that he always used to cover his mouse while playing. His hyperhidrosis condition caused him to sweat profusely, and so the towel helped improve his grip on the mouse, preventing any potential "mis-clicks" that could doom his

128All *StarCraft II* pro-gamers have nicknames that—along with their team affiliation—identify them among fans and other players. For example, SK_MC's nickname is "MC" (an acronym for "Min-cheol" when written in Roman letters), and "SK" refers to SK Gaming, the German e-sports team that sponsors him. Korean fans are much more likely to refer to pro-gamers by their "true" Korean name than their nicknames, while the inverse is true among non-Korean fans. In this chapter, I primarily refer to players by their nicknames, and I do not use pseudonyms for pro-gamers' names or nicknames unless otherwise noted.

chances. LosirA was a fan favorite and GSL veteran, renowned in the *StarCraft II* global community for his high "actions per minute" (APM) rate, a skill that he attributed to years spent learning piano as a child.

GuMiho took the first set in around twenty-two minutes, but LosirA was able to rebound and win the second set in twenty-seven minutes, setting up a decisive third set. As the players decided upon a new map for the final set and waited for the game to load both the FXO and LG-IM coaches entered the booths to consult with their respective players and offer them some final pieces of advice. GuMiho removed his jacket and began fanning himself with his right hand as he was already dripping with sweat. LosirA took a long quaff from a bottle of water next to his monitor and popped a fresh stick of gum into his mouth.

The crowd murmured as the third set began and the broadcast view on the large screen at the front displayed GuMiho's opening build at his natural base. The fans were reacting to GuMiho's unorthodox strategy known in e-sports as a "cheese,"[129] a situation in which he would attempt to win the match in the opening minutes by gambling that his opponent would not have prepared an adequate defense. If LosirA did not send one of his reconnaissance units to scout GuMiho's maneuvers, then the set—and the match— could be over in a matter of moments. However, one of LosirA's units spied GuMiho's trickery, forcing GuMiho to cancel his plans. LosirA's fans applauded his foresight while GuMiho's supporters sighed with disappointment. After the unconventional start the set stabilized, with both players following the conventional early game progression of mining resources and building up their respective armies. Anxious whispers spread throughout the crowd as the minutes ticked by with no clear indication of which

129Korean *StarCraft II* fans and players use the same terminology, transliterating "cheese" to "*chi-jeu*" (치즈). The term is used in other e-sports and digital game contexts, and carries pejorative connotations (viz. Moeller et al. 2009). Among *StarCraft II* fans, cheeses are exciting and unexpected techniques, but pro-gamers who rely on them too much to win matches are regarded as lucky rather than skillful players.

player was in the lead. Occasionally their armies fought brief skirmishes, but all of these encounters ended in draws. Just as it seemed that GuMiho had gained the upper hand and would be able to deliver a decisive blow, LosirA launched a perfectly timed counterattack, eliminating GuMiho's most powerful units. The crowd let out collective gasps, and cheered enthusiastically with each successive engagement. Whatever rooting interests they had held at the beginning of the match had been replaced by fascination at what was unfolding on the screen.

As the set dragged on, both players' armies were nearly depleted, their economies almost bankrupt, and their mining locations all but dried up. The fans were becoming tense. While the average GSL set lasted between twenty and thirty minutes, even the longest sets rarely eclipsed forty-five minutes; this one was already approaching one hour. Tasteless and Artosis wondered aloud whether this might well end up being the longest set in GSL history, relishing the idea of casting something so momentous in e-sports history. The crowd laughed nervously and chatted restlessly with each other as we all waited to see which player would make the first mistake. Both GuMiho and LosirA looked mentally exhausted sitting in their booths. LosirA lazily moved his mouse back and forth while GuMiho sat back in his chair with a look of exasperation and sweat pouring down his face.

At last GuMiho launched an offensive that managed to destroy a key piece in LosirA's defense. Sensing that the end was near, LosirA tried the only strategy left available to him and baited GuMiho into wasting his army's final defensive power-up, hoping that GuMiho would respond by overextending his remaining forces and leaving himself vulnerable. GuMiho drew back his forces as LosirA advanced with all of his remaining firepower. At this point the victor would be whoever could execute his moves the quickest and manage his forces' health levels

most effectively. Unfortunately for LosirA his gambit failed, and GuMiho managed to destroy LosirA's strongest remaining unit. LosirA was left with no option except to surrender. Finally, after sixty-two minutes, LosirA typed "ㅈㅈ"—a homophonic rendering of the English "gg," which is a conventional abbreviation for "good game" in e-sports and other digital games—into the game's chat channel as he executed *StarCraft II*'s surrender command, thereby signaling the end of the match. The crowd immediately erupted in cheers, and the Korean shoutcasters bellowed "*Ji-jiiiiiiiiiii*!" at the top of their lungs. GuMiho quickly exited his booth to thunderous applause while LosirA lingered at his station, staring at his monitor with his head cocked to one side looking simultaneously confused and devastated. The match had lasted more than two hours in total. I looked at the clock on my iPod and saw that it was already 9:00 PM. Though I had only been a spectator, I too felt utterly exhausted.

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The GSL is just one of several professional *StarCraft II* competitions in Korea and around the world. And *StarCraft II* is just one of the many electronic sports—or "e-sports"—that are contested in organized competitions. Since 1998 *StarCraft* has been the most visible and culturally significant e-sport in Korea. Although in today's diverse e-sports scene the *StarCraft* game franchise no longer enjoys the same level of popularity in Korea that it once did,[130] matches still draw scores of fans to Seoul's e-sports stadiums and attract national and global audiences through cable television broadcasts, online livestreams, and video on demand services. Among

130Korean police estimated that more than 100,000 fans attended the 2004 KeSPA Proleague grand final held on Gwang-an-ri Beach in Busan (KeSPA 2008:54), but there were only around 1,000 fans at the GSL's 2013 Season 1 grand final that I attended in Seoul. By contrast, Riot Games' *League of Legends*—currently the most played and watched e-sport in the world—drew roughly 40,000 fans for the 2014 World Championship held in Seoul's World Cup Stadium (Evans 2014). In 2012, *League of Legends* also surpassed *StarCraft II* for the first time as the highest-paying e-sport in terms of tournament prize money, with $4.6 million in prizes distributed at *League of Legends* events globally, compared to $4.1 million for *StarCraft II* events (Source: http://www.progamingtours.net/starcraft-2/best-paying-esports-of-2012/, accessed September 16, 2014).

fans of the game and of e-sports, Korea and *StarCraft* are synonymous with one another; start a conversation with any e-sports fan and it will not be long before he or she mentions Korea.

Professional *StarCraft*, and e-sports more generally, encapsulate many of the contradictions and tensions in Korea's information society regarding normative expectations for online gaming. At the macro-scale, e-sports bring together social, political, and business entities in new institutional arrangements. Major Korean IT, entertainment media, and communications companies—including globally recognizable brands like Samsung, and the country's two largest telco providers, KT and SK Telecom (SKT)—sponsor their own e-sports teams. Professional gamers, or "pro-gamers," enjoy celebrity status in Korea and around the world, adored by legions of passionate fans and compensated with salaries and prize winnings that can exceed US$200,000 per year.[131] Korean politicians[132] have voiced their public support for e-sports, drafting policies to subsidize e-sports endeavors such as 2012's "Act on Promotion of E-sports," which seeks to "establish infrastructure for the culture and industry of 3e-sports, enhance competitiveness in e-sports, and contribute to increasing people's opportunities to enjoy leisure time with e-sports and the robust development of the national economy by providing for matters necessary to promote e-sports" (Act No. 11315, Article 1:2012). Even the Korean military has taken an interest in e-sports, actively recruiting individuals like pro-gamers who demonstrate advanced IT-related skills that are considered potentially valuable for national defense (KeSPA

131Although this is true for a handful of the best pro-gamers, the majority of Korean professional e-athletes earn far less. Jin notes that "as of March 2005, about 72.4% of pro gamers earned less than $10,000 annually, 15% earned $10,000 to $30,000, and 5.5% earned $30,000 to $50,000. Only 3.1% of pro gamers earned more than $100,000 per year in 2005" (2010:93). In light of this disparity—and in response to criticism from labor activists—KeSPA has recently proposed setting minimum salary requirements for pro-gamers starting in 2015, although the exact figures have not yet been announced (Gafford & Kulasingham 2014).

132One of Korean e-sports strongest supporters has been Jeong Mong-joon, a well-knonw politician and former president of the conservative Grand National Party (Grand National Party 2009). He has also previously served as chairman of Hyundai Heavy Industries and as the vice-president of FIFA, in which capacity he was instrumental in bringing the World Cup to Korea in 2002.

2008:95).[133] At the micro-scale, e-sports entail the promotion and cultivation of specific embodied skill sets that emphasize mental and physical quickness. Dr. Hong—a neuropsychiatrist who researches the cognitive effects of online games—told me that fMRI scans of pro-gamers' brains revealed "highly advanced critical thinking, and increased cognitive functions compared to the general population." This capacity for thinking and acting quickly—at accelerated speeds—aligns with the temporal aesthetics of *bballi bballi munhwa* and their ethical entailments on practice and behavior. The strategies and techniques that e-sports teams and players use to maintain quickness and precision in embodied athletic performance—in conjunction with the institutional interests that endorse and sponsor e-sports—represent one approach to the large-scale management of Korean online gaming culture.

In these ways, e-sports span several Korean online gaming chronotopes: different game environments (*StarCraft II* in this case); the offline times (e.g. league matches, special events, grand finals) and places (e.g. stadiums, team houses, overseas) where e-sports happen, bringing together fans, players, media, and league officials; and Korean information society in general, where pro-gamers are admired for their athletic skills, especially insofar as they are aligned with the pace and tempo of *bballi bballi munhwa*. At the same time, some observers have drawn associations between pro-gamers everyday engagement with online games—including practice sessions that regularly last upwards of ten hours—and the behaviors of so-called online game

133The association between *StarCraft* and the military is somewhat self-evident, given that it is a military-themed simulation that involves complex strategic planning. In an online poll conducted by the Korea Broadcasting Company in 1999, top *StarCraft* pro-gamer Lee Gi-seok (Ssamjang) was chosen as "commander-in-chief of the cyber army" for the "Millennium Super Cabinet" (Gyeong-hyang Newspaper 1999). And when Lim Yo-hwan (BoxeR)—the most famous Korean e-sports star of all time—left the Proleague to fulfill his compulsory military service in 2006, a special *StarCraft* team was created within the Korean air force to accommodate him and other pro-gamers; because BoxeR was so important to the popularity and viability of *StarCraft*, many had feared that his absence from professional competitions would spell the end of Korean e-sports. The military officially designated these player-soldiers as "war game testing officers" (KeSPA 2008:95).

addicts. Although pro-gamers are well-aligned with the normative aesthetic and ethical evaluations of quickness as a practical virtue in Korea's information society, the degree to which they are immersed in online gaming is similar to amateur gamers' involvement that is classified as non-normative. Pro-gamers and e-sports, therefore, straddle the conceptual boundary between normative and non-normative expectations on online gaming in Korea.

Between January and March of 2013 I attended over one hundred *StarCraft II* matches—becoming a participant observer in the Korean *StarCraft II* fan community—and interviewed e-sports fans, both formally and informally. I also attended Blizzard Korea's launch event for *Heart of the Swarm*—the most recent *StarCraft II* expansion—in Seoul as an invited VIP, interviewed one of KeSPA's liaisons to the professional *StarCraft II* leagues, spoke with members of the Korean e-sports media and two Blizzard Korea employees involved in e-sports marketing, and collected Korean pro-gamers' testimonials available online in both print and video. Through these experiences, I came to better understand the inner workings of Korean e-sports, and learned what members of Korea's e-sports community find valuable about professional gaming, especially as an activity that epitomizes quickness in human-computer interactions.

StarCraft **and Korean e-Sports**

StarCraft II is the most recent installment in U.S. game developer Blizzard Entertainment, Inc.'s *StarCraft* franchise,[134] a futuristic, science fiction-themed military

134Blizzard released the original *StarCraft* in March 1998, followed by the *Brood War* expansion in November 1998, the sequel *StarCraft II: Wings of Liberty* in 2010, and *StarCraft II: Heart of the Swarm* in 2013. A third *StarCraft II* iteration—*Legacy of the Void*—is planned for release in the near future. Each of these releases have accompanied a shift in the competitive format, as the introduction of new units and new maps necessitates new strategies. Among pro-gamers and e-sports fans, the history of professional *StarCraft* is divided into the *Brood War*, *Wings of Liberty*, and *Heart of the Swarm* eras; in Korea, a distinction is drawn between *Seu-ta won* ("Star

simulation that belongs to the real-time strategy (RTS) genre of networked digital games.[135] Gamers can choose to play as one of three "races" (Terran, Protoss, or Zerg)[136] each with its own unique abilities and unit types. Two players[137] face off on digital battlefields, or "maps," where they must collect and manage limited gas and mineral resources—together known as an "economy"—in order to build armies, structures, and technologies and try to force each other into surrender. A player's strategy for managing all of these variables is known as a "build," and follows a progression that is determined in large part by the specifics of the racial match-up, the affordances of the map, and the decisions that his or her opponent makes. A *StarCraft II* match ends when one of the players cannot realistically win and is therefore forced to surrender, or "gg."[138] Mastery of the game requires quickness and precision in both strategic thinking and manipulation of the game's equipment (i.e. the mouse and keyboard).

StarCraft has had a significant impact on contemporary Korean popular culture that extends beyond e-sports. Of the estimated 9.5 million copies of the game that had been sold

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One," or *Brood War*) and *Seu-ta tu* ("Star Two"), the latter of which is sub-divided into the *Ja-nal* (short for *Ja-yu-ui nalgae*, or *Wings of Liberty*) and *Gun-shim* (short for *Gundan-ui shimjang*, or *Heart of the Swarm*) eras.

135Galloway offers this succinct description of RTS games vis-à-vis other digital gaming genres: "The RTS genre is characterized by a simulated economy involving resource collection and the production of weapons, fortifications, and fighting units. RTS games do not involve turn-taking, but instead transpire in real time. They are typically 'God games,' meaning they adopt a third-person, bird's-eye camera perspective and require the micromanagement of a large number of relatively autonomous player tokens" (2007:106, fn 15).

136Terran, Protoss, and Zerg all have intricate backstories that are explored in *StarCraft* mythology, but they are ancillary to its status as an e-sport and fans do not need to know the narrative details in order to enjoy competitions. Each race has different abilities and unit types, but no race has an inherent advantage over the other two. One American *StarCraft* fan described the relationships among the races as "like rock, paper, scissors, only more complicated." The complexity of variables involved in playing *StarCraft* means that pro-gamers specialize in playing as just one race, and they typically perform better in some racial match-ups than in others (e.g. Zerg vs. Terran, Zerg vs. Protoss, Zerg vs. Zerg, etc.).

137Both *StarCraft* and *StarCraft II* afford single player, offline modes, as well as online matches among up to eight players. The Korean professional leagues have experimented with a two-on-two competition format in the past, but these matches are now only contested in exhibitions or in small tournaments outside of Korea.

138In the *StarCraft* community, "gg" is the conventional sign-off that players make when they surrender—and as such a focus of *StarCraft* etiquette and good sportsmanship—but it can also be used to refer to the end of a set in general. For example, shoutcasters like Tasteless and Artosis would often say "we should be seeing 'gg' here very soon" in anticipation of a surrender, and a generic feature of Korean shoutcasting is the loud, drawn out "*Ji-jiiiiiiiiii*!" at the end of every set.

worldwide between 1998 and 2008, 4.5 million had been sold in Korea alone, 70 to 80% of which were purchased by PC *bang*.[139] My interlocutors agreed that most Korean men under the age of forty had probably played either *StarCraft* or *StarCraft II* at least once in their lives. Even those Koreans who have never played the game before, nor seen a match themselves, are familiar with the name "*StarCraft*" and can recognize the sport's most famous stars from their appearances in popular media. *StarCraft* helped to socialize an entire generation of Koreans not only to online gaming, but also to the use of computers and the Internet. Its release in 1998 coincided with the PC *bang* explosion and Korean informatization policy post-IMF crisis (Lee 2011), and its popularity as an e-sport helped to drive interest in IT and public demand for the high-speed Internet connections that were needed to play the game.[140] In fact, an early advertisement for Hanaro Telecom's household ASDL service invoked the popularity of *StarCraft* in its appeal to parents: Purchase Hanaro's service and you no longer have to worry about your children playing *StarCraft* all day in a PC *bang* because now they could do it in the safety of their own homes (Oh & Larson 2011:81).

Pro-gaming was recognized as an official job category in Korea in 2000 (Macintyre 2000) due primarily to the professionalization of *StarCraft* through e-sports competitions. The popularization of *StarCraft*-as-e-sport has made pro-gamer a prized occupational aspiration for

139Source: http://askakorean.blogspot.com/2010/02/why-is-starcraft-popular-in-korea.html, accessed July 15, 2014. Over one million copies of the game were sold in Korea alone within the first year of its release, which was one-third of total global sales for that period. *StarCraft* remained the top-selling packaged computer game in Korea from 1998 through 2007.

140Kang notes that *StarCraft*—an American product—also distinguished itself from Korean-made games such as *Lineage* by virtue of its English-language game menus: "Because [*StarCraft*] is an American game, all the menus and instructions are in English, which has helped avoid its being looked on as an unproductive pastime, unlike its Korean rival, Lineage … As a science fiction real-time strategy game, the game's futuristic image was accepted favorably by many Korean gamers. Playing the game involved understanding English menus and instructions, helping improve the image of gamers. As a result, StarCraft players may not be welcomed by girls' parents, but they can still make cool boyfriends [sic]" (2014:60-62).

young Koreans, especially among boys.[141] Dal Yong Jin calls pro-gamers Korea's "new media workers," writing that they "are considered to be important components of Korea's digital economy and culture-driven Korean society" (2010:82). He notes that:

> "several corporate sectors, including telecommunications, online game publishers, media firms, and large conglomerates have rapidly invested and expanded their involvement in eSports. They have created their own online game teams or purchased existing teams in order to boost their corporate images and improve their marketing efforts by identifying themselves as supporters of youth culture and digital media [sic]" (2010:95).[142]

These companies are also involved in the institutional administration of not just professional *StarCraft* but the whole of Korean e-sports. When the Korea e-Sports Association (KeSPA)—the administrative body that oversees all twenty-five of Korea's official e-sports, itself under the auspices of the Ministry of Culture, Sports, and Tourism (MCST)—was established in 2005, SKT's CEO Kim Shin-bae and KT's CEO Nam Joong-soo were unanimously elected president and vice-president respectively (KeSPA 2008:67).

Although Korea did not invent e-sports, Korean players, corporate sponsors, and professional competitions have been at the forefront of strengthening e-sports' global visibility and popularity. Korean players have been dominant in international e-sports competitions, especially in *StarCraft* and *StarCraft II*. The World Cyber Games (WCG)—one of the first attempts at creating an Olympics-style global competition for e-sports—were first held in Seoul in October of 2000, with sponsorship from the MCST, the Ministry of Information and

141Jin cites a survey of Korean elementary school students conducted in the mid-2000s which found that "pro-gamer" was one of the most sought after careers for this age group (2010:88). I heard this same story several times during my fieldwork—presented to me by my interlocutors as evidence of e-sports' cultural influence in Korea—but was unable to verify it for myself. However, while I was teaching English in Korea in 2006 a few of the elementary school-aged boys in my classes told me that they wanted to be pro-gamers when they grew up.

142McDaniel and Sullivan (1998) describe how the advent of what they call "cybersport"—i.e. the intersection of sports entertainment and online media—produced not only new modes and channels for fan participation in sports, but also a growing partnership betweens sports organizations (e.g. teams, leagues, regulatory institutions, etc.) and media companies. These sorts of partnerships are perhaps especially visible in the context of Korean e-sports, where entertainment media not only not only broadcast the matches but also own and operate e-sports leagues.

Communication, and Samsung.[143] In a pre-recorded video segment at the inaugural WCG, former President Kim Dae-jung addressed the international audience, saying "I hope that the first WCG will help our nation to become recognized as one of the leaders in games, knowledge industry and IT infrastructure, as well as help the world's game-loving young people exchange information and build friendships" (quoted in Stewart 2004:9, fn 3). More recently, KeSPA has been trying to get e-sports into the Olympics, and succeeded in lobbying the Korean Olympic Committee to include them in the 2014 Indoor Asian Games.

E-sports—and *StarCraft* in particular—have contributed greatly to the popularity and acceptance of online games in mainstream Korean society, in part because of how they are outlets for performances that exemplify the sociotechnical ideals of Korea's information society with respect to mastery of computer and Internet-centric activities. As in more "traditional," non-electronic sports, practitioners and observers alike are impressed by the embodied skills and physical talents that distinguish e-athletes from ordinary gamers. With e-sports like *StarCraft*, excellence in athletic performance boils down to quickness and precision, i.e. the ability to execute game commands faster and more effectively than one's opponent(s). And because participation in e-sports necessitates expertise with operating computer equipment and working in online environments, e-sports skills—both physical and mental—are regarded as potentially valuable in IT-related tasks outside of specific game contexts. To wit, from KeSPA's history of the first decade of Korean e-sports:

> "Minseung Yoon, the marketing director of SK Teletech[144] said, 'Back in the past when hunting was the main source of daily bread-winning, physical abilities

143Korea hosted the WCG annually between 2000 and 2003, and again in 2011. However, the WCG ceased operations in 2014. The final WCG competition took place in Kunshan, China in November/December 2013.

144SK Teletech is the former name of SKY, a division of SKT, and is under the majority control of Pantech, a Korean mobile handset manufacturer. Pantech sponsored a professional Korean *StarCraft* team from 2004 to 2007.

> were the core values and the sports which [were] suitable to it had the most value,' and that 'In the information age, values like gaming abilities, which obtain and process a large amount of information within a short period, would be the alternative values for sports.' In fact, [these] information processing abilities were always mentioned when it came to the values of e-Sports. It was because in game competitions, the one that processed the information from the monitor through the mouse and the keyboard had better chances to win. Later on, universities and hospitals checked the brainwaves, reactions and concentration of pro-gamers, and proved that pro-gamers had superior information processing abilities compared to normal people [sic]" (2008:64).

E-sports invite attention to their embodied, physical dimensions precisely because that physicality is not as emphasized in the visual representations of e-sports competitions as it is in other sports. For example, whereas a television broadcast of a soccer match will feature close-up shots of players running, kicking, and heading the ball accompanied by slow motion replays and commentary about the players' skillful execution, e-sports broadcasts tend to focus on the action in the game itself, rather than the players' physical movements. It is on these grounds that e-sports are a marked category of athletic competition. They are not quite as obviously physical as "real" sports, but at the same time they are arenas for skillful embodied performances that are qualitatively different from other forms of online gaming.

Addressing this ambiguity, T.L. Taylor asks what make sports *sports*: Is it "an issue of physicality? Of exertion, skill perfection, or some other alchemy of action and an individual human's striving and drive to excel?" (2012:35). She observes that there are two ways of talking about physicality and the body with respect to e-sports. The first is the body's active role in skilled performance during e-sports competition—"tense shoulders, focused visual attention, 'on point' posture, complex cognitive engagement, and stillness in the body except for the key interface points" (2012:38)—and the second is the assemblage of skills and knowledges that is performed by and through bodies and digital technologies, in which players calibrate themselves and their play with their equipment and the demands of the games themselves in search of the

most comfortable and effective combination.[145] The physicality of e-sports also has practical entailments for pro-gamers' careers, specifically regarding their capacity to perform quickness and precision in competition. According to Jin-soo—a KeSPA liaison to the *StarCraft II* Proleague—KeSPA believes that pro-gamers are at their peak physical condition between ages seventeen and twenty-five. "After twenty-five," he told me, "the combination of their brains and their hand skills is not as good as before. They slow down. It's similar with other sports, like figure skating, because they depend on muscle movements. That's why we could say that e-sports is a *sport*. It's different from chess and *baduk*;[146] they are *all* brain, but e-sports is a combination."[147] Jin makes a similar observation, noting that "where the speed of keyboarding is a key component, late twenties are retirement ages for most pro gamers; their skills lag far behind youth in their late teens and early twenties, so they cannot win the competitions [sic]" (2010:100).

Although their physicality may be different, e-sports share many of the same social and ethical features as other, more "traditional" sport activities, chief among which is the concept of "fair play."[148] Jin-soo told me that "every year many games are created, but just a few games could be e-sports. The basic thing is fair competition; [success in] the game doesn't depend on

145Michael G. Wagner emphasizes this second way of talking about physicality in his working definition of e-sports: "An area of sport activities in which people develop and train mental or physical abilities in the use of information and communication technologies" (2006:3, emphasis removed).

146Also known as *go* or *weiqi*, a traditional Chinese board game. In Korea, *baduk* is contested by professionals whose matches are televised, although these broadcasts are not nearly as popular as e-sports programming.

147This is an important distinction, and is referenced in support of KeSPA's and others' arguments for including e-sports in international athletic competitions like the Olympics. The International Olympic Committee has thus far understood e-sports as belonging to the same category as other "mind sports" like chess (BBC 2014).

148There is a widespread belief in the e-sports community that if fair play cannot be guaranteed then e-sports could disappear as a viable professional athletic enterprise. Korea's *StarCraft* Proleague suffered an infamous match-fixing scandal (*seungbu-jojak*) in 2009 and 2010 when several players took bribes from Korean organized crime groups to throw their matches for the benefit of offshore gambling operations. The scandal threatened to scuttle professional *StarCraft* in Korea—if not worldwide—altogether. Ultimately the players who had participated in fixing matches were banned from competition for life, but the incident continues to inspire fears of potential future occurrences.

money to buy some items. That is un-competitive. So *StarCraft* starts from very *fair* conditions." It is this commitment to fair play that separates e-sports from other forms of digital play and make them like other sports. The idea of fair play is a guiding principle for all athletic competitions that aim to ensure equal conditions for all participants so that players may only be differentiated according to their individual skills and performances. As Jin-soo pointed out to me, a game like *Lineage II* does not meet the criteria for fair play because an individual's chances for success in the game depend upon the accumulation of experience points, leveling up, and purchasing more powerful weapons and armor. Games without a competitive player-versus-player structure fall into the category of what KeSPA calls simply "gaming" or "'entertainment for me (singular),'" whereas e-sports are "'The fair play between me and opponents (plural)'" (2008:1).

E-sports are also distinguished from other online games and gaming by their relative sustainability as popular objects of play. As Jin-soo remembers, game developers in late 1990s conceived of games as simply "*jjalb-eun jaemi*" or "short-term entertainment": "At that time, game companies didn't know the power of e-sports. They just thought 'it's just a marketing thing.' So many, many companies just did the e-sports events for just one year or just six months, and that was the end. But many e-sports organizations wanted to try to make the leagues very long term." This prevailing logic of product cycles in the game industry has important implications for how online games make the transition from game to sport. Brett Hutchins (2008) notes that e-sports represent an intriguing form of "mediasport" (Wenner 1998; 1989), i.e. the increasing interdependence of sports and media in a sociocultural complex of entertainment. He writes that:

> "e-Sport is born in and of media, which alters the parameters of competition in

> terms of how it is conducted—on-screen and in digital space—and the dynamics of the 'game-contest' which, unlike football or ice hockey, is determined by a technical interface and the programmed possibilities contained within a computer game … This is sport *as* media, meaning that e-sport is the product of the logic of media, communication and information flows" (2008:857).

Whereas non-electronic sports are organized primarily around physical contests with long social and cultural histories, e-sports depend upon digital media products for the substance of competition. The merging of sport and online game media in e-sports entails two radically different temporal orientations to activity: Sports leagues work to create institutional infrastructures that will help sustain interest in a given sport for long periods of time, while game developers have been content to promote interest in their products until a new game title is released.[149]

The temporal durability of e-sports as opposed to other online games is, arguably, what Korea has been able to develop more fully than anywhere else, beginning with the professionalization of *StarCraft*. When Korea's first professional *StarCraft* league debuted in December of 1998, Blizzard was primarily interested in e-sports as a means of promoting and marketing its digital entertainment products in Korea. Blizzard would have been pleased if *StarCraft* had done nothing more than sell as well as it did in 1998, helping to establish its brand on a global scale and encouraging gamers to purchase the company's next game products.

149Like other online games, *StarCraft*'s chronology is expressed not only in different software iterations—i.e. *Brood War*, *Wings of Liberty*, *Heart of the Swarm*—but also in different patches to these software. Patches are significant for *StarCraft*-as-e-sport in two ways. First, patches alter the game's mechanics and algorithms, introducing micro-level variables to competition. Changes to gameplay introduced in a new patch are designed to ensure fair play by fixing competitive imbalances among the three *StarCraft* races (Anglophone *StarCraft* fans use the abbreviation "imba" to index the perception that one race is weaker than the others, e.g. "Zerg is imba in *Heart of the Swarm*"). Non-electronic sports occasionally undergo similar structural adjustments, such as rule changes, or changes to equipment and playing surfaces. But e-sports afford comparatively more opportunities for adjustment in the form of patches, and at even more fundamental levels such as changing the game's "physics." Second—and as a consequence of the first—specific patches come to index eras of professional *StarCraft* as well as individual tournaments because of the new variables that they introduce. For example, the 2013 GSL Season 1 finals that I attended featured the *Wings of Liberty* 1.5.3 patch, while the 2012 GSL Season 4 finals had been contested in the 1.5.2 patch.

StarCraft-as-e-sport was a welcome—if unexpected—by-product of that process, but at the time Blizzard was uninterested in designing games specifically *for* e-sports. However, with the sustained success of the Korean professional leagues over more than a decade, Blizzard was fully invested in designing games with e-sports in mind by the time of *StarCraft II: Wings of Liberty*'s release in 2010.[150]

Blizzard's increased interest in e-sports led to a legal dispute with KeSPA over licensing and broadcast rights prior to *StarCraft II*'s release in 2010, as the company sought to exert greater institutional control over professional *StarCraft* competitions. Blizzard claimed that KeSPA owed the company licensing fees for using its game contents as the substance of its competitions and broadcasts, which KeSPA had never paid and Blizzard had never demanded until 2007,[151] nearly nine years after the first matches had been broadcast on Korean cable television. KeSPA countered by arguing that:

> "E-sports is a newly emerging sports industry based around video games, and is a gaming business as well as a sports-entertainment business that provides game developers an opportunity to increase revenue and customer satisfaction, and provides sponsors the opportunity to promote and market their products. Taking these features into consideration, if a game is to become a popular E-sports [sic] competition, the game developer and the E-sports organization must have a flexible relationship. If a game achieves success as an iconic E-sports competition, and the developer pursues profits by declaring that their copyright is valid in the sports industry as well, then that is a large obstacle for E-sports' growth and establishment as a future sports-entertainment industry" (KeSPA 2010).[152]

At its base the dispute was about whether game developers' intellectual property rights to their game contents extended into the realm of e-sports. In other words, was *StarCraft*-as-e-sport a

150This change in emphasis for game development that considers how game contents might be best designed to function as sports contents as well has influenced younger game development companies like Riot Games, which envisioned its *League of Legends* product as an e-sport from the very beginning.

151In February 2007, Blizzard sent KeSPA a request demanding that it immediately cease broadcasting any matches featuring Blizzard game products (i.e. *StarCraft*). Blizzard's challenge had been precipitated by KeSPA's attempts to sell the broadcast rights to professional *StarCraft* to Korean media companies.

152Source: http://www.teamliquid.net/forum/brood-war/123275-update-kespa-speaks-out-on-intellectual-property-rights, accessed September 15, 2014. Translated from the Korean by "Waxangel."

qualitatively different product than *StarCraft*-as-online-game? Blizzard prohibited KeSPA from using *StarCraft II* in any league matches organized for its long-time broadcast partners MBCGame and OnGameNet (OGN),[153] and granted sole broadcast rights to GOM TV[154] and the upstart GSL. This legal injunction effectively created a fission in Korean professional *StarCraft* whereby KeSPA's Proleague kept operating as usual, but the GSL became the sole arena for aspiring *StarCraft II* pro-gamers, the majority of whom were younger Proleague players assigned to "B teams"[155] who did not have opportunities to compete in formal competitions. As *StarCraft* was declining in popularity and competitive viability worldwide, KeSPA resumed negotiations with Blizzard in 2012 in order to secure broadcast rights for *StarCraft II*. The Proleague's 2011-2012 season was divided into *StarCraft* matches in the first half and *StarCraft II* matches in the second, with the full transition to *StarCraft II* beginning in the 2012-2013 season. In April 2013—just weeks after the conclusion of my fieldwork—Blizzard asserted a more active role in the organization and sponsorship of e-sports by inaugurating the *StarCraft II* World Championship Series (WCS), an individual competition format partitioned into three regions—Korea, North

153Korean broadcaster ON Media launched OGN in July 2000, followed by the Munhwa Broadcasting Corporation (MBC)—one of the three major Korean television networks—establishing its MBCGame imprint in May 2001. Before OGN and MBCGame, professional *StarCraft* matches had been broadcast on Tooniverse, a cable channel operated by CJ E&M, the media contents division of the Korean CJ Group conglomerate. MBCGame stopped broadcasting e-sports in 2012 and became a music video channel, MBCMusic, while OGN stopped broadcasting the *StarCraft II* Proleague at the end of 2013. KeSPA currently partners with SPOTV, an independent Korean sports and entertainment channel launched in 2010 that also broadcasts soccer, basketball, and tennis matches, among other sports.

154GOM TV is the online broadcasting division of Korea's Gretech Corporation, which created Korea's most popular Windows media player, the GOM Player. GOM TV had been hosting and broadcasting professional *StarCraft* events since 2008, but it never officially partnered with KeSPA. GOM TV's independence in this regard made it a viable and attractive Korean broadcast partner for Blizzard when it decided to temporarily sever ties with KeSPA.

155Proleague teams enjoy corporate sponsorship that supports their ability to sign more players than they need for competitions. Players are typically divided into "A teams" and "B teams," with the A team players participating in league matches and individual tournaments while the B team players act as "sparring partners" for A team players in daily practice sessions. B team players tend to be younger, less developed pro-gamers, and are drawn from the Proleague's apprenticeship program and the league's annual draft. As A team players retire and/or leave to fulfill their compulsory military service, B team players have opportunities to move up to the A team.

America, and Europe[156]—with a global grand finals designed to better determine the best pro-gamers in the world. Although Blizzard works with regional e-sports organizations including KeSPA, North America's Major League Gaming (MLG), and Europe's Electronic Sports League (ESL) to coordinate and host competitions, ultimate institutional authority for the WCS lies with Blizzard itself.

The long-term future of Korean professional *StarCraft* depends upon maintaining organizational partnerships among teams, leagues, sponsors, broadcasters, and game developers. Although 2010 to 2012 was a period of instability, the transitional process demonstrated Korean professional *StarCraft*'s extensive impact on the global scene; in fact, Korean players had become so important to the sustainability of worldwide *StarCraft* competitions that their influence transcended any national or institutional boundaries. From a macro perspective, *StarCraft*'s durability as an e-sport contrasts with the quick, sometimes volatile tempo of change in the professional *StarCraft* scene. In the short time since the conclusion of my fieldwork, a new global structure for competition—the WCS—has been introduced and subsequently modified, an entire professional league (the e-Sports Federation, or eSF) has disbanded, six teams have either changed ownership or ceased operations, and some of the biggest names have retired while others who seemed unbeatable only months ago now cannot even qualify for the top events. At a smaller scale, *StarCraft*'s strategic paradigms change on a weekly basis as players devise new attacks and counterattacks. However, this pace has become the norm in Korean professional *StarCraft*, with the expectation of rapid change one of the constitutive elements of *StarCraft*-as-

156This competition format has been changed for the 2015 season. The North American and European regions have been combined into one region, while the Korean region has been expanded to include two separate tournaments. Furthermore, Blizzard has reorganized the WCS qualifying tournaments to include regions where e-sports and professional *StarCraft II* are rapidly becoming popular, namely China, Latin America, Oceania and Southeast Asia, and Taiwan, Hong Kong, and Macau.

e-sport's sociality.

Rapidity also characterizes the physical aspects of *StarCraft*-as-e-sport that entail quick, precise athletic performances in order to be successful. The evaluation of quickness in e-sports performance as a both a practical necessity and a symbolic virtue aligns well with the temporal aesthetics of *bballi bballi munhwa*. Jin-soo explained to me that one of the reasons *StarCraft* became so popular in Korea was because of qualitative associations made between the game and Korean society: "Our *gukminseong* ["national character"] is very similar to *StarCraft*. Koreans are very fast, very intelligent, and want to talk with others. And *StarCraft* was very good for Koreans. [By comparison], *Warcraft III* was very popular in Europe and China. Their cultural bases are different from Korea; they are not speedy like Koreans." In this way, the tempo of *StarCraft* is interpreted as being calibrated with the tempo of Korea writ large. In other words, *StarCraft*'s chronotope resembles that of Korea's information society insofar as they share beliefs about the value of quickness that become translated into prescriptions for practice and behavior.

Quickness and Precision: *StarCraft* Skills, Equipment, Practice, and Timing

> "I haven't slept for four days. I can't lie down in comfort. Fortunately, my mind is as clear as the autumn sky. The mighty opponent most likely to defeat me is not the player sitting across from me. It's me. If I give it my best I will not lose this game. My laziness is my most fearful enemy. Defeat is acceptance of my own laziness. I practiced without regard to day or night for today's game. I pushed onward until my practice partners collapsed, begging to stop playing. In the game, only the last man standing has the privilege of making the victory toast. I'm now sitting on the player's seat. The blinding lights shining and the cameras fixed on me. 'YEAH~~ YEAH~~' I can hear the cries. They are the cheers of the countless fans surrounding me. Even more fans are watching me in front of their television. Everyone is waiting to see what kind of game I will play today. Why am I sitting here? There's only one answer—for victory … With a final attack as sharp as a sword and as swift as a flash, I must completely dominate the opponent. Precise timing! A moment I cannot pass by, my units trample over the enemy base. I set ablaze everything to make restoration impossible, and pressure him to admit defeat. However the opponent cannot let go of even the thin thread of a hope. Coldly I must crush even that hope. After all the fibers of hope have

> been severed the opponent gives up everything and announces GG. At last the goddess Nike timidly gives me a kiss. Slowly I lift my eyes from the monitor and look at the fans. I take off my headphones and listen to the cries of the fans [sic]" (Lim 2005).[157]

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In his autobiography *Crazy Like Me* (2005), Lim Yo-hwan (BoxeR)—the most famous *StarCraft* pro-gamer of all time—describes his personal transformation from "'Internet Café bum' to 'progamer' [sic]," thereby simply and elegantly summarizing the contradictions in Korean online gaming culture regarding the evaluation of different online gaming socialities. In the same section as the passage quoted above, he adds that his goal in writing an autobiography was to "convey how someone worthless like me was able to stand up to the world." Although neither the object of BoxeR's attention—*StarCraft*—nor his dedication of time and energy to this passion had changed considerably, his social status had shifted dramatically from PC *bang jookdori* to world-renowned e-athlete, beloved by a global community of fans and celebrated by his own government, which named him an official "cultural celebrity" in 2003. BoxeR's career arc mimics the metamorphosis of online gaming culture in Korea writ large, from marginal activities associated with *geim maeniak* to a mainstream pastime with significant social, cultural, and economic value.

The value of *StarCraft* pro-gamers in Korea derives in part from the aesthetic evaluation of their embodied performances, which complementary virtues of quickness, smartness, and precision. Chris—a retired American pro-gamer—once told me that "you'll never find a dumb *StarCraft* player." He meant that *StarCraft* as both game and e-sport requires players to demonstrate intimate knowledge of complex strategies that must be executed extremely quickly.

157Source: http://yohwanbiography.blogspot.com, accessed November 3, 2014. Translated from the Korean by "BinaryStar" for TeamLiquid.net.

Since the game unfolds in "real-time," *StarCraft* players must be able not only to devise flexible game strategies that can be effective for a variety of contingencies, but they also must also possess physical mastery of keyboards and mouses used to skillfully maneuver their units quickly enough to carry out those strategies.

StarCraft incorporates only a limited number of automated tasks, and so much of the game's actions must be executed individually and manually by each player. Physical skills are vital to a player's performance, but they are not the only factors that contribute to success. Yong Ming Kow and Tim Young note that *StarCraft* fans have "developed a saying that [the best] players need 'the finesse of a pianist, and the intelligence of a chess master'" (2013:4), thereby emphasizing the qualitative and practical relationship between physical and mental quickness. When I asked Dong-ryul which skills a player needed in order to perform well in *StarCraft*, he immediately answered "*fast* hand speed" before adding that being able to move one's hands quickly meant that a player could control resources more quickly and thereby "make [his] forces go faster than other players." However, he continued, manual quickness alone will not guarantee success if a player lacks *chok*, or "intuition," because "if the other player's strategies are very different, then the match is going to be different." Simon Dor provides a similar description of *StarCraft* gameplay with respect to what he calls "strategic habits":

> "In order to think fast in a RTS, forging [a strategic] habit has to be done. In psychological terms, seeing habits in objects corresponds to building a frame where they can be included … A given strategy can be a functional basis for a game, but at the same time, can be a way to discriminate their gaze according to initial misconceptions. During play, a player is not thinking of every possible situation according to the game rules: they are thinking of the habits and strategies which they have to adopt in order to react accordingly to their opponent. As a counterpart to the quickness of play these habits give, they can limit the possibilities of a player, who responds directly with a specific action to a precise situation" (2014).

Learning the procedural operations and conditional contexts of strategic deployments in

StarCraft involves acquiring, honing, and continually re-calibrating one's sensorimotor skills, namely hand and finger quickness and hand-eye coordination. Dong-ryul explained to me that players develop their embodied skill sets and strategic thinking abilities through a combination of watching pro-gamers and mimicking their gameplay and, quite simply, practice and repetition. "I watch strategies on the Web or in Proleague," he told me, but as far as keyboard and mouse control were concerned, "I just practice! Without thinking, just with my hands moving."

While amateurs like Dong-ryul might spend a few hours over the course of a week practicing *StarCraft* alone or with friends and watching live or recorded video of e-sports matches, pro-gamers spend upwards of ten hours every day practicing drills, scouting opponents for upcoming matches, and experimenting with new builds. Chris told me that in his estimation taking a week off from playing *StarCraft*—not just matches, but also practice drills—would translate into about a month needed to recuperate one's physical conditioning. He added that learning to play *StarCraft* "is like learning a language," and that one needs to be surrounded by other players in a community of practice in order not only to improve but also to maintain one's abilities. I asked him if he ever though that he had "plateaued" when he was still competing, and he said that no, he had not, but rather he felt that he progressed little by little every day no matter how long he had been playing.

The sociality of Korean professional e-sports is characterized by qualities of diligence and immersion. In order to ensure that players' focus their attention and efforts squarely on the game, professional Korean *StarCraft* teams have team "houses"—apartments that are more dormitory than anything else—where the players eat, sleep, and train together. Practice is not limited solely to playing *StarCraft*, but also applies to the upkeep of physical health in all areas

of players' lives. Teams employ chefs to ensure that their players eat a balanced diet, and some organize mandatory outdoor physical exercise.[158] During Daniel Lee's time as coach of the now-defunct sSTRO Prolegaue team,

> "players would wake up at 9 A.M. and have two hours to change, shower, and eat a breakfast prepared by the team's professional cooks. From 11 A.M. Until 4 P.M., the team practiced, mostly playing against one another, testing out new strategies and reviewing footage of games that they previously lost. At 4 P.M., the team took a break to eat, followed by a physical workout at a gym. Gaming practice would resume at 7 P.M. followed by a 'light supper' at 10 P.M., and then two more hours of practice until bed at 1 A.M." (Farivar 2011:57).

In 2003, the KTF MagicNs (now KT Rolster) "revolutionized" how *StarCraft* teams make use of the offseason when they traveled to Jeju-do—an island southwest of the Korean peninsula—where players participated in long-distance marches and "mental training" exercises (KeSPA 2008:43). When their team performance improved during the next Proleague season, other teams replicated KTF's training schedule, taking their players on training vacations either to Jeju-do or tropical locations in Southeast Asia. In December 2005, the now-disbanded Proleague team Pirates of Space employed a retired pitcher from the LG Twins professional Korean baseball team to help its players with physical conditioning and to teach them mental control techniques, thereby establishing a holistic approach to e-sports training that most teams have now embraced. According to Jin-soo, *StarCraft* teams were not overly concerned with physical conditioning until around 2008 or 2009. Back then, he told me, "they thought just playing and practice is more important, but these days they know that muscle training is more important to the long-term condition of players." He told me that the frequency with which players developed wrist injuries led teams to consult with ergonomic specialists who instruct players in the proper posture that

158Pro-gamers are also technically prohibited from drinking and smoking while they are members of a team as part of maintaining a healthy lifestyle, although based on conversations that I had with people in the Korean e-sports community these prohibitions do not seem to be strictly enforced.

they ought to have so as to avoid putting stress on their wrists and necks, especially.[159]

The positioning of equipment is also a critical factor in how pro-gamers manage their engagement with *StarCraft* in order to maximize quickness in performance. Lee Yeong-ho (Flash) is infamous in the Korean *StarCraft* community for using a ruler to align his keyboard and mouse pad on the competition desk exactly the same way each time that he competes. Flash's care for his equipment illustrates the precision with which players approach calibrating their bodies and movements with their tools, namely a keyboard and mouse. Just as players in other sports have preferences for bats, shoes, gloves, etc., pro-gamers, too, make choices about equipment from among a range of possibilities. The only constants are the game software and the computer monitors, but otherwise they are free to use their preferred pieces of equipment. All *StarCraft* pro-gamers have their own personalized keyboards and mouses, which they bring with them to matches an arrange to their liking prior to each set. Referees swipe each player with an electronic wand before entering the competition booths in order to make sure that he or she does not have any hidden signaling devices that could be used for cheating. Upon entering their booths, players unpack their equipment, plug it in, and calibrate it to their personal specifications.

Every pro-gamer whom I observed used a mechanical, non-membrane keyboard.[160] Mechanical keyboards use spring-activated key switches, as opposed to the more commonly

159Injury is another index of e-sports physicality, and something they share with more traditional sports. Although they are not experienced as acutely as injuries in other spheres of activity, IT and digital gaming-related injuries are commonplace and reveal much about the embodied entailments of intensive human-computer interaction. For instance, Loftus and Loftus list some of the common injuries that frequent arcade and computer gamers suffer, including numbness of extremities and joint pain among other maladies (1983:108-109).

160This is the case for pro-gamers in other e-sports that use desktop PC interfaces as well. However, in e-sports that use proprietary video gaming platforms, players may employ those devices' controllers—e.g. a XBOX or Playstation controller—or one from a range of different custom-designed controllers specifically built for e-sports. For example pro-gamers in the fighting game genre use large, plastic "arcade-style input boxes" (Taylor 2012:43) with a joystick and typically eight buttons, though some have more.

used membrane keyboards that have rubber dome switches. Although mechanical keyboards are heavier and more expensive, their keys are also less likely to jam or stick, and this reliability is crucial for pro-gamers; the pace of professional *StarCraft* is so quick and the sequence of movements so complex and meticulous that even one missed keystroke can be the difference between winning and losing. Players also augment their keyboards in various ways. *StarCraft*'s gameplay works such that specific keys are associated with, or "mapped to" specific, important operations within the game (in English, these are known as "hot keys"), while other keys are functionally useless, as striking them results in a null input. Some players remove these extraneous keys from their boards in order to avoid potential mis-strikes. Others exchange the monochromatic keys of a generic keyboard with a melange of multi-colored keys to identify frequently-used keys; for example, Yoon Yeong-seo's (TaeJa) keyboard looks more like an arrangement of Valentine's Day candies than a computer keyboard. Still others put differently colored stickers in the spaces above important keys rather than swapping out the keycaps themselves, or affix textured stickers to the surface of keys so that they are identifiable by touch.[161]

These idiosyncratic techniques of bodily, social, and technical training exemplify the ways that pro-gamers integrate distributed cognition strategies (cf. Suchman 1983; Hollan et al. 2000; Hutchins 1995) into their gaming repertoires, creating mnemonic and sometimes even haptic methods of accelerating their e-sports performances. The qualitative ideals of quickness and precision are central to the practice of professional *StarCraft*, as well as to the gaming sociality associated with e-sports. In this way, *StarCraft*-as-e-sport aligns well with the temporal

161 While shoutcasting a GSL match, Tasteless recalled that when he was first starting out as a pro-gamer, he did not have access to the accessories like keycaps and stickers that were at that time beginning to appear in the Korean e-sports scene, so he scored the surfaces of certain keys with a knife in order to distinguish them as important.

aesthetics of the Korean information society, where the logic of *bballi bballi munhwa* values quickness for quickness's sake. Furthermore, as part and parcel of their professional development, *StarCraft* players learn to calibrate their embodied gaming practices with normative expectations for fast-paced, carefully-executed athletic performance, and in so doing align themselves with a normative model of gaming sociality.

National Style, Timing, and Speedy Hands

February 1, 2013: The group of four players competing in the GSL's Round of 32 stage that night featured Ilyes Satoury (better known as Stephano), a French player whom many fans considered the best non-Korean *StarCraft II* pro-gamer in the world at the time. Stephano had just recently moved to Korea to join Evil Geniuses/Team Liquid in the KeSPA Proleague and participate in the 2013 GSL Season 1, and his debut was anticipated by non-Korean fans eager to see if a foreign player could succeed at *StarCraft*'s highest levels of competition. The GOM TV studios were buzzing with conversations in English, French, and German, as Seoul *StarCraft*-loving ex-pat population turned up in larger numbers than I had seen before for a GSL match. A group of three foreign fans had dressed up in stereotypically "French" costumes—berets, striped shirts, and fake mustaches—and were carrying baguettes and a French flag in honor of Stephano's home country. Stephano's first opponent was a formidable Terran player, Lee Shin-hyeong (INnoVation), who was favored by some to win that season's GSL. One of the few Korean fans in the audience held up a cheerful that read: "Everyone is Stephano's fan. It looks like I am Lee Shin-hyeong's only fan" (my translation).

Tasteless and Artosis were absent, having traveled to Taiwan to check out the Taiwan e-

Sports League (TeSL), and so the evening's commentating duties fell to Wolf Schröder, a.k.a. Wolf, another retired pro-gamer and English-speaking GOM TV shoutcaster. As INnoVation harassed Stephano's forces at several points on the map simultaneously, Wolf remarked that both players were well-known for their high "actions per minute" (APM) rates, and that their APM abilities had been on display so far, with both showing off their skillful control of individual units and armies. However, INnoVation had managed to stay one step ahead of Stephano, which Wolf attributed to INnoVation's superior strategic skills; although Stephano was certainly an accomplished player in his own right, he was notorious in the global *StarCraft II* community for disdaining practice and using questionable strategies such as eschewing reconnaissance in the early game in favor of building up his army supply. Wolf pointed out that success in *StarCraft II* is not solely dependent on physical skill, but also demands rigorous attention to strategy and situational play: "APM is not about fast hands, actually," he told the audience; "It's about a fast mind."

With the match tied at one set a piece, Stephano and INnoVation began a decisive third set. As was his custom, Stephano failed to scout INnoVation, who advanced his army in a "timing push" and massacred Stephano's mining units, thereby making it virtually impossible for the Frenchman to keep pace with the growth of INnoVation's economy. Realizing that INnoVation's victory was imminent, Stephano typed "well played; gg" into the game's chat channel, signaling his surrender. Ultimately Stephano was simply unable to keep up with the strategic complexity of his opponent's play, nor the pace of his execution. Stephano left his booth and gave the crowd a quirky half-smile as the fans applauded and the Korean broadcast team told him "*Chal haetneundeyo*" ("You did well, but… "). Many of the fans in attendance were clearly

disappointed, but Stephano had done well to take INnoVation to a third set, a significant accomplishment for a non-Korean player in his first GSL.

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Korean players have dominated *StarCraft* competitions from the very beginning, and continue to win every major tournament in which they participate. In December 1998's "Season III Ladder Tournament"—hosted entirely online by Blizzard's Battle.net online gaming service—there were nine Koreans in the final draw of sixteen players from around the world. Shin Joo-yeong (Honest) emerged as the victor and went on to become one of the first truly *professional* gamers when his team's sponsor—Cheong-Oh Seulgi Room, a PC *bang* franchise company—began paying its players salaries in 1999. As KeSPA's historians recount, "Experts back then evaluated this Starcraft Boom and the excellent records the Korean gamer brought home as the result of the Korean spirit, tenacity and spite, and considered this as a fine opportunity to show the world the image of 'Korea, the superpower in gaming' [sic]" (2008:7). The Korean dominance of professional *StarCraft* continues to this day; only one non-Korean player—the Canadian Guillaume Patry (Grrrr…)—has ever won a top flight *StarCraft* or *StarCraft II* tournament in which the best Korean players also participated.[162]

Although non-Korean *StarCraft* fans certainly idolize Korean players, many with whom I spoke expressed a desire to see a non-Korean player emerge as "the great foreign hope" who could challenge the very best Korean players. During my fieldwork, Stephano represented the best chance that a non-Korean player had of breaking into the Korean *StarCraft* scene in many

162Sasha Hotsyn (Scarlett), another Canadian player, did win the 2014 Red Bull Battlegrounds: North America tournament by beating Choi Seong-hun (Polt), an accomplished Korean pro-gamer with six individual championships on his résumé including a GSL. However, the tournament was limited to only six players and is not one of the major *StarCraft II* tournaments. Still, Scarlett's performance was a significant victory for non-Korean *StarCraft II* players and helped distinguish her as a world-class pro-gamer (McGrath 2014).

years. In conversations about Stephano and the handful of other non-Korean players who played in the Proleague and GSL at that time, I noticed a strange pattern to how fans—both Korean and non-Korean—talked about *StarCraft* pro-gamers. In Korean, the word *waygukin* ("foreigner") is broadly applied to every non-Korean, and non-Korean *StarCraft* fans have adopted this naming strategy for referencing non-Korean players as well, no matter their national origin or where the match is taking place. This practice exemplifies the symbolic organization of *StarCraft*-as-e-sport globally into two categories of pro-gamers: Koreans, and everyone else.

National identity is associated iconically with different playing "styles." During the 2013 WCS Europe Season 1 competition[163] the English shoutcaster Apollo commented on a match between Spain's Pedro Moreno Durán (LucifroN) and Jeong Jong-hyun (Mvp), noting that even though both were Terran players their gameplay styles were "European" and "Korean" respectively. I never developed the necessary fluency with *StarCraft*'s minutiae to recognize these differences myself, but experts are able to label certain unit compositions, build strategies, and micro-management of armies as characteristically "Korean," "European," or "American," etc. Since Korean players are consistently the best in the world, non-Korean players who want to improve their performances often regard Korean gameplay styles as models to be copied. Fans and fellow pro-gamers alike laud Korean players for their intense dedication to practice and skill development—both physical and strategic—and for their diligent preparation for matches, but much of this is due to the institutional organization of professional *StarCraft* in Korea that affords players opportunities to focus solely on playing that pro-gamers in other national contexts do not enjoy.[164] In addition to diligence and intensity in practice, "Korean-ness" in

163I did not observe this competition in person, but rather followed the live stream through the twitch.tv online portal.

164The disparity between the Korean professional *StarCraft* scene and professional *StarCraft* environments elsewhere is changing, albeit somewhat slowly. American teams that can afford to do so have followed the

StarCraft playing style is correlated with qualities of quickness and mastery of the game's tempos.

"*StarCraft* is all about timing." I heard this statement again and again during my fieldwork, from fans, ex-players, and shoutcasters alike. Everyone with whom I spoke reiterated how a player's chances of victory ultimately depended upon how well he or she could manage build strategies and unit individual maneuvers within the tempo of a given match. Mastery of timing is fundamentally contingent on how well a player calibrates his or her own phenomenological sense of the tempo of play with the game-specific time that it takes to build structures and units. As in other online games, *StarCraft II* utilizes a delay feature whereby game units are not produced automatically upon a player's instruction, but rather take a certain length of time before they appear on the map and can be used. Each unit, structure, and researched technology has a specific "build time" that is measured in seconds, and this is how long it will take from a player ordering it to be built to when it is ready. For example, a Protoss zealot has a build time of 140 seconds while building a Protoss immortal takes only fifty-five seconds. Furthermore, different units move at different rates across the game maps, and there are upgrades that a player can make to increase the speed at which units move. There are also delays known as "cooldowns" that apply to different units' attacks and abilities and determine the frequency with which certain attacks can be utilized. For instance, a Zerg mutalisk has a cooldown of 1.5246 seconds between attacks, compared to .75 seconds for a Zerg hydralisk. Together, build and

Korean model of housing their players together so that they can concentrate solely on practice (Feuer 2013), and elite academies where retired pro-gamers train the next generation of professionals have sprung up in Europe (Kostov 2013). Moreover, in 2013 the United States began issuing P-1A visas—the same visas granted to athletes in other sports—to pro-gamers for participation in American e-sports leagues and competitions (Dave 2013), which has encouraged some Korean players to seek individual sponsorship and move to the U.S. where they have greater flexibility over their own practice and competition schedules than they do in Korea (Campbell 2014).

cooldown times constitute the basic tempo of *StarCraft*, establishing the regimented temporal parameters for play.

Timing also influences fans' reactions to how an individual set unfolds. All of the *StarCraft* fans whom I encountered enjoyed playing the game in their free time as well, and so they had their own well-conditioned sense of the game's timing based on their knowledge and experiences. Knowledge of the timing characteristic of conventional builds helps fans predict what a player will do from the very opening of a set. For example, if fans see that a Zerg player has opened by building a structure known as a "spawning pool" as soon as he or she reaches ten "supply"—the term for the number of individual units available to a player at any given time—then this indicates his or her intention to prepare a large force of attacking units more quickly than the conventional "thirteen-pool" strategy that entails building a spawning pool after reaching thirteen supply. A player typically uses a ten-pool opening in aggressive builds designed to launch attacks earlier than his or her opponent expects, and thus incorporates the technique into a strategy that—if executed correctly—will end the set quickly. Once fans recognize that a player intends to "go ten-pool," they usually react with gasps, murmurs, groans, or applause, depending on their rooting interests. As the set progresses, these reactions punctuate the action on the screen, thereby helping to establish and mark the tempo of *StarCraft* as an e-sports performance.

StarCraft pro-gamers are well aware of how long it will take to execute a given build order or unit attack and are able to plan or adapt their moves and counter-moves accordingly. They do not formally measure the game's tempo—as doing so would detract from the fluidity of their actions, which unfold at a breakneck pace—but rather develop a familiarity with *StarCraft*

temporality through practice that becomes internalized and to which they calibrate their play.[165] While players can consult the game clock in the bottom left hand corner of the game interface as a reference, professionals also develop idiosyncratic metrics that let them know when something "ought" to occur. In this way, they are able to speculate about their opponents' strategies based on whether or not they see a specific unit or structure at a given point in the set, and organize their own counter-strategies around their inferences about timing.

A "timing push" or "timing attack"—like the one INnoVation used against Stephano in the vignette above—is the name given to a move that takes advantage of the marginal differences in build times among races and units. Team Liquid's authoritative *StarCraft II* wiki defines a timing attack as:

> "an attack that is done during a certain period or moment in time that results in an increased advantaged compared to attacking outside that window. The time period in which an attack is stronger than outside the time period is commonly referred to as a timing window. The best timing windows are ones where both player-dependent and opponent-dependent factors coincide (e.g. your upgrade completed, but your opponent's has not)" (emphasis removed).[166]

Pro-gamers, therefore, learn to calibrate their gameplay not only with their equipment and the game's technical interface, but also with the temporality that is programmed into *StarCraft*'s mechanics and the tempos of individual matches. Developing an embodied, tacit method of evaluating timing is therefore a crucial dimension of professionalization.

To complicate matters further, *StarCraft* can be played at five different speeds. "Normal" speed is the baseline, the default temporal metric for playing the game. However, players can choose to adjust the game's settings so that build times and unit movements pass more slowly or

165Depending on the specific racial match-up (e.g. Zerg vs. Protoss, Terran vs. Zerg, etc.) the expectations for timing will be different.

166 Source: http://wiki.teamliquid.net/starcraft2/Timing_Attack, accessed October 10, 2014.

more quickly. The pace of professional *StarCraft* is standardized to the "faster" speed option, at which everything moves exactly 1.38 times faster than "normal" speed.[167] For example, I measured GumiHo and LosirA's epic GSL battle in this chapter's opening vignette with a stopwatch application on my iPod as taking sixty-two minutes, but according to the game's internal chronometer it lasted over eighty-five minutes. Because of this difference in calculating game speed, fans and pro-gamers refer to the professional pace in "*StarCraft* minutes," thereby explicitly marking the game's alternative, chronotopic temporality. In other words, professional *StarCraft* speeds are *literally* accelerated, and become constitutive aesthetic features of pro-gaming practice and sociality.

The most discussed statistic that the *StarCraft* player and fan communities use to evaluate pro-gamers' performances is APM rate, a metric that quantifies the speed at which players can execute individual actions in the game. APM is calculated according to the number of commands that a player issues—via mouse clicks and keystrokes—over the span of one *StarCraft* minute (about forty-three seconds of "normal" time). *StarCraft II*[168] has an internal application that keeps track of players' average APM rates over the course of a game, thereby making it easy to compare against one's previous performances or against another player's. However, there is not always a one-to-one calque between keystrokes or mouse clicks and game commands, and so although high APM is certainly correlated with fast movements it is not an *absolute* measurement of finger or hand speed. Additionally, APM does not necessarily correlate with "skill" since players can artificially inflate their APM rates by issuing the same command over

167Of course, this accelerated pace *is* normal speed for pro-gamers, the rate to which they calibrate their performances.

168APM calculation was not programmed into the original *StarCraft*, but after the metric became popularized in the course of *StarCraft*-as-e-sport's history Blizzard incorporated it into *StarCraft II*. This is one more example of how Korean e-sports have affected game developers approach to game design.

and over again, a practice known in the English-speaking *StarCraft* community as "spamming." In light of this, e-sports fans have developed an "effective APM" (or EPM) metric that accounts for spamming and measures only "meaningful"—or "useful"—commands.[169] Korean pro-gamers typically have an average APM rates of 300—several fans told me that players with rates under 300 could not realistically compete at the highest levels of *StarCraft* competition—but occasionally these can rise above 400 during particularly intense engagements.[170]

While APM and EPM alone are not enough to indicate a player's relative skills and abilities, they are reliable indicators of excellence in performance. In other words, having a high APM rate does not automatically mean that a player will be successful, but players with low APM rates will find it difficult to win in the vast majority of professional matches. Even as Wolf's comments about *StarCraft* being "not about fast hands, but about a fast mind" seem to reify a Cartesian mind-body dualism, they also point to the importance of developing both mental strategies and physical skill sets and how these two domains are unified in performance. At the same time, the inverse is also true: "Players who can think fast, but who are unable to issue these commands on time, are unable to win matches" (Kow & Young 2013:7). Whether or not APM is a useful statistic is, in the last instance, irrelevant, as the importance that is has within the *StarCraft* community demonstrates the salience of speed, and the qualities of acceleration and quickness specifically, for e-sports performance. Moreover, the celebration of speed with respect to APM emphasizes the embodied, technical relations among players, equipment, and game contents that distinguish e-sports from other athletic competitions.

169 For more information about the algorithm that is used to determine effective versus ineffective actions, see https://sites.google.com/site/sc2gears/features/replay-analyzer/apm-types, accessed October 13, 2014.

170The highest recorded APM in professional Korean *StarCraft* belongs to Park Seong-joon (July), who registered an APM rate of 818 in a match in 2007. However, this included spamming, so it is unclear what his EPM rate would have been.

Hands and fingers are the focal points of pro-gamers' physical training and performance.[171] When I attended my first professional *StarCraft II* match I was mesmerized by the players' hands: constantly in motion, flying across the keys, and clicking the mouse buttons with nary a pause, even for a fraction of a second. Many players use handwarmer packs in between sets or as they are waiting on the bench, squeezing them and running them across the backs of their hands to keep fingers and joints loose, and team houses are kept hot when players are training for the same reasons (Jin 2010:97). The OGN Hall of Fame wall at the back of Yongsan's I'PARK stadium demonstrates the symbolic value of hands for Korean *StarCraft*, featuring casts of four players' right hands—their "mouse hands"—in order to mark their having won 100 sets in Proleague matches.[172]

Quickness as a characteristic feature of Korean *StarCraft*-as-e-sport applies not just to equipment, software, and hands, but also—metaphorically speaking—to the game's history and volatility with respect to the tempo of major upheavals (e.g. "flash in the pan" players, sponsorship and ownership changes, changes to competitive formats and organizational structure, etc.). Brett Hutchins writes of e-sports and online gaming in general that:

> "The culture of digital games and gaming is characterized by 'speed and acceleration,' which presents a significant challenge for those attempting to study them. The rapid growth of the gaming industry, the pace of development in computing processor power and memory storage capacity and the capricious tastes, fervid devotion and varying experiences of gamers mean that '[w]hat is published [about games] in paper today has already been debated to death online yesterday'" (2008:854).

Hutchins' observations apply equally well to my own fieldwork experiences with Korean e-

171To further underscore the primacy of hands in professional *StarCraft*, Hong Jin-ho (YellOw) had his fingers insured for US$62,500 during his career as a pro-gamer (Bell 2013).

172These victories were recorded during the *Brood War* era and so the feat of 100 victories in that format will never be equaled. Only four players ever accomplished this mark: BoxeR, YellOw, Lee Yoon-yeol (NaDa), and Song Byeong-goo (Stork).

sports. Tasteless and Artosis articulated this narrative of upheaval as the status quo in this brief exchange during the 2013 GSL Season 1 Final between Kang Dong-hyeon (Symbol), and Shin No-yeol (RorO):

> "*Artosis*: As we see, Symbol did beat [RorO] last time they played, but that was in 2012; who even *knows* how many years ago that was Tasteless?!
> *Tasteless*: That was some time ago! That's like B.C. in *StarCraft II* years right now!"

I mention this not to make a methodological point about the temporality of Internet research (cf. Karpf 2012) or to remark about the "timeliness" of such research (cf. Boellstorff 2014), but rather to draw attention to how quickness and acceleration are fundamental qualities in the aesthetic evaluation of Korean e-sports. Moreover, it is this preoccupation with quickness, dynamism, volatility, and precarity more than anything else that connects Korean e-sports to the characteristics of Korea's information society chronotope and its attendant socialities.

Conclusion

Unlike their amateur counterparts, Korean pro-gamers do not experience nearly the same degree of public scrutiny regarding their gaming behaviors and practices. While individuals who spend their days at PC *bang* are labeled *jookdori* and those who play games all day long at home are called *geim pye-in*, pro-gamers are commended for their athletic achievements, bringing fame and positive global attention to the Korean information society. As Dong-ryul said to me, "I'm proud of [Korean players' accomplishments]! Because it's just like war! Victory! [We've won] like seven WCG in a row." His friend Hyun-jae chimed in that "the Riot Games CEO says the Korean pro-game market is like the Premier League in soccer," adding that this made him feel proud as well.

Other countries have begun to take notice of Korean e-sports and how they have been intertwined with Korean informatization. In 2012, the Polish government invited Jin-soo to act as a consultant for Poland's plans to create public demand for high-speed Internet by inculcating a domestic e-sports scene. E-sports have become so associated with the development of Korea's advanced information society that the relationship has become a model for places that also want to construct a world-class information infrastructure in a relatively short period of time.[173]

Korean e-sports have not been immune to criticism, however. While some observers continue to voice their concerns about the labor conditions for pro-gamers,[174] an issue that has attracted more attention in recent years has been the relationship of e-sports to Korea's growing online game "addiction" problem. For example, in 2003 BoxeR was invited to participate in a segment on KBS—one of Korea's three major television networks—discussing the "harms of online games":

> "[Inviting BoxeR] was the mistake of the producers who did not realize the difference between gaming and e-Sports. Especially as the moderator treated [BoxeR] as a game addict, the KBS viewer bulletin was on the verge of paralysis, due to the complaints of netizens. However, rather than having negative impacts, this led to sending a message that 'Pro-gamers are good cultural products' to the broadcasters, and later on the appearance of pro-gamers on public TV continued [sic]" (KeSPA 2008:51).

Given that pro-gamers practice online games for upwards of ten hours per day, politicians, parents, and news media—both Korean and international—have drawn a connection between e-sports and behaviors that the Korean psychiatric community have identified as gaming

173E-sports observers outside of Korea have asked whether the rest of the world will ever "catch up" with the Korean e-sports scene (Zacny 2014), a sentiment that parallels the Park Chung-hee era policies designed to help Korea "catch up" with the world's advanced economies.

174In a policy talk organized by Korea's New Progressive Party in 2010, former MBCGame host Kim Jeong-geon referred to the professional development system for Korean pro-gamers as "the chicken coop," emphasizing the exploitative labor conditions in which the majority of players find themselves (Hankyoreh 2010). Jin (2010) also emphasizes the precarious situation for Korean pro-gamers, especially regarding opportunities for post-retirement employment.

"addiction," expressing worries about how e-sports might promote "unhealthy" relationships to online games and the Internet (e.g. McCurry 2010). Vladan Starcevic writes that "in some Asian countries, such as South Korea, Internet addiction and similar problems are considered issues of public health significance," but subsequently notes that in Korea "competitive online video gaming is heavily promoted, blurring the boundary between 'normal excessive' and pathologically excessive use of the Internet and online video games" (2012:17).

Jin-soo stressed this same distinction between gaming and e-sports when I asked him about KeSPA's relationship to game addiction treatment. Although he said that KeSPA does not have a formal relationship with any addiction treatment centers or organizations, it is something that he and others in the Korean e-sports community think about. "Addiction is a problem for young people because they are losing their creativity," Jin-soo told me. He continued:

> "Young Korean students just learn routines at school, and after school they play games just alone, just competing with electronics. But doing e-sports, it's different. For e-sports they need more activity and creativity to compete with each other. Just playing games and playing e-sports is *very* different. Playing an e-sports game with their friends is different because they could communicate with their friends and with others. So you can see many young generations watching e-sports contents together on the subway, and saying together 'Oh, that strategy is not good!' or something. E-sports are easier for them to connect to because it is easier to connect to game contents than other sports contents. We think that e-sports are a cure for addiction to games."

Without using the same terminology, Jin-soo's comments reproduce a typology of online gaming socialities that is similar for amateur online gamers in PC *bang*. Just as PC *bang* patrons problematize their peers' behaviors according to the degrees to which they are "social" or "anti-social," the Korean e-sports establishment views e-sports activities as qualitatively different from other types of online gaming.[175] And like the distinction in PC *bang* contexts, the evaluation of e-

175Marcella Szablewicz notes a similar distinction with respect to online gaming in contemporary China, which shares with Korea a growing public concern about game addiction. Whereas online games—especially MMORPGs—have elicited condemnation from the Chinese government and society because of their association with so-called game "addiction," e-sports have been celebrated as alternatives to online games that are both

sports versus online gaming can be reduced to ethical evaluations that privilege offline, face-to-face social interaction over human/non-human and online-mediated interactions, and that associate this normative model of sociality with qualities of acceleration and quickness.

morally and physically "healthy," becoming the 99th official Chinese professional sport in 2003 by government decree: "It was not the fact that they were played on the internet [sic] or on a PC that separated them … but rather a number of judgments about the kind of social interaction, competition, skills, and time/monetary investment that these different game genres were presumed to entail" (2011:8).

"From Heroes to Monsters": "Addiction" and Managing Online Gaming Culture

August 3, 2013: At the opening ceremony for the 2012-2013 *StarCraft II* Proleague finals,[176] Jun Byung-hun—a member of the centre-left, opposition New Politics Alliance for Democracy party—addressed the crowd of hundreds in attendance at Seoul's Jamsil Indoor Stadium. A representative from Seoul's Dongjak-gu district in the National Assembly, Jun had also recently become the fifth president of KeSPA (the organization in charge of the Proleague), and was one of the government's strongest supporters of online gaming culture in general and e-sports in particular. He thanked the fans for demonstrating their support of e-sports, and noted how important online games were to Korean popular culture. He also vowed to continue fighting legislation aimed at restricting online gaming, such as the controversial "Shutdown Law," an amendment to the Juvenile Protection Act passed in 2011 that prohibits anyone under sixteen from logging into online games between midnight and 6:00 AM. The Shutdown Law had been proposed as a measure to prevent so-called online game "addiction," a problem that many doctors, politicians, and child advocacy groups see as a growing threat to Korean society. Jun, however, believed that the law was an ineffectual, politically-motivated measure that represented a misunderstanding about how to manage the addiction problem. Moreover, he argued that e-sports should not be lumped in with the problematic aspects of online games as they demonstrated the creative, fun, and "healthy" side of Korean online gaming culture.[177]

Later, during a break in the action between sets, SPOTV's English language shoutcasting

176I did not attend this competition in person, as I had left Seoul in April 2013. These observations and the transcription below are taken from SPOTV's broadcast of the event, which I accessed via the twitch.tv live online streaming video service.

177In a post on his personal blog less than three months earlier marking KeSPA's "e-Sports Family Festival," Jun framed e-sports in 2013 as being "reborn as a new culture of family play for the digital generation," presenting an image of Korean e-sports that is connected to the most intimate of Korea's social institutions (Jun 2013).

team of Alex “Supernovamaniac” Kim and Justin “Whiplash” Wilson touched upon the topic of game addiction that Jun had raised earlier, and addressed how it was related to Korean e-sports:

> *Supernovamaniac*: “You know what's also funny, these guys, they might be pro-gamers, but they're not game *addicts*.”
> *Whiplash*: “Well … I don't know about that, man … They play *StarCraft* ten to twelve hours a day-”
> *Supernovamaniac*: “Yeah, but here's the thing: the addicts, they can never stop, and, you know, they're always forced to play the game. These guys, when they do not play the game, they're like, 'Okay, you know what? I'm not playing the game right now, I'm not practicing.' So the brain is okay.”

Before Whiplash could respond, the next set began and he and Supernovamaniac resumed their play-by-play commentary. However, their lack of agreement as to whether or not pro-gamers are also game addicts illustrates an important tension underlying Korean online gaming culture that is becoming more visible as the public debate around game addiction intensifies. Online gaming exists between these two discursive representations: Is it a creative outlet for social interaction and friendly competition, or is it a potentially dangerous activity that encourages problematic—or even addictive—behavioral attachments? Institutional strategies for managing Korean online gaming culture address this very tension, and these strategies' practical entailments are working to reshape relations not only between people and games, but also among individuals, groups, and society writ large.

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Online game addiction is squarely in the public eye in Korea, the source of both fears and derision regarding the nation's informatized past, present, and (especially) future. Korean doctors have been researching and publishing about game addiction since the mid-1990s, and more recently the news media have brought attention to the issue, prompting politicians to take legislative actions—such as the Shutdown Law—designed to deal with game addiction's effects before they become unmanageable. The Shutdown Law and similar measures have come as

something of a surprise for the Korean game industry since it was not so long ago that they were being praised for their economic and cultural contributions to informatization. As Dr. Paik—a prominent Korean psychiatrist and one of the architects of the Shutdown Law—told me, "[The game industry] is so disappointed—very, very depressed—because they are unexpectedly discriminated against. [They've gone] from heroes to monsters."

My goal in this chapter is not to argue whether or not "addiction" is an accurate or appropriate label to affix to this behavioral phenomenon, but rather to approach it as a discursive object that motivates and is used to justify particular political and biomedical action. Online game addiction is not a collateral dimension of Korean online gaming culture, but rather one of its constitutive aspects, the responses to which are shaping and reshaping the status of online gaming in relation to mainstream Korean society. The debates around legislation like the Shutdown Law and Game Addiction Bill raise two sets of important questions for ethnographic work concerning addiction, public policy, and the social entailments of IT-related practices like online gaming. The first set concerns the relationship between players and games: Are games akin to some sort of substance to which players can become addicted? Do they afford opportunities for social interaction to which players develop pathological attachments; in other words, is the addiction to *games* or *gaming*? Or is "game addiction" symptomatic of other social, cultural, and/or psychological phenomena that manifest in an unhealthy obsession with games? The second set of issues concerns the relationships among individuals, society, and the government: Does responsibility for preventing and managing game addiction lie with individuals or with institutions? What is the sociality of so-called addicts, and how does it deviate from "healthy" or "appropriate" social behavior? What would successful treatment of

addiction entail?

The issue of online game addiction is situated across several Korean online gaming chronotopes. It is a topic of conversation and conceptual category of behavior in online gaming communities, in the offline spaces where online gaming takes place such as PC *bang* and e-sports competitions, and in the Korean public sphere. At each of these scales, addiction is contextualized within the history of informatization, and the aesthetic and ethical characteristics of *bballi bballi munhwa.* "Twenty years ago, the president at that time said that we have to develop technological excellence to make the country wealthy," remembered Dr. Moon, a retired a retired psychiatrist and superintendent of a large hospital in Seoul. He continued, "So they asked the scientific leaders to think about which way was best, the shortest way: *bballi bballi*. Their conclusion was IT, and one way was developing games. The Ministry of Science and Technology gave support to game companies, and we propagated our knowledge and technology to the world and earned money." However, according to Dr. Moon the symbiotic relationship that developed between the games industry and the government made any sort of regulatory intervention vis-à-vis online games and addiction more difficult to accomplish. Furthermore, the prevailing logic of *bballi bballi munhwa* that seeks quick solutions to sometimes complex problems had, in the eyes of many of my interlocutors, made addressing and managing online game addiction all the more difficult, as policymakers looked for the most politically expedient —not to mention cheapest—way of dealing with the problem. They cast their pessimism in terms of speed and acceleration as well. Dr. Paik, for example, expressed to me his opinion that "society changes so fast that no one can have enough time [to solve game addiction]. So, in Korea, I think it's very hard to solve this. The problem is just going to evolve." In this context,

addiction is framed both as symptomatic of informatization's literal and metaphorical qualities of acceleration and as a sociality imbued with qualities—slowness, immobility, isolation—that are out of synch with the pace and expectations of Korea's high-speed, high-tech information society. As such, managing game addiction is a political, medical, and ethical project that entails calibrating would be addicts with normative models of IT use and online gaming through a variety of institutionalized disciplining strategies and techniques applied to both embodied practices and social behaviors. Examining the confluence of discourses and practices around online game addiction reveals a modern style of governance that combines government-backed interventions with "technologies of the self" (Foucault 1997) that influence how gamers relate to games, gaming, and other gamers.

Online game addiction treatment and prevention is managed in several different ways in Korea, including individual and group counseling sessions, treatment centers and clinics, educational outreach in schools and media, legislative strategies like the Shutdown Law and Game Addiction Bill, and more recently in rehabilitation "camps" where potential game addicts are cut off from the Internet and online games for an extended period of time. For reasons of privacy and concern for patients' successful recovery, I was not able to visit treatment facilities nor observe firsthand any counseling or other therapeutic activities. Neither did I ever meet a self-described online game addict. Instead, I interviewed several psychologists, psychiatrists, and addiction counselors who had clinical and theoretical expertise with techniques and strategies for managing addiction in visits to their offices at several hospitals, universities, and treatment centers around Seoul. I supplemented the data from these interviews by reviewing public policy assessments and news media reports about game addiction, speaking with the online gamers I

played *Lineage II* with about the discourse about addiction and their encounters with addiction management strategies, and collecting anonymous online testimonials from gamers who were worried that they might be addicted. In this way, I learned how medical professionals define and act upon the concept of online game addiction in relation to larger political projects that are designed to cultivate specific practical and ethical engagements not only with online games, but with Korea's information society more generally.

A Brief History of Online Game Addiction in Korea

Dr. Paik's comments about Korean online game companies' public image transforming "from heroes to monsters" illustrates an opinion that was shared by all of the doctors and addiction counselors with whom I spoke: While online gaming culture had been instrumental in promoting informatization and helping Korea recover from the IMF crisis, it had also generated some unexpected and problematic social phenomena, namely the growth of Internet and online gaming "addiction." Concerns about online games, gaming, and addiction have been circulating in Korea for nearly two decades. Dr. Paik claimed to have introduced the idea of "Internet addiction" to Korea in an article he published in a popular science journal in 1996. "My article got *big* attention," he told me, "because in the nineties the term around cyberspace was computer 'horror' or 'terror': The computer was considered as a big obstacle to overcome. It was an ugly thing, so how could it be that spiritually attractive [as to afford addiction]?" With the development of informatization and the popularization of online games in Korea, computers and the Internet were no longer things to be feared; rather, fears emerged in relation to the specific ways in which individuals *used* them, and the consequences of that use for Korean social

institutions. Among the greatest concerns with respect to IT-related addiction were stories of people becoming pathologically attached to online games, especially given the explosion of online gaming's popularity in the late 1990s and early 2000s. Writing in the context of this period in Korea's informatization history, Leo Sang-Min Whang et al. noted that "Internet use in Korea has increased dramatically and has become a part of daily life … However, the Korean public is apprehensive about pathological use of the internet … Excessive online game usage, especially, has emerged as a major social concern, because of the social and family conflicts related to game activities [sic]" (2003:143).

The Korean public's concerns were further heightened by several high-profile cases of deaths linked—both directly and indirectly—to online games in the 2000s and 2010s. One of the earliest reported incidences of gaming and death in Korea occurred in 2004, when a twenty-nine year old man who had been playing games in a PC *bang* for eight hours continuously began complaining of chest pains before collapsing dead at his station (Shin 2005). In 2010, a twenty-two year old man stabbed his mother to death while she was sleeping, allegedly because she had been harassing him about playing games too much; after the murder, he went to a PC *bang* to keep playing (Park 2010). The most infamous of these stories—and the one that received the most attention in the international news media—was the case of a Suwon couple whose infant daughter starved to death while her parents were playing online games at a nearby PC *bang*. This event received particularly sensational treatment in the media as the couple was reported to have neglected their own child while spending time raising a virtual child[178] in an online game (Tran

178This aspect of the story was more media fabrication than actual fact. The couple had been playing a game called *Prius Online* in which players have the opportunity to "grow" a companion character alongside their primary characters. In the game, these companion characters are represented as child-like creatures, and so journalists seized upon the opportunity to juxtapose "real" and "virtual" families and perpetuate a narrative about collapsing boundaries between offline and online spaces. However, laminating offline family dynamics onto engagement with online games is a misrecognition not only of gameplay, but also of the myriad ways that gamers have of

2010; Veatch 2014), thereby making a connection between online game addiction and the breakdown of the Korean family. Although each of these cases was extreme and unusual for the average online gamer, they came to be associated with Korean online gaming culture—and especially with PC *bang*—through their circulation in news media.

Medicalization of online gaming

Thus far I have been using the phrase online game addiction as a blanket term, a choice that reflects contemporary Korean news media, political, and medical discourses on "*geim joongdok*," literally "game addiction." However, academic literature both inside and outside of Korea is divided over whether to call the phenomenon online (or Internet) *game* addiction (e.g. Sun et al. 2012; Kim et al. 2008; Koo & Kwon 2014; Kneer et al. 2014; Kweon & Park 2012; Kwon et al. 2011) or online *gaming* addiction (e.g. Freeman 2008; Ko et al. 2009; Shin 2007). This distinction has implications not only for understanding models of addiction, but also for designing and implementing treatment programs. Whereas "online game addiction" locates the source of addiction in specific game titles or "online games" in general—thereby drawing an implicit analogy between online games and addictive substances—"online gaming addiction" problematizes the qualities of gaming as an activity and as a platform for behavioral development, particularly with respect to sociality. The differences between these two ways of medicalizing Korean online gaming culture with respect to addiction have significant entailments upon management strategies and techniques: If games are understood to be the problem, then managing addiction entails regulating access to games, but if instead the problem is gam*ing*, then management becomes about facilitating behavioral regulation of gamers against normative

compartmentalizing their different spheres of social interaction.

expectations, especially around embodied gaming practices and social interaction.

Problematizing digital games and gaming is by no means a new phenomenon, as games have been cited in news media and medical research alike as causing and/or contributing to physical and social problems almost as long as such games have been around (e.g. Greene & Asher 1982; Ross et al. 1982; Harry 1983; Kestenbaum & Weinstein 1985).[179] Addiction specifically has been associated with digital games and gaming in medical and social scientific research since the early 1980s (e.g. Soper & Miller 1983; Shotton 1989; Keepers 1990; see Griffiths et al. 2012 for a thorough survey of research on video games and behavioral addiction from the 1980s to the present day). In Korea, too, *orakshil*—the public video arcade rooms of the 1970s and 80s—and early digital games were associated with corrupting children, encouraging deviant social behavior, and even addiction. To wit, this excerpt from a 1980 newspaper article published in the *Dong-a Ilbo* about the world inside of *orakshil*: "The games are so addictive that once entered, the children can't bear to come out again before they spent all the money in their pockets; the content of the game is mostly the reenactment of war, and the instructions also use pure martial slang, and there are not few worries that they hinder a healthy formation of character."[180] This historical orientation to digital games in Korea as fostering deviance and affording addiction influenced the medicalization of online games, including the familiar themes of protecting children, encouraging ethical behavior, and regulating play that are characteristic of strategies for managing online gaming culture.

In public policy, the popular press, and medical literature alike, online game addiction

179Criticizing some games' violent and sexually explicit content has been part of political discourses around the world for decades; for instance, Loftus and Loftus recall that in 1982 then-U.S. Surgeon General C. Everett Koop strongly cautioned American parents against letting their children play video games because he believed that they produced "aberrations in childhood behavior" (1983:182).

180Source: http://www.hardcoregaming101.net/korea/part1/korea1.htm, accessed February 21, 2015. Translated from the Korean by Sam Derboo.

most often falls into a larger category of "Internet addiction," itself sometimes treated as a subset of "media addiction" (e.g. Finn 1992; Zekany 2014) or "technology addiction" (e.g. Turel et al. 2011; Paris et al. 2015), "operationally defined as non-chemical (behavioural) addictions that involve human-machine interaction" (Widyanto & Griffiths 2006:31). In other words, it belongs to a class of IT and online-mediated *behavioral* addictions.[181] The association of addiction with the IT-related activities is a relatively recent one in the medical literature, albeit one that some authors see as a potentially devastating behavioral disorder. As Sookeun Byun et al. write, "Among all behavioral addictive traits, the Internet stands out for its relevance to the future and its promise of potentially delivering harmful results to millions as access to the Internet rises globally" (2009:203).

Several of the Korean doctors and counselors with whom I spoke traced the term "Internet addiction" back to psychiatrist Ivan Goldberg and psychologist Kimberly Young, both Americans.[182] Goldberg created a web page in 1995 titled "Internet Addiction Support Group," and the following year wrote a message to a mailing list called "Psychology of the Internet," advertising the website. In the message he wrote, "As the incidence and prevalence of Internet Addiction Disorder (IAD) has been increasingly exponentially, a support group, The Internet Addiction Support Group (IASG) has been established," followed by what he termed "official criteria" for diagnosing IAD.[183] Young began working on Internet addiction around the same

181Not all medical professionals agree that "addiction" is an appropriate clinical description for repetitive behaviors that are not substance-related; for instance, Jaffe argues that "looking for commonalities across chemical and non-chemical addictions can be heuristic. However, to the degree that seeing these behaviors as members of a super category suggests that they are all amenable to behavioral interventions, inspiration, or changes in values and beliefs, we risk the trivialization of some of the commonest and most destructive of human problems" (1990:1427).

182Goldberg's and Young's nationality was important for my interlocutors, as they argued that the idea of Internet addiction had originally come from the United States, and so they were simply working in the same tradition rather than dealing with a uniquely "Korean" phenomenon.

183Source: http://users.rider.edu/~suler/psycyber/supportgp.html, accessed February 21, 2015. It was later revealed that Goldberg had intended for his web page and message to satirize how psychiatrists can often be overzealous

time, devising a questionnaire for Internet users in 1994 aimed at determining whether or not their behaviors could constitute an addiction and establishing the Center for Internet Addiction in 1995 in Pennsylvania and online.[184] Like Goldberg, she proposed diagnostic criteria for Internet addiction by drawing upon the diagnostic criteria for pathological gambling in the American Psychiatric Association's authoritative Diagnostic and Statistical Manual of Mental Disorders (DSM)-4.[185] Building upon Young's proposed critieria, between 2001 and 2002 Korean psychologists developed the "K-Scale," a tool designed to test the specificities of Internet-related disorders among Koreans (Kim et al. 2002; Kang & Oh 2001; Whang et al. 2003).

As the medicalization of online gaming in Korea continues to produce research findings, Korean medical professionals have become as influential in the conceptualization of Internet and online game addiction as Goldberg and Young. In the years leading up to the publication of the DSM-5 in 2013, doctors argued both for (e.g. Block 2008; Starcevic 2013; Tao 2010; King & Delfabbro 2012)[186] and against (e.g. O'Brien 2010; Pies 2009; Petry & O'Brien 2013) including Internet and/or online game addiction among the list of officially designated mental disorders. Some referenced anecdotal evidence from Korean online gaming culture, Korean medical research, and Korean policy efforts as support for its inclusion; for example, American psychiatrist Jerald J. Block wrote that:

> "After a series of 10 cardiopulmonary-related deaths in Internet cafés and a

when it comes to identifying new disorders. However, many mental health professionals took his suggestion seriously, and the term "IAD" that he introduced is now used widely by researchers in this field, even among my Korean interlocutors.

184Young also founded the United States' first inpatient treatment program for Internet-related addictions at Bradford Regional Medical Center in Pennsylvania (Neporent 2013).

185More recently, the perceived similarities between pathological gambling and Internet-related addictions have been questioned, specifically that problematic online gaming "may have a unique cognitive profile with assumptions and beliefs that differentiate the disorder" (King & Delfabbro 2014:307).

186King and Delfabbro actually opposed including "online gaming disorder," but supported the idea of including "video-gaming disorder," arguing that "the specific context in which video-gaming takes place is relatively unimportant in conceptualising addiction to video-game play [sic]" (2012:21).

> game-related murder, South Korea considers Internet addiction one of its most serious public health issues … Since the average South Korean high school student spends about 23 hours each week gaming, another 1.2 million are believed to be at risk for addiction and to require basic counseling … Despite the cultural differences, our case descriptions are remarkably similar to those of our Asian colleagues, and we appear to be dealing with the same issue" (2008:306).

Arguments like Block's contribute to the perception of Korea not only as a leader in the diagnosis and treatment of online game addiction, but also a cautionary example of the social consequences of advanced information infrastructures coupled with a vibrant online gaming culture.

Ultimately, neither Internet nor online game addiction were included in the DSM-5, but "Internet Gaming Disorder" is listed as an entry in the "Conditions for Further Study" section where it is defined as "persistent and recurrent use of the Internet to engage in games, often with other players, leading to clinically significant impairment or distress … in a 12-month period" (2013:795). The entry also makes an explicit connection between Internet gaming disorder and contemporary East Asian societies, specifically China and Korea. Under the heading "Prevalence" the DSM-5 notes that "[Internet Gaming Disorder] seems to be highest in Asian countries," and under "Risk and Prognostic Factors" that "it has been speculated that Asian environmental and/or genetic background is another risk factor, but this remains unclear" (2013:797). Although as an anthropologist I strongly reject this decidedly reductionist—not to mention racist—rendering of "Asian," it is important to note how statements such as these contribute to the naturalization of addiction in discourses on Korean online gaming culture, especially how Korean online gamers are represented as particularly "extreme." Even Korean doctors themselves have argued for Korean exceptionalism with respect to Internet and online game addiction. For example, a team of Korean psychiatrists tested the diagnostic criteria for

Internet gaming disorder suggested in the DSM-5 and their appropriateness for Korean populations, concluding that the criteria were generally useful, but that some factors are abnormally highly correlated—specifically between withdrawal and preoccupation, and between loss of interest in other hobbies and all other factors—and thus recommended that the criteria be further refined (Cho et al. 2014).

Political interventions

In the midst of rising public anxiety about the social consequences of informatization, Korea hosted the first "International Symposium on the Counseling and Treatment of Youth Internet Addiction" in 2007. Koh Young-sam—at that time the director of the National Information Society Agency's (NIA) Internet Addiction Response Center—marked the occasion by telling the assembled specialists that "Korea has been most aggressive in embracing the internet. Now we have to lead in dealing with its consequences [sic]" (quoted in Oh & Larson 2011:157). Chulmo Koo et al. write that "finding a chance to lead in the treatment of IT addiction will lead [Korea] to become an 'ethically advanced technology country'" (2011:393). These comments illustrate how in both the political and medical communities managing Internet-related addictions has been cast as part and parcel of Korea's modernity through informatization: It is one thing to be technologically advanced, but it is quite another to sustain that advancement while ameliorating what are perceived as its harmful effects. Additionally, the language about *leadership* mimics the discourse around informatization in the 1990s as expressed in the *Chosun Ilbo* slogan "Slow to industrialize, but let's lead in informatization." There is an implicit argument being made here that developing an advanced information infrastructure entails

managing the unanticipated individual and social affordances of that infrastructure. The days of Korea playing "catch up" to the rest of the world have now been replaced by the responsibility of leading by example with respect to facilitating a "healthy" information society.

Although Korean doctors, academics, and politicians of all parties agree that something ought to be done about online game addiction, there is considerably less agreement about what that something should be. The most visible addiction management strategies—and consequently the objects of the fiercest public debates—have been legislative actions targeting the games industry and restricting access to online games. Conservative Korean politicians proposed punitive legislation aimed at game companies and designed to curb game addiction as early as 2005 (Park 2010; Lee 2005), but the most impactful policy thus far has been Article 26 of the Juvenile Protection Act, more commonly known as the "Shutdown Law," which states that "No provider of an Internet game shall provide the internet game to juveniles under the age of 16 between 12 midnight and 6 a.m. [sic]" (2012).[187] The law is enforced by requiring players to enter their national identification number whenever they either log into an online game web portal or sign up for an online game player's account. If the number is linked to a player under sixteen, then his or her access is restricted for the specified period of time.[188] However, the law

187Insofar as it is designed to enforce strict limits on the duration of play, the Shutdown Law parallels a strategy developed around the same time by the Ministry of Health and Welfare aimed at curbing alcohol consumption. The "119 Temperance Movement"—119 is the telephone number for emergency services in Korea—encourages drinkers to consume "one type of alcohol, just one round, and finish by 9 PM" (Lee 2012). As Dr. Moon told me, the increased attention to Internet and online game addiction has renewed interest in other addictive behaviors: "We believe maybe Korea was the first country whose psychiatrists realized that the Internet problem is serious in Korea and that it is a kind of addictive behavior. At the same time we realized that in Korea there is a lot of alcoholism!"

188The Shutdown Law has even had an unintentional impact on e-sports. Since a few e-athletes are younger than sixteen, they cannot participate in matches that require them to be online after midnight. Although such events are rare, one such incident occurred in 2012 when Lee Seung-hyeon, a.k.a. StarTale_Life, had to adjust his strategy in a *StarCraft II* tournament qualifying match. As the time approached midnight, he realized that he would soon be kicked offline and so he deployed a risky "all-in" attack even though he knew that it was a bad idea. The attack ultimately failed, and Life lost the match, but in recognition of how the shutdown law had negatively affected his performance the tournament organizers awarded him a place in the finals anyway (Choi 2012).

has been more symbolic than effective as underage gamers have simply created accounts using their parents' ID numbers.[189] The law has been met with criticism from several civil society groups, including the Korea Game Industry Agency (KGIA), which issued a statement saying that "it's regrettable how [the system] has branded game publishers as those with ill intentions like those making drugs" (Kim 2011). The KGIA and an advocacy group called Parents and Adolescents Cultural Solidarity are currently challenging the law's constitutionality in separate lawsuits (Jung 2012).

In an even more antagonistic approach to regulating the game industry, since 2013 Korea's National Assembly has been debating a proposed "Game Addiction Bill," which would officially recognize online games as on par with alcohol, drugs, and gambling regarding their addictive potential (Choi 2013). The Game Addiction Bill was introduced by Shin Yee-jin, a representative of the conservative, ruling Saenuri Party, whose sponsorship lends a perception of legitimacy as she is also a practicing psychiatrist. Hwang Woo-yea—another Saenuri representative and the current Minister of Education—stated his party's goals with respect to the proposed legislation in no uncertain terms: "We need to create a clean Korea free from the four addictions" (quoted in AP 2013), by which he meant alcohol, drugs, gambling, and online games.[190] This proposal marks a significant change in Korea's game addiction management as political practice: If passed, the Game Addiction Bill would allow the government to exert

189An addiction counselor told me of how the Shutdown Law had led to a humorous situation regarding representations of Korea's online gamer demographics. Based on statistics logged by online game providers, "if you look at Korea from abroad, it looks like forty year-old housewives play games the most because almost all adolescents are using their mother's code."

190Areum—a media addiction specialist at a government-funded addiction treatment center—used this exact phrase ("the four addictions") in our conversation about online game addiction. I spoke with her in October 2012, several months before the Game Addiction Bill was introduced to the National Assembly for debate. Given that her center operates under the auspices of the government and publishes research in the public sphere, this indicates that the "four addictions" discourse had been circulating for some time prior to its articulation in this proposed piece of legislation.

stricter control over the games industry and people's online behaviors by virtue of defining online games and gaming as potential public health risks. The rationale behind such a move is that since game companies "created" the object of addiction—i.e. games—in the first place, it stands to reason that they should be held accountable for solving the addiction problem. Furthermore, the bill would make game addiction into a legal category that could be used to mitigate individual responsibility (and agency) in crimes, or even as a reason for exemption from compulsory military service (Hwang 2014). On the other hand, formally recognizing online game addiction as a legitimate behavioral disorder could theoretically make treatment eligible for coverage by Korea's national health insurance plan.[191]

Speaking for the political opposition, Jun Byung-hun called the Game Addiction Bill a "lame concept"[192] and voiced his disapproval, as he had previously with the Shutdown Law (Lim 2013). Other members of the Korean psychiatric community—including some of my interlocutors—have also spoken out against the bill in the Korean press, explaining that their research has not yet made a compelling case that online games are *sources* of addiction, and that there is simply a lack of medical evidence to support including it among the "four addictions" (Economy Today 2013). The game industry has decried the bill, objecting strongly to being likened to drug-dealers and arguing that games themselves are not the problem, but rather that underlying social and cultural factors are to blame for people developing unhealthy attachments

191I got the impression from conversations with doctors that patients can make insurance claims for some forms of treatment, but not for others. For example, Dr. Moon told me that in the past he had prescribed Naltrexone—an anti-narcotic drug that is often used to ameliorate withdrawal symptoms—to online game addicts. However, under the letter of the law, pharmacological treatments like Naltrexone can only be prescribed to patients with substance addictions, and so the only way that Korean medical insurers will cover the cost of the prescription is if the patients' disorders are re-classified as something other than "online game addiction."

192The adjective that Jun used—*kkondae-jeok*—to describe the Game Addiction Bill is a slang term meaning "an old man with an aggressive attitude," thereby associating problematization of online games with a generational conservatism.

to online games in order to relieve their stress (Chae 2014).

Game companies and their advocacy organizations were surprised by these shifts in policy and public opinion about them and their products. As Dr. Hong put it to me, "Many game companies complain that the government and the Korean people think that they are evil, that they make 'drugs.' But they are not! They are very gentle, and they have a lot of [good] things for Korean society." The Korea Internet and Digital Entertainment Association (K-IDEA)—a trade group made up of Korea's largest game developers and other media corporations—created an online petition for Koreans to register their opposition to the law, and by November of 2013 it already had 280,000 signatures (Jeong 2013). In June 2014, the Democratic Party of Korea—one of the two parties in the opposition New Politics Alliance for Democracy—organized a public debate titled "Video Games: Addiction or Art?" about the role of digital games and gaming in Korean society, bringing together doctors, academics, representatives from the games industry, and politicians to discuss the relative merits of the Game Addiction Bill (Hwang 2014).

Internet and online game addiction, and the management strategies and techniques deployed to help "(re)calibrate"[193] addicts with a normative model of engagement with computers, the Internet, and society writ large are part and parcel of the making of the Korean "netizen." Although historically in Korea the term has been used most frequently in relation to political organizing through the Internet (e.g. Chung & Cho 2004; Yun & Chang 2007; Yun et al.

193Anne Allison describes a similar phenomenon in contemporary Japan around social displacement and the increasing precarity of labor, but she analyzes "recalibration" as a "biopolitics of life from below" employed by the displaced and precarious in developing "human life and relationality in a new direction" (2012:346). The process that I am describing is more coercive: a top-down, institutionalized set of management strategies that are crucial to contemporary forms of Korean governance. I prefer the term "(re)calibration" because it does not assume an original, normative calibration to which one is returning, but rather a semi-voluntary process of behavioral transformation that *implies* return, whether that return is actual or metaphorical. Furthermore, (re)calibration aligns with disease models of addiction that treat the disorder as a psychological condition that the addict has had since birth.

2010; Hauben & Hauben 1998), more broadly speaking "netizen" calls attention to the concept of online-mediated citizenship. In this regard, the Ministry of Information and Communication formed the "Netizen Ethics Committee" in 2000, and in early 2001 the Ministry of Education drafted the "Information and Communication Ethics Guidelines" which became a model for so-called "netiquette" curricula in middle and high schools. Many of my informants recalled their netiquette courses when they were schoolchildren, which focused not only on preventing anti-social online interactions such as cyberbullying, but also warned them of the dangers of Internet and online game addiction. The articulation of "netizenship" in strategies for managing online game addiction emphasizes how problematic engagement with games is framed as a pressing political concern that necessitates calibrating individuals and their behaviors with a normative model of IT-related practices, beliefs, and values in Korea's information society.

Parsing Addiction Typologies

Social scientific approaches to addiction research

Addiction has both colloquial and clinical uses. The colloquial understanding of addiction typically denotes obsession with something relatively trivial, like a certain food—e.g. "I'm addicted to chocolate"—or a specific song—e.g. "'Gangnam Style' is really addictive"—etc. In this context, addiction is not necessarily serious or harmful, and can even be used in jest or in reference to something "positive" (see Glasser 1985 on "positive addiction"). In its clinical contexts of use, however, addiction denotes compulsive, repetitive engagement with certain substances and/or activities that is understood to be pathological and detrimental to an

individual's physical, mental, and social health. All theories of addiction make ontological claims about the human condition, specifically about the roles that cognition, genetics, and environmental conditioning play in the progressive development of the behavioral patterns that characterize addiction. From an anthropological perspective, it is imperative that addiction be understood as embedded in far-reaching systems of knowledge and practice that have scientific, political, medical, and legal entailments, among others. Crucially, addiction research is in conversation with the classic Durkheimian tradition in sociology concerned with deviance as a social fact, parsing "the normal" from "the pathological":

> "The history of addiction in many ways is the history of its treatment as efforts to define this modern malady have taken place against the backdrop of its wider problematization. That is, addiction emerges as an object of inquiry and concern only when its associated behaviors become incompatible with the demands and expectations of modern life" (Raikhel & Garriott 2013:26).

Just as the places and social proximity of online gaming for PC *bang* customers, the qualities of in-game activities for *Lineage II* players, and the qualities of embodied athletic performance in e-sports are all constitutive elements in evaluations of Korean online gaming socialities against normative expectations, so too are the strategies and techniques concerned with online game addiction entangled in an evaluative framework for interpreting IT-related practices and behaviors according to certain aesthetic and ethical ideals. My research follows in this same social scientific tradition that is more interested in what examining practices and discourses around addiction in their localized, historicized contexts offers in the way of insight into larger social organization and cultural conventions, rather than the veracity of addiction as a medical concept.

Anthropologists and sociologists working in addiction studies have focused on both substance addictions (e.g. Bourgois 2000; Garcia 2010) and behavioral addictions (e.g. Avery

2009; Schüll 2012). While the objects of addiction in each of these studies are different, there are similarities in how addiction is treated by and through social institutions, and in how addicts' subjectivities and socialities are configured vis-à-vis expectations for "normal" social behavior. Angela Garcia (2010) writes that the history of addiction as an object of social and medical concern has progressively moved from understanding it as a manifestation of individuals' moral shortcomings[194]—a pathology with a quick and easy solution—to a disease model of chronic affliction. While the disease model of addiction removes some of the personal accountability from the addict's trajectory, Garcia points out that it also frames addiction as unavoidable, a condition that the addict can never fully overcome and can only ever hope to manage. In other words, as far as treatment is concerned the chronicity of the disease is in direct contradiction with the idea of individual agency and the choice to cease engaging in certain patterns of behavior; relapse—i.e. the return to addictive behavior—from this perspective becomes a personal, moral failing on the addict's part regarding inability to adequately care for one's self.

Nancy D. Campbell calls neuroscientists who seek to understand how addicts' brains function "moral-scientific pioneers" (2013:256), and writes that their work cannot help but take on moral valences with respect to how concepts like free will, choice, and compulsion are framed in public discourses (and policies) about normative versus non-normative behavior. In his comprehensive theory of addiction, West notes that these two ways of understanding addiction—simultaneously as a disease and as a matter of individual willpower—conceive of the addict in

194To wit, in "The Doctor's Opinion" opening to the "big book" of Alcoholics Anonymous—the foundational text for many substance addiction treatment and recovery programs around the world—Dr. William D. Silkworth remembers an alcoholic patient he once counseled: "The patient had made his own diagnosis, and deciding his situation hopeless, had hidden in a deserted barn determined to die … Following his physical rehabilitation, he had a talk with me in which he frankly stated he thought the treatment a waste of effort, unless I could assure him, which no one ever had, that in the future he would have the 'will power' to resist the impulse to drink. His alcoholic problem was so complex, and his depression so great, that we felt his only hope would be through what we then called 'moral psychology,' and we doubted if even that would have any effect" (2001 [1939]:xxxi).

different ways:

> "Addiction affects the choices we make but cannot be understood solely in terms of those choices; it affects our needs and desires but cannot be understood solely in terms of those; it affects our emotional attachment to the object of addiction, but involves more than this; it can involve non-conscious impulses as well as conscious urges but cannot be understood solely as a disorder of impulse control; finally it often involves a habitual element but is more than just habit" (2006:175).

This tension between personal responsibility and medical condition becomes laminated onto the ways in which programs that seek to manage addiction position individual addicts in relation to society.

Parsing online game addiction

Like addiction in general, online game addiction also has its colloquial and clinical uses. In its colloquial context, online game addiction can often have a positive or even humorous valence that describes attraction to some aspect of online games and/or gaming that is non-normative but not necessarily dangerous (see Kraut & Seay 2007). North American online gamers, for example, sometimes speak of being "addicted" to a particular game that they enjoy playing; for example, *World of Warcraft* is sometimes called "Warcrack" in reference to players' fierce devotion of time and energy that is facetiously equated with crack cocaine addiction (Snodgrass et al. 2012). In Katie Salen and Eric Zimmerman note in their comprehensive guide to video game design that "by and large, among game designers, addiction is considered a positive trait, the mark of compelling play. In business terms, lots of addicted players means that a game has a greater chance of being a commercial success" (2004:355). In fact, they argue that "play" and the clinical understanding of addiction are incommensurable concepts (similar to how Jin-soo—the KeSPA employee—explained to me why e-sports are an antidote to game

addiction):

> "To play is to find free movement within a more rigid structure. When a game activity becomes pathologically addictive, this movement is censured: free movement is shut down, the sense of free choice evaporates, and meaningful play abates. In this experiential sense, when a player becomes medically addicted to some form of play, play as we have defined it no longer exists. In other words, addictive play, in the negative sense used by the medical community, is not really play at all" (2004:356).

Playing games, in this formulation, is necessarily a voluntary, agentive activity—albeit something that is also bound by the rules and structures of the game being played. Because the clinical definition of addiction holds that addicts are prisoners to their compulsions, this fundamental principle of free will is absent among online game addicts, and thus their engagement with games is understood as something other than play.

In its clinical contexts, online game addiction refers to a pathological behavioral disorder that individuals develop around online games. Addiction is characterized by the symptoms of withdrawal that an addict experiences when he or she is separated from the game, which can manifest as agitation, insomnia, feelings of paranoia, etc. It does not correlate with any specific quantity of time spent playing online games; rather, addiction is defined in relation to how the addict's quality of life—e.g. work, education, social relationships—is affected by dependency on online games (see Metcalfe & Pammer 2012). As Dr. Moon put it for me, "There are no agreed upon criteria [about] how much *time* they use for playing, but in my opinion if [the addict] does not attend school or do homework, and his parents are scolding him, then he has a problem."

Managing online game addiction in the Korean medical community begins with formulating lists of risk factors and the potential causes of addiction. Once identified, these lists help doctors diagnose patients, create individual and generalized plans for treatment, and propose strategies for preventing gamers from developing addictive patterns of behavior in the first place.

Medical research focused on individual pathologies points to a variety of personality factors—from depression, low self-esteem, and loneliness (Kim & Kim 2002; Lemons et al. 2010; Kraut & Seay 2007), to aggression and hyperactivity (Kim et al. 2008; Freeman 2009)—and co- and/or premorbidities (i.e. co-occurrent mental health diseases or disorders) such as bipolar disorder, social anxiety, or other mood disorders (Yellowlees & Marks 2007; Han et al. 2011; Jang et al. 2008; Raveler et al. 2011) that contribute to the development of pathological attachment to online games. This is one of the many reasons that my interlocutors hesitated to call online games themselves addictive—as the proposed Game Addiction Bill would have it—and instead argued that it is better to think of games as technological platforms that can exacerbate an individual's pre-existing cognitive and behavioral disorders depending on the quality of his or her engagement.

While the Korean medical community has been more or less content with identifying these disorders as *addiction*, there has been considerably more controversy elsewhere. Some researchers prefer "problematic online gaming" (or "POG") (e.g. Király et al. 2014), "pathological video-gaming" (e.g. King et al. 2013), or "Internet gaming disorder" (King & Delfabbro 2014) to "online game/gaming addiction." Others question whether diagnoses of "addiction" are being applied too liberally to patterns of online gaming behavior, and whether categories such as "excessive use" (Hansen 2002; Weinstein & Lejoyeux 2010) or "high engagement" (Charlton & Birkett 1995; Charlton & Danforth 2007, 2010) might be more accurate descriptors for the majority of gamers' experiences. High engagement differs from addiction "in that it does not have negative consequences for the individual" (Charlton & Danforth 2007:1533). Soonhwa Seok and Boaventura DaCosta tested criteria for distinguishing

between online game addiction and high engagement among Korean adolescents, discovering that "although a larger percentage of participants from the addicted group played online games than from the highly engaged group, statistically speaking, there was no difference between the two groups with regard to the frequency of their online gameplay" (2014:240-242).[195] At issue, then, is not the *quantity* of time that an individual spends playing online games, but rather the *qualities* of that play experience. In other words, for clinicians like Dr. Moon the first indications of potential addiction to games are patterns of non-normative social behavior, not the duration of play. This juxtaposition of normative and non-normative socialities is at the very heart of Korea's game addiction discourse, and (re)calibrating addicts with normative social behavior—most notably around the places, times, and qualities of social interaction—is the goal of addiction management strategies. The medical and political interventions targeting the addiction problem in Korea present an intriguing case for the practice of governance in contemporary information societies, and particularly for the idea of "care of the self" (Foucault 1988, 1997).

Care of the Self, Addiction, and the Relationship among Individuals, Government, and Society

Dr. Hong—the director of an inpatient addiction treatment center at a large university hospital—told me that in his opinion the greatest threat that online game addiction poses to Korean society is "unhealthy individualization," a situation in which "the patient doesn't want human relationships in the real world." He continued, "[Addicts] have their own world; they do

195The ambiguity of duration is also important because the normative, "acceptable" time for one to spend online has changed dramatically in the past two decades. In her groundbreaking 1998 article, Young reported that the mean usage time for "nondependent" Internet users was 4.9 hours per week, with a standard deviation of 4.7 hours, whereas for "dependent" users it was 38.5 hours with a standard deviation of 8.04 hours (1998:239). These numbers would no doubt be considered lower than average by today's standards.

not focus on the real world. In the end, in the future, [this could lead to] the dis-cohesion of Korean society." Dr. Hong's comments connect an individualized nosology of online game addiction—which he described as an "impulse control disorder"—with broader social and cultural expectations for being a "healthy," responsible member of society. In this way, they illustrate how online gaming is evaluated according to criteria for determining normative from non-normative sociality in Korea's information society chronotope.

As I discussed earlier in relation to PC *bang* customers, the salient difference in Korean online gamers' evaluations of *geim pye-in* versus PC *bang jookdori* articulates around a judgment about normative sociality that is tied to place and face-to-face interactions; for *jookdori*, being in the presence of others while playing—such as being in a PC *bang*—marks them and their behavior as "more" normative by virtue of the fact that they are not self-isolating like the *geim pye-in*. The criteria for determining normative versus non-normative online gaming socialities in this offline chronotope are calibrated with models of normative sociality in Korea's information society chronotope, although the specific qualities used in evaluation are different. Dr. Paik gave me his assessment of normative Korean sociality to me by comparing social life in Korea with his own experiences of as a psychiatry resident in the United States in the late 1990s:

> "Western Protestant culture is very strict, especially in the States. [Because of this] you need an exit, so you get drunk: alone! But you cannot be alone in Korea. Saying 'alone' means almost 'death' here … If you are alone [in Korea] then someone will take care of you in some way. But if you are in the States, if you are alone over there, then they don't touch you because they believe that you have some reason to be. Here, if you get some invitation, you cannot resist. In the States you can just say no! It doesn't work like that here."

This abhorrence of solitude that is prevalent in Korean society writ large inflects evaluations of normative versus non-normative sociality at each of Korean online gaming culture's chronotopic scales. Working to calibrate oneself with the expectations for normative gaming practices and

behaviors across these different scales is accomplished by and through regulating one's own engagement with games, particularly around qualities of social interaction.

Insofar as online game addiction in Korea can be understood as "unhealthy individualization" or a pathological pursuit of pleasure that deviates from a normative model of sociality, the practices and discourses around managing addiction exemplify "care of the self" as a technique of modern governance. According to Foucault, care of the self "does not mean simply being interested in oneself, nor does it means having a certain tendency to self-attachment or self-fascination … It describes a sort of work, an activity; it implies attention, knowledge, technique" (1997:269). Crucially, care of the self is subordinated to knowledge of self, which is a constant practice of self-monitoring of behavior; in other words, care of the self is a continual process of self-regulation accomplished through "technologies of the self" which "permit individuals to effect by their own means, or with the help of others, a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves" (1997:225). The entirety of online game addiction prevention and treatment in Korea is articulated around providing addicts with technologies of the self so that they can successfully regulate their own gaming practices and behaviors in order to calibrate with expectations of the normative model of sociality in Korea's information society chronotope.

Technologies of the self and self-regulation

Dr. Hong expressed the prevailing opinion in Korea about treatment of online game addiction, explaining to me that "the goal is to control playing, not abstinence." Areum—the treatment center counselor—held a similar viewpoint about the ultimate objective being to help

addicts regulate their own gaming, adding that "it's a different situation with other addicts, like substance addicts or gambling addicts, where the final goal is to stop using." Rather than quitting gaming altogether, addicts use various technologies of the self in order to better incorporate games into their everyday lives in a "healthy" manner.

Building upon Albert Bandura's (1991) social-cognitive theory, Robert LaRose et al. argue that Internet-related addictions like online game addiction are symptomatic of addicts' deficient self-regulation, "a state in which conscious self-control is relatively diminished" (2003:232). Framing addiction as a matter of inadequate self-regulation lends support to strategies and techniques for managing online game addiction that emphasize personal initiative and individual responsibility. From this perspective, doctors, politicians, and institutions can play important roles in furnishing individual addicts with tools that help them better monitor their own behaviors, but ultimately individuals are held accountable for the success or failure of behavioral regulation (see Kraut & Seay 2007). In an anonymous post on Naver Knowledge (Naver *Ji-sik*iN), a self-described addict tells a story of being incapable of controlling time spent playing online games, putting this behavior in the context family relationships. "I don't have a mother, and since my father goes to work I am bored, so I play games," the poster writes. "My father returns home around 1 to 3 AM, and since there is no one to tell me to stop I guess I play games for about ten hours." The poster characterizes the lack of control over online gaming routines as an inability to self-regulate, and—in the absence of any authority figures who can provide external regulation—asks "isn't there some way to stop thinking about games?"[196] This is just one of many such testimonials on Naver Knowledge that demonstrate how online message

196From a post dated July 20, 2012. Source: http://kin.naver.com/qna/detail.nhn?d1id=13&dirId=1303&docId=155036916&qb=6rKM7J6EIOykkeuPhQ==&enc=utf8&section=kin&rank=3&search_sort=0&spq=1&sp=1, accessed March 6, 2015. My translation.

boards can be used as technologies of the self. Gamers who think that their gaming may be problematic use testimonials to reach out to others for advice about how to overcome the problem, leveraging the knowledge of online communities—the "wisdom of crowds," so to speak—for improving knowledge of self, assisting in self-diagnosis, and facilitating self-regulation of online gaming.

Related technologies of the self that potential game addicts can use to help better monitor themselves are warning messages that appear in course of playing some online games. A 2011 amendment to the Framework Act on National Informatization allows game companies to display a "Green Internet certification"—denoting a commitment to promoting "healthy" and responsible online gaming culture—on their websites and products if they voluntarily program warning messages into their game contents alerting players every hour as to how long they have been playing (NIPA 2011:15). While playing *Lineage II*, I became accustomed to seeing these messages appear briefly in the lower right hand corner of the visual interface every hour, and then become logged as text in all of my different in-game chat channels: "One hour of play has elapsed. Excessive game playing can adversely affect normal daily life" (my translation). Warnings like these are intended to call gamers' attention to the potentially negative effects of too much gaming, and encourage them to log off. In this sense, they can become an external resource for gamers' own self-regulation, especially considering the sort of phenomenological temporal distortions characteristic of prolonged online gaming experiences. However, in my experience gamers paid little attention if any to these warnings and never commented positively or negatively about them.

Natasha Dow Schüll makes a similar observation about the political implications of

framing addiction as a problem of insufficient self-regulation, connecting it with "the more general demand of neoliberal society that individuals participate robustly in consumptive markets while assuming responsibility for their conduct—from the economic to the medico-psychological" (2012:244-245). In Korea, improving self-regulation of Internet and online game use begins with diagnosis. Many organizations provide questionnaires and other evaluation tools that addicts can use to diagnose themselves. For instance, the Korea Internet Addiction Center—operated by the National Information Society Agency (NIA)—hosts "self-rating" scales on its website, with statements such as "I feel great and easily get excited when I am on the Internet" and "I can control my Internet usage time" accompanied by four options: strongly disagree, disagree, agree, and strongly agree.[197]

Self-diagnosis emphasizes the individual's proactive role in addressing addiction and by extension places the onus of responsibility for adequate behavioral regulation on addicts themselves. A similar formulation of individual responsibility inflects discourses about treatment and the centrality of "willpower." To wit, this anonymous response to the Naver Knowledge post quoted above underlines acceptance and willingness as the only effective solutions for overcoming addiction: "Going to the hospital is good, but without your own willingness even paying for treatment at a famous hospital is the same as not getting treatment … If you can't put it into practice, then it will be a complete loss. The hospital isn't going to try, but rather your own willingness is most important." No matter the specific forms that they take, all of these technologies of the self help facilitate "evaluation against perceived standards" (Kraut & Seay 2007:2) that separate individual addicts from the rest of society, thereby marking their patterns of behavior—particularly social behavior—as non-normative and in need of regulation. Through

197Source: http://www.iapc.or.kr/dia/survey/addDiaSurveyNew.do, accessed April 29, 2015.

self-regulation, addicts attempt to calibrate themselves and their behaviors with normative expectations for online gaming at different chronotopic scales.

Collective technologies of the self for addiction management

Managing online game addiction in Korea is not solely organized around personalized treatment plans. Rather, individual techniques and strategies for self-regulation are complemented by treatment plans in which technologies of the self are experienced collectively, i.e. by individual addicts together with their peers. In this way, addiction specialists try to involve institutions such as schools and families in treatment plans because of how they can help to reinforce self-regulation strategies. Dr. Moon explained that adolescents "don't accept therapy, so we cannot expect autonomic participation in psychotherapy; School-pressured or parent-pressured group therapy is the only way now." He continued, "If a child or adolescent has some mental problem, we have to ask for help from the parents. Generally the parents are cooperative, but the children are resistant to such an approach." Dr. Hong told me that his clinic tried to get addicts' social groups involved in treatment as soon as possible. "We tell parents and schoolteachers, 'Prevention can be done by you, by yourselves, not the patients,'" he said. "The family environment and school environment are very important." He also noted that parents' tendency to try directing their children's behavior—which he said was a contributing factor to problematic gaming in the first place—could be put to productive use in this regard. Whether family or school takes the lead, however, the object of treatment in part is to reintroduce addicts to their most immediate offline social networks.

Korea's Internet and online game addiction "boot camps" are another method of bringing

addicts into closer proximity with others, and have received worldwide publicity over the past decade (e.g. Fackler 2007; Rushkoff 2009; Reid 2011; Veatch 2014). The most well-known camp is the "Jump Up RESCUE[198] School," a camp started in 2007 by the Ministry of Gender Equality and Family (MOGEF) and the Korea Youth Counseling and Welfare Institute (KYCI), which subsidize the costs of attendance either partially or fully depending on the financial needs of patients and their families. The RESCUE School is a twelve day, eleven night program for middle and high school students where they travel to the countryside, cannot access the Internet, participate in individual and group therapy sessions, and do outdoor physical activities with peers. This system of "conditioned aversion … along with social-skills training and family therapy" (Koo et al. 391) follows the model of other behavior replacement therapies, with special attention given to learning how to control one's emotions and encouraging patients to participate in normative, offline social interaction. At the end of each cycle, the patients design a plan for controlling their gaming, having theoretically regained "the ability to live normally as part of social society" (ibid. 392-393). The KYCI's website features a former camper's testimony about what he gained from the experience:

> "Physical activity, regular meals, playing board games, etc. helped strip away computers from my thinking and even made me forget about them … Individual counseling time helped me learn to build a vision of my future … The most impressive things was two nights and three days with my family at the training camp. At that time my parents passed around a letter that was very difficult for me to read, and even now I can't read it … After the camp was over I returned home. On the surface no one thing had changed, but my heart and mind had changed. From the day that the camp ended and I returned until the next day I didn't sit in front of the computer even one time. Even now I don't play games for more than two hours per day … Now I regret that I played meaningless computer games. The poison called computer games had a big influence on me, so recovering from that will take a long time. But in order to have the dream that I want to achieve for myself, I am not afraid to change, and the change has already started" (KYCI c. 2011, my translation).

198In Korean news reports and in the camp's brochures, "RESCUE" is sometimes written in Roman letters, and other times is transliterated into *hangeul*. RESCUE is an acronym for "Re-experience, Excitement, Socialization, Change, Unit, Escape."

For this patient, learning to think about his gaming in relation to others—in this case his parents—and developing alternatives to games were crucial to managing his addiction. His narrative exemplifies the game addiction treatment ideal in Korea in that he connects the importance of his social relationships with a personal transformation of "heart and mind." In other words, participation with others in the RESCUE School's treatment activities provided him with technologies of the self that helped improve his capacity for self-regulating his gaming habits, but ultimately he takes responsibility for his own addiction management moving forward.

Addiction management as a technique of governance

Although the concept of addiction as insufficient self-regulation forwards the view that addicts are ultimately responsible for whether or not treatment will be successful, there is some debate in Korea as to who exactly—e.g. families, schools, doctors, the government, game companies, addicts themselves—ought to bear the brunt of responsibility for managing online game addiction. These disagreements spring not only from differing opinions about the risk factors and causes of game addiction, nor from competing evaluations about the efficacy of treatment strategies and techniques, but also from different perspectives on the normative relationships among individuals, society, and the government. In other words, arguments about the best methods for managing online game addiction are entangled in larger debates about the future of Korean governance.

In the run up the Shutdown Law's passage, an official with the Ministry of Culture, Sports, and Tourism (MCST) argued that "Government policies are important but it's also crucial for the public to take charge as well … We want to alert as many people as possible on

the seriousness of Internet addiction so that individuals can start monitoring themselves" (quoted in Yoon 2010). Statements like these make implicit judgments not only about addiction as an *individual* rather than *public* health issue, but also about the responsibilities of the Korean government, supporting a style of statecraft in which managing addiction is offloaded onto individuals and private institutions. Dr. Moon complained that many Korean politicians talk about the importance of dealing with addiction, but in terms of practical, meaningful actions he felt that political solutions had been slow in arriving. For instance, in 2012 his hospital proposed a special addiction treatment program and approached the Seoul metropolitan government for funding. "They told us, 'Oh, it's very important, you have to do that,'" he said. "But there was no money for a budget! Many times they tell us, 'You psychiatrists and mental health professionals should do this,' and 'This is bad; why don't you do that?' But then if you ask for a budget? [They say] 'Oh, I'm sorry, this year it's impossible.'" In lieu of securing public funding for addiction treatment programs, some clinics and other centers have sought out help from the game industry. For example, patients at Dr. Hong's clinic benefit from having 50% of their medical costs paid for by the Game Culture Foundation, the advocacy organization representing the six largest Korean game companies. And the center that Areum works for was initially founded with money from some of the largest names in the Korean game industry after the center's director approached them for help.[199]

However, it would be incorrect to say that the government has taken a completely hands-off approach to the practical activities of addiction management. Besides developing and passing

199This is another one of the reasons why the game industry has reacted so strongly against the Game Addiction Bill and a related provision that would require game companies to donate 1% of their annual revenues to a fund for online game addiction treatment and prevention. From the industry's perspective, they have been involved in addiction management efforts longer than the government, and so they resent being represented as part of the problem rather than the solution.

legislation, policymakers have made funds available for treatment organizations and supported research into the causes of and possible solutions to the addiction problem. Although Areum's center received all of its financial support from game companies in the beginning, the director soon persuaded the government to get involved, arguing that—in Areum's words—"we need funds, and the national government has to do this work because it's the government's responsibility." Similarly, the National Computerization Agency (the forerunner to the NIA) began funding the Korea Internet Addiction Center in 2003 in accordance with the Framework Act on National Informatization, which establishes the government's obligation to provide "support for the advancement of information culture and status survey, prevention, and treatment of Internet addiction" (Act No. 10629, Article 14). In 2004 the Ministry of Health and Welfare financed a longitudinal study of youth Internet-related addictions conducted by neuropsychiatrist Ahn Dong-hyun and a team of researchers, in which they concluded that between 20% and 30% of Korean adolescents were either addicted to the Internet and online games or at risk of becoming addicted (KIHSA 2006:318). More recently, MOGEF has worked in conjunction with the KYCI and parents' and children's advocacy groups to open more counseling centers and treatment facilities, and to provide financial support—in some cases full subsidization—for patients and their families. MOGEF was also a strong force behind the Shutdown Law, and its activities in this regard put it at odds with the MCST, which has historically advocated for the games industry and is nominally in charge of Korean e-sports. In this respect, managing Internet and online game addiction has not only become an object for enacting and developing modern Korean statecraft, but also an endeavor that has exposed fissures in the government regarding the state's relationship to citizens and vice versa.

Korean online game addicts face two conflicting representations of their behavior in relation to "care of the self." In the first, addiction is cast as a problem of "unhealthy individualization," of withdrawal from society and from offline social interaction. An addict's behavior is interpreted as individual mis-calibration with "perceived standards," and recovery entails regulating behavior and calibrating with expectations at different chronotopic scales via various technologies of the self. In the second, addiction is understood as both an individual *and* social disease that affects many more people than just the addict himself or herself. Since from this perspective addiction is understood as having society-wide effects, it falls to institutions such as families, schools, clinics, and government to lead the way in prevention and in treatment. At base in both of these representations is a correlation between addiction and non-normative sociality. Managing addiction, in other words, is about (re)calibrating addicts with normative expectations for participation in Korean society. And addiction management strategies—from anonymous online testimonials and self-diagnostics to rehabilitation camps and legislation like the Shutdown Law and Game Addiction Bill—are techniques of governance through with a modern Korean statecraft is being developed.

Sociality and/of Addiction: Spacetimes of Social Interaction, the "Virtual"/"Real" Gap, and Narratives of Immersion and Escape

Across all of Korean online gaming culture's chronotopic scales, normative gaming socialities are defined by and through qualities of social interactions organized around IT use (viz. Chee & Smith 2007). Although the specific instantiations of these qualities and the evaluative criteria that they constitute are different according to the contexts of interaction, at

each scale online gamers make judgments about other gamers and about themselves. These judgments all—according to the relevant circumstances—value competition, collaboration, and other interactive qualities of socializing while problematizing isolation, self-segregation, and solitude.

Normative expectations for being social inflect nearly every aspect of daily life in Korea, from anxieties about eating alone[200] to fears of being left out of peer group interactions. Several of my interlocutors noted how this desire to around others and to be included in group activities is well-suited to the Internet and online games as they both afford new and more varied ways of being social. More than once someone told me that the pleasure derived from playing games together online complements a Korean social value called "*shin-i manhta*." *Shin* is the Korean word for joy or excitement, and *manhta* means "(to be) a lot." *Shin-i manhta*, therefore, describes a preference for exciting, interactive, and pleasurable social experiences. As one doctor put it, "Koreans realized that there was almost everything on the Internet: They can sing a song by using the Internet, they can dance, they can gamble, and they can have some kind of party using the Internet. So we can say that the Internet, the information society, is very close to Korean people's personality." Dr. Paik made a similar association among *shin-i manhta*, information society, and pathological attachment to online games: "Koreans are experts in ecstasy formation," he told me. "One interesting thing that we can find [in Korea] is that drugs are not here very much, because we don't need that. Korean people enjoy their parties every night if they want, with two, three, four, five people: the number gets bigger. The synergy creates a huge

200Between 2014 and 2015, Korea received worldwide attention because of a growing trend of individuals—many of whom are characterized as "lonely"—paying to watch online livestreams of people eating dinner, some of whom have become celebrities and attract legions of fans. Offering a hypothesis as to why these individuals might be attracted to watching others eat, Professor Park Sung-hee observes that "for Koreans, eating is an extremely social, communal activity, which is why even the Korean word 'family' means 'those who eat together'" (quoted in Cha 2014).

mental power. So we have less drug problems, but we have more Internet problems." In other words, whereas *shin-i manhta* is understood to motivate Koreans' pursuit of pleasure and love of socializing, the Internet and online games afford opportunities for pleasure and social interaction that deviate from the values of physical proximity and subordinating individual pleasure to the interests of the group. Thus a distinctive feature of normative Korean sociality—at least with respect to online gaming—is the privileging of physical world, offline *proximity* as a characteristic of being social over online-mediated communication and interaction. Online game addiction, in this context, represents an individual's mis-calibration not only with normative gaming sociality, but with normative expectations for being social in general.

Opportunities for online social interaction introduce a complicating variable to normative models of sociality, as individuals can interact with others online and in realtime without occupying the same physical space. Of course, physical proximity signifies different things about normative sociality for the different communities implicated in online gaming culture. For instance, the doctors with whom I spoke all agreed that problematic gamers were identified first and foremost by having retreated from their "real life" social networks and obligations, a measure of relational proximity that prioritizes face-to-face over online interactions. By comparison, the physical location of gaming rather than the online-offline gap was more important for gamers' definitions of problem gaming and proximity than it was for doctors, as the criteria that my interlocutors used to distinguish PC *bang jookdori* from *geim pye-in* demonstrates. In other words, gamers attach greater significance to the offline qualities of gaming—privileging social spaces like PC *bang* and problematizing private, socially isolated spaces like apartments—than they do to the distinction between "virtual" and "real" or online

and offline (perhaps because they already have techniques for keeping online and offline separate in their gaming practices). Furthermore, as far as gamers are concerned, an individual's withdrawal from the offline places of everyday social interaction is more indicative of potential online game addiction than isolation from family, friends, or co-workers.

Problematizing "virtual," "online," "immersion," and "escape"

The qualities of proximity—social, physical, or both—complement constructions of a divide between "real" and "virtual," or, more accurately, between offline and online interaction that is inflected by ethical assessments of normative sociality. Kimberly Young's work in particular has been criticized in this regard. As evidence of pathological engagement with the Internet among the subjects of her landmark 1998 study, she wrote that Internet "dependents often preferred their on-line friends over their real-life relationships, due to the ease of anonymous communication and the extent of control in revealing personal information among other on-line users [sic]" (1998:240). Rob Cover argues that "by enforcing a strict and over-simplified distinction between 'real life' behaviour and 'virtual' behaviour, [Young] validates a false concept of reality over digitality" (2003). Similar judgments about "real" and "virtual" appear throughout the literature on online game addiction. For instance, writing in the same historical context as Young, Robert Kraut et al. concluded that "use of the Internet can be both highly entertaining and useful, but if it causes too much disengagement from real life, it can also be harmful" (1998:1030).

Ways of problematizing "virtual" sociality were also apparent—both explicitly and implicitly—in my interlocutors' descriptions of online game addiction. Massively-multiplayer

online games are nothing if not social spaces in which individuals participate in rich, meaningful interactions with friends and strangers alike. The problem, then, as far as the Korean psychiatric community is concerned is when gamers supplant offline social interactions with online ones with regard to both frequency and importance. For instance, Dr. Hong explained a typical online game addict's experience in the following way: "First of all, the patient himself disappears from the real world. That's the biggest problem. Family members sometimes plead with him, 'Please escape from the online world! Please come back, come back to the real world!' But the patient can't recognize what's real or what is cyberspace." Perspectives like Dr. Hong's reify a gap between virtual and real, online and offline activities, at the same time as they make claims about addicts having difficulty recognizing that gap. They both reflect and re-inscribe beliefs and values about what counts as normative gaming sociality, marking preferences for online interactions and activities as indications of potential addiction.

The virtual-real gap also problematizes the *online* qualities of online games, positing that their immersive, interactive experiences are contributing factors to online game addiction. For example, Antonius J. van Rooij et al. (2014) found that of all observed Internet-related behaviors, online gaming was far and away the activity most associated with compulsive use of the Internet. This viewpoint proceeds from an evaluation of the technological affordances of networked telecommunications and powerful computer processing as the conditions of possibility for creating virtual worlds where individuals can interact with one another in realtime. Laura Widyanto and Mark Griffiths argue that while in most cases behavior classified as "Internet addiction" is simply the playing out of other addictions on the Internet, online gamers "use functions of the Internet that are not available in any other medium" and that therefore

"these are people addicted *to* the Internet" (2006:48). The assumptions that follow are that immersion in the dense social interaction of online game environments is qualitatively different from offline—or "real world"—experiences such that when an individual demonstrates a preference for immersion in virtual worlds like online gaming environments this indicates a pathological attachment to "the virtual" and online.

Game genre is also an important consideration, as many researchers (e.g. Kim et al. 2010; Metcalf & Pammer 2012; Freeman 2009; Ng & Wiemer-Hastings 2005; Lee et al. 2007) have problematized MMORPGs—the genre to which *Lineage II* belongs—as being particularly associated with online game addiction. The most frequent explanation given as to why this should be is that MMORPGs are "more social"—i.e. they often entail collaboration with more than one other player, and they afford relatively stable, long-term social arrangements like gaming clans—than other game genres. Opportunities to build friendships with other players that may last for years are what help distinguish MMORPGs from genres such as FPS and RTS, both of are characterized primarily by one-off interactions with strangers in battles that are over in a matter of minutes. The specific contents of these games have less to do with players' reasons for engaging with them than do the relationships that they develop with other players in online spaces, and the responsibilities that they assume with respect to collaborative tasks and collectives like gaming clans. Again, these explanations for how players become addicted to games make normative judgments about the value of online social interaction versus offline, constructing an opposition between "virtual" and "real" spacetimes and their attendant socialities.

Alongside claims that online games' immersive qualities engender addiction are

assertions that players seek out gaming as a means of *escaping* from offline social interaction and relationships altogether.[201] The discourse on online gaming as a means of escape reflects some of the ominous fears raised by Paul Virilio:

> "Addiction to, or compulsive dependence on, the internet and its innumerable search engines is actually an initial response at the origin of this reality effect whereby interactivity is already driving certain of the faithful to quit their concrete environment, to vacate the premises of an organic social vitality, and even to abandon any regular eating, all healthy living, for this full-screen virtual perspective in which the individual, literally consumed by his screens, puts his mental health in danger through habituation to the hallucination induced by a pseudo-relief that wins out over the full-scale dimension of all physical reality [sic]" (2010:83-84).

Escape complements immersion with respect to the discursive construction of online gaming socialities and player motivations, while at the same time offering a slightly different pathologization of online social interactions. Once again, game genre is an important factor as the most fantastic or exotic the immersive gaming environment, the more amenable it is to escapist play. As psychologists John P. Charlton and Ian D. W. Danforth argue:

> "For people whose psychological characteristics and/or life circumstances make them vulnerable to behavioural addictions, MMORPGs may be particularly addictive in several respects. For example, the games allow people to *escape* everyday real-world problems by *immersing* themselves in a fantasy world; a possibility that is particularly attractive to people whose personalities and social skills lead to problems in real-world environment. Also, players adopt the role of a character … in a virtual environment in which a story line evolves over time and in which various unexpected positive and negative events occur periodically within an uncertain time-frame and in the context of contingencies that are often uncertain … Other players also adopt avatars and the interaction between the

201"Escapism" is explicitly connected with addiction as item eight in the DSM-5's proposed diagnostic criteria for Internet Gaming Disorder: "Use of Internet games to escape or relieve a negative mood (e.g., feelings of helplessness, guilt, anxiety" (2013:795). A corollary to the depiction of game addiction as a form of escape are appeals from doctors, parents, and addicts themselves for "escape" from addiction. For instance, Kim Hyeon-soo —an eminent Korean psychiatrist a founder of a now defunct addiction treatment camp—authored a children's book titled *Game Addiction Escape School* ("□ □ □ □ □," 2009). The escape narrative is also articulated in Naver Knowledge posts by self-described addicts declaring that "I'm trying to escape from games" (Source: http://kin.naver.com/qna/detail.nhn?d1id=7&dirId=70109&docId=216140522&qb=6rKM7J6EIOykkeuPhQ==&enc=utf8&section=kin&rank=1&search_sort=0&spq=1&sp=1, accessed February 21, 2015) and pleading for knowledge about "anyone who escaped from game addiction" (Source: http://kin.naver.com/qna/detail.nhn?d1id=7&dirId=70109&docId=152703734&qb=6rKM7J6EIOykkeuPhQ==&enc=utf8&section=kin&rank=7&search_sort=0&spq=1, accessed February 21, 2015).

> avatars representing various players within the virtual environment often provides a source of acclaim and attention for players, thereby providing social reinforcement" (2010:603, my emphasis).

This portrayal of online games—and MMORPGs in particular—as affording individuals who are predisposed to addictive behavior with opportunities for escape resonates with Bonnie Nardi's observation that in North American *World of Warcraft* communities "problem players bring their problems to the game" (2010:125). Moreover, the representation of online gaming as an escape from the "real world" perpetuates beliefs about the virtual and the real as fundamentally incommensurable spaces, physically, conceptually, and socially. From a chronotopic perspective on Korean online gaming culture, escape and immersion—insofar as they signify online gaming pathologies—are qualities of mis-calibration with normative socialities, both online and offline.

Online Game Addiction and Temporality

Problematizing the qualities of immersion and escape in online gaming underscores the fact that gaming socialities do not necessarily take the same forms: Some players welcome participation in dense online social networks, while others prefer to engage with online games as a means of carving out spaces and times for solitude within their daily lives. Moreover, immersion and escape refer not only to social circumstances of playing online games, but also to the different ways of experiencing time that online games afford, as demonstrated by the experiences of temporal distortion that my interlocutors shared with me regarding playing in PC *bang* as well as the quasi-incommensurable temporalites of *Lineage II* time versus offline time. For example, Dr. Paik told me that "the main, fundamental concept of the game industry is to make the user addicted. [Online game worlds] never shut down, and that's the most important thing because you can live forever there." In his opinion, since online game worlds are persistent

and always accessible, gamers can remain playing in these environments for as long as they desire; in fact, Dr. Paik believed that companies design their games to be open-ended—i.e. without any ultimate goal—in order to retain player' attention and engagement for as long as possible.[202] Although he could not have know it, Dr. Paik's characterization of engagement with online games as potentially endless accurately describes the experience of *nokada*, the slow, repetitive style of gameplay in which players extend their playing time *ad infinitum* in order to level up their game characters.

From a game design perspective, *nokada* can be understood as a strategic response to the temporality of MMORPGs like *Lineage II* in which leveling up becomes exponentially more difficult and time-consuming the further a player advances through the game. And from a medical perspective, these design features contribute to an operant-conditioning system in which players find it progressively more difficult to derive the same pleasure from gaming, thereby exhibiting qualities of tolerance that are characteristic of other behavioral addictions. Crucially, operant-conditioning in online games is related to the relative quickness of the feedback loop between player input and being rewarded by the game; even for activities like *nokada* where rewards are not immediate, this feedback loop is more predictable and stable than it is for some non-gaming activities. As Dr. Hong explained it to me:

> "The best point of online games is that they are fast, strong, and very fair. If some adolescent invests one hour, they get one hour reward. But this is not the same with studying. Although they invest more than ten or twelve hours, their grades are still very low. At that time they feel that the reward for studying is very *slow*; it's not fair, and it's not strong. So that's the reason why the Korean adolescents love—really love, terribly love—their online games."

202Dr. Paik also told me that the logic behind the Shutdown Law was that forcefully interrupting a player's sustained engagement with an online game—even for just a few minutes—could break the hold that the game has over the player, and therefore be a method of preventing the development of game addiction. He added that his initial suggestion to MOGEF and the KYCI when they were developing the Shutdown Law was that the shutdown period be only thirty minutes or an hour, and that in his estimation the six hour mandatory shutdown is "too serious."

"Zoning out," flow, and temporal distortion in online gaming

Nokada and similar styles of online gameplay share several temporal—and social—qualities with what Natasha Dow Schüll's machine gambling informants call "zoning out." Schüll writes, "As gamblers describe it, machine gambling is a solitary, absorptive activity in which they enter a dissociative state—a 'zone,' as they call it—in which a sense of time, space, monetary value, social roles, and sometimes even their very sense of existence dissolves" (2012:2). Contrary to the received wisdom about gambling—i.e. that it is motivated by thrill-seeking behavior and an attraction to increasingly more risky situations (cf. Avery 2009)—the machine gamblers whom she met were unconcerned with playing to win money; in fact, winning (or losing) quickly and often was antithetical to their engagement with the game because it often meant that they would be unable to extend their time at the machine. Rather, what attracted them to machine gambling was how it afforded opportunities for zoning out, a process that Schüll identifies as "distilling real-world value to the point where it assumes another value altogether" (2012:203). For machine gamblers "in the zone" and for *Lineage II* players doing *nokada*, a fundamental—and fundamentally attractive—aspect of their engagement with these activities is withdrawal from all social interaction and an accompanying experience of temporal distortion. Robert E. Kraut and A. Fleming Seay argue that "the inability to recognize how much time one has spent involved in an activity would be an example of a failure in self-monitoring, e.g. losing track of time" (2007:3), thereby characterizing the experience of temporal distortion as an example of deficient self-regulation, or inadequate care of the self.

Players' descriptions of temporal distortion in gaming are akin to the "flow" experience theorized by the psychologist Mihaly Csikszentmihaly, who warned that "one must be aware of

the potentially addictive power of flow" (1990:69) because of the feelings of pleasure that it potentially affords which cannot be accessed otherwise. Areum explicitly invoked Csikszentmihalyi and flow in our conversation, classifying it as a significant dimension of certain online game *contents*, one of the four factors that her center identifies as contributing to online game addiction:

> "In flow theory there is perceived challenge and perceived skill, two kinds of stimulus, and from those we can experience flow. Most things online or in cyberspace reveal flow because we can choose a 'level,' like in the case of games. Someone with *low* intellectual ability and *low* skills can experience low level flow, and if someone has *high* intellectual ability and high skills, then he can use a *high* level game and he can experience flow. There are so many subtypes—chatting, community games, so many websites—and we can have *choices*. But in the real world it's not easy to have choices. It's too hard. So it's a very different situation—the real versus the cyber—and that's why many people enjoy cyberspace. They can have choices and many stimuli, and have a fun connection."

The personalized flow experiences afforded by playing online games draw gamers in and encourage them to keep returning to the game. In this way, experiencing flow is not just the product of feedback loops in games' operant-conditioning systems; flow also describes the immersive and temporally-distorted qualities of maintaining these feedback loops, remaining engaged with them for as long as possible.

Online gaming temporality at the macro scale

Temporal aesthetics are important not only for understanding the phenomenology of online game addiction at the chronotopic scale of game worlds, but also for understanding how game addiction and addicts are evaluated vis-à-vis societal expectations for IT use. Korea's information society chronotope is characterized by a hegemonic dromology that values quickness for quickness' sake, expressed colloquially as *bballi bballi munhwa*. Online game

addiction relates to *bballi bballi munhwa* both in terms of how the ethical imperative to quickness contributes to addiction, and with respect to how addicts miscalibrate with its prescribed pace.

Two of *bballi bballi munhwa*'s emblems emerged time and again in my interlocutors explanations for what caused Korea's online game addiction problem. The first was the Korea Information Infrastructure (KII), the primary focus of informatization and material representation of the acceleration of information that it makes possible. Associating the KII and informatization with problematic IT use is a constitutive feature of discourses on online game addiction not just in the Korean medical community, but also in society at large. For example, the NIA's Jong Sung Hwang and Sang-Hyun Park write that "another social problem that has resulted from easy access to the Internet is Internet or online addiction" (2009:239), and in a survey of Korean Internet users, Dong-Hee Shin found that some respondents blamed the high-speed broadband network for "[producing] negative side-effects such as online gaming addictions" (2007:631). As for the doctors with whom I spoke, Dr. Paik remembered that around the time of the IMF crisis in 1997,

> "PC *bang* provided *high* speed connections at very cheap prices, and lots of young, high school students gathered together there, spending the night smoking and what have you; some delinquent behavior was also there. [At that time], the emergence of the Internet gave us an opportunity to participate in the game industry … Given the high level of the national infrastructure and PC *bang* deployment, we had all the infrastructure for Internet games and the companies just grew."

These elements of Korean online gaming culture that developed alongside and in conjunction with informatization set the tone for how online gaming would evolve in the country's many PC *bang* and in game worlds where some developed socially deviant gaming behaviors. The quickness and convenience of the KII made online games accessible and nearly ubiquitous, and

so from Dr. Paik's perspective online game addiction would not be possible without these infrastructural conditions of possibility. Dr. Moon also emphasized the effects that the KII has had on individual Korean households and families. "Young people have many opportunities to play computer games," he told me. "Availability, opportunity, and time. Every home has a computer and they are connected to the Internet. And at first, parents thought if the child is using the computer, they say 'Oh! It's recommendable!' because the computer is a scientific tool … So when they were playing computer games, their parents saw them and said 'Oh, he is studying!' So they could not imagine the future like this."

Dr. Moon's comments connect informatization with another of *bballi bballi munhwa*'s characteristic features—Korea's intense, competitive education system—as a contributing factor to online game addiction, an association that is also made in the medical literature (e.g. Koo et al. 2011:393). Areum explained that Korean children are introduced to the centrality of education for their individual and social identities beginning at an early age. "They have no pleasure time, no leisure, no rest," she told me. "From a very young age they start like this, and it's difficult to balance knowledge, emotions, and actions … When they grow up to become adolescents it's hard to control their impulses." One of the ways that this lack of impulse control manifests is in deficient self-regulation of gaming activities. Dr. Moon elaborated on this point, noting that as they age "many Korean boys and girls—adolescents—have a lot of stress because of competition in school and entrance examinations for college. And the parents are crazy about that." He told me that Korean adolescents develop serious anxiety disorders as a result of the pressure that their parents put upon them to succeed in school. "They want that their children only study, study, study," Dr. Moon continued. "So they have no chance to enjoy life! The only way is a disguised

way." Dr. Hong agreed with these assessments, adding that "students who don't adapt well to this stress become outsiders [*wang-tta*], and some refuse to go to school and just stay in their rooms playing games." Their arguments are supported by research such as Young Ran Kweon and Myung Sook Park's (2012) study of elementary and middle school students, which found that successful adjustment to school was negatively correlated with the development of game addiction.

Whereas Korea's high-speed information infrastructure affords quick, convenient engagements with IT that are understood to engender pathological attachments to online games, with respect to education, online game addiction develops as a means for some students to relieve their stress and to mitigate the sense of failure that they experience in school. Both of these sets of consequences represent gamers' mis-calibration with the normative expectations of *bballi bballi munhwa*, but in ways that are not entirely consistent with mis-calibration in other Korean online gaming chronotopes. Whereas other online gaming activities such as *nokada* are problematized for their qualities of slowness, game addiction can be interpreted as a pathological relationship with quickness whereby gamers are attracted to the quickness of pleasure-seeking feedback loops in online games. From this perspective, speed is—as Virilio puts it—"a drug" that game addicts pursue obsessively to the point that this pursuit becomes all-consuming. In other words, game addiction represents a mis-calibration with Korean information society's hegemonic dromology *not* because it is is imbued with qualities of slowness, but rather because it is symptomatic of an unhealthy affinity with quickness that has become unmanageable.

Conclusion

Just as the discourse around informatization in the mid-1990s emphasized Korea taking a leading role on the global stage, the discourse around Internet and online game addiction makes a similar argument about Korea's potential vanguard position, as evidenced by Koh Young-sam's comments about Korea needing to take the lead in dealing with the consequences of promoting informatization. The Korea Internet Addiction Center claims in one of its brochures that "we will lead a warm-hearted digital world by wisely operating the center and becoming an example of the world in founding various policies on the information infrastructures and solutions to the Internet addiction" (IAPC 2012:2). Areum shared this sentiment, telling me that "I think that Korea is a good model if maybe someday some country wants to start doing this, because already the government took charge; they are leading the way."

Recently, there has been considerable interest in Korea's addiction management strategies, especially in other East Asian countries. Treatment camps like the Jump Up RESCUE School are similar in scope and organization to Japan's "Internet fasting camps," which the Japanese Ministry of Education established in 2013 (Ryall 2013). Taiwan (e.g. Sun et al. 2012; Ko et al. 2009; Chou 2001; Lin & Tsai 2002) and Singapore (e.g. Ong & Tan 2014) have also taken measures to diagnose addiction and regulate online activities, including efforts to interdict the offline places where online gaming takes place in order to combat "Internet café addiction" (Wu & Cheng 2007). Besides Korea, the most proactive medical and political community with respect to managing online game addiction has been China's (Bax 2013; Szablewicz 2010, 2011; Golub & Lingley 2008; Zhang 2013; Stone 2009). Chinese doctors created a diagnostic definition of Internet and online game addiction in 2008, defining addictive behavior as being

online for more than six hours per day (Ye 2008). These diagnostic criteria were accompanied by regulations aimed at curbing online gaming in China such as requiring online game suppliers to impose time limits on players—similar to Korea's Shutdown Law—demanding that Internet cafés scan their customers' national ID cards, and starting treatment camps similar to Korea's. However, unlike the Korean camps' "eleven night, twelve day" model, Chinese camp programs can last for months, and in some cases patients are locked behind bars for their duration of their stay (Shlam & Medalia 2014).

The KII has served as a model of how government and business can work together to quickly build a world-class information infrastructure, and—as Jin-soo's consultation with the Polish government demonstrates—the Korean e-sports environment is also regarded as an example of how to create public demand for advanced IT. Likewise, Korea's approach to Internet and online game addiction management has the potential to become a prototype for other places looking to understand and care for unexpected practices and behaviors that emerge in high-tech, high-speed information societies. Whereas online games have long been important—and lucrative—Korean cultural contents exports, now addiction management strategies can join them as symbols of Korea's informatized modernity.

Discourses on online game addiction are not ancillary footnotes to Korean online gaming culture, but rather are constitutive of it. No matter whether the discussion is about the KII, PC *bang*, online games, or e-sports, connections are made to the addiction question at every turn. In so doing, the association between online gaming and addiction becomes naturalized in Korea. And in light of the social, cultural, and economic importance of online gaming culture for contemporary Korean society, devising strategies for managing game addiction is a process

through which normative social relations, political agendas, and Korean modernity are continually worked and reworked.

Conclusion

In South Korea, online gaming is about much more than just games, and it is not limited solely to the online. Rather, it is a complex of people, places, practices, and behaviors that emerged alongside Korea's informatization process in the 1990s. Korean online gaming culture is encountered at a number of different sites, including the ones that I have explored in this dissertation: PC *bang*, online game worlds, e-sports competitions, and doctors' offices at game addiction clinics. At each of these sites, online gaming and gamers are evaluated according to normative expectations for practice and behavior inflected by a hegemonic dromology expressed in the vernacular as *bballi bballi munhwa*, or "chop chop culture": a lived aesthetic and attendant ethical imperative that elevates *quickness* and *acceleration* as virtues of everyday practices.

However, the criteria used in making these evaluations about normativity differ according to the different scales at which people engage with Korean online gaming culture. While sometimes these different evaluative criteria are complementary, at other times they conflict with one another. I have argued that these different scales of experience, of practice, and of evaluation are nested chronotopes, i.e. participation frameworks in which temporality, spatiality, and sociality are all intrinsically interconnected. The sites where I did my fieldwork span all of these chronotopic scales. Although typically their evaluative frameworks are dominated by one chronotopic perspective, I have discussed certain gaming practices—such as going to PC *bang*, doing *nokada* in *Lineage II*, and practicing *StarCraft II* drills in a professional setting—that invoke multi-scalar perspectives and lead to conflicting evaluations.

Gamers operate at the intersections of these different sites, and respond to different evaluations of normativity across different chronotopic scales. This entails calibrating their

gaming practices and behaviors with the normative expectations of whichever scale is contextually relevant for a given evaluation. Moreover, gamers often find themselves in situations where more than one chronotopic scale is relevant simultaneously, such as the instance of the *Lineage II* player who needed to fulfill his or her role in a raid itinerary and pick his or her child up from kindergarten, or the case of *StarCraft II* pro-gamers who must perform excellence in their gameplay as well as in their roles as employees to produce value for corporate sponsors. I have argued that in these moments of scalar collision, gamers are confronted with taskscapes, i.e. interactive and embodied arrays of related activities in which multiple tempos are brought together in practice and behavior. Gamers must learn how to navigate these taskscapes: to calibrate with sometimes conflicting sets of evaluative criteria, and to regulate their own behavior according to contesting normative expectations. Failure to calibrate correctly—or, rather, to "mis-calibrate"—with the temporal aesthetics and social entailments of normative expectations across different scales can sometimes have serious consequences for gamers, such as in the diagnosis and management of so-called online game addiction.

I have identified three chronotopic scales that are most salient for my analysis, listed from the most to least restricted spheres of influence: 1) online game worlds; 2) the offline spaces and times of online gaming, e.g. PC *bang*, homes, e-sports matches, etc.; and 3) Korea's information society broadly-conceived. With respect to this third chronotope, gamers and gaming exist between two conflicting institutional interests with different strategies and techniques for managing online games in/for contemporary Korea: e-sports, and the medical and political communities concerned with preventing and treating online game addiction. These two extremes represent discordant methods for evaluating online gaming in Korea, namely capitalization and

medicalization. In e-sports, pro-gamers are evaluated for their athletic performances and the value of their play is quantified by the media, telecommunications, and digital entertainment companies that sponsor them and the Korean e-sports enterprise as a whole. At the other pole, the practices and discourses around treating online game addiction pathologize certain kinds of play, making them into the objects of medical and political interventions designed to bring would be addicts into alignment with normative expectations for online gaming. These two approaches to managing online gaming culture are inflected not only by the temporal aesthetics of *bballi bballi munhwa*—problematizing different qualities of speed in embodied practices—but also by its ethical entailments for normative social behavior.

Korean online gaming culture affords different socialities that characterize life in Korea's high-speed information society. At each of the chronotopic scales that I discuss the specific qualities of social interaction are of utmost importance, but what "counts" as normative social interaction differs among scalar and site-specific contexts. Differences in evaluations about normative sociality are especially salient across the online-offline gap. Take for instance evaluations of the sociality entailed by *nokada*, a repetitive, prolonged gaming activity characterized by qualities of slowness and solitude. At the chronotopic scale of an online game world like *Lineage II*, *nokada* is part and parcel of normative gaming socialities; it is something that all serious *Lineage II* players will engage in eventually as it is necessary for advancement in the context of the game, and indirectly for signifying prestige within the player community. Time spent doing *nokada* is distorted, a strange combination of stagnation and progression. But above all, *nokada* is understood to be deliberate social isolation in the service of calibrating with normative expectations for *Lineage II* sociality. According to the evaluative criteria at this scale,

a player's affective orientation to doing *nokada* is the determining factor in assessing normativity: A player who prefers doing *nokada* to collaborative activities like raiding will have his or her gaming behavior evaluated as non-normative.

The solitude entailed by *nokada* takes on a different valence at the chronotopic scale of offline sites for online gaming such as PC *bang*. A gamer like Mr. Legend who spends all day alone at Super PC Bang—interacting with a handful of customers and staff, but only briefly—may get a reputation as a PC *bang jookdori*, but so long as he keeps playing games at these semi-public locations he will not be evaluated as a *geim pye-in*, a gaming sociality that is by definition non-normative. The issue here is not so much social interaction and physical proximity, as *geim pye-in* may engage in deep, meaningful interactions online, but because they are physically separated from other gamers—or people, for that matter—in the offline world they are "out of synch" with normative gaming sociality.

And at the scale of Korea's information society writ large, *nokada* bears similar characteristics to anti-social, obsessive gaming practices and behaviors that psychiatrists like Dr. Paik and others would classify as addiction. On the other hand, for *StarCraft II* pro-gamers whose daily practice routines resemble *nokada* in some critical ways—e.g. the repetitiveness of warm-up exercises intended to improve and maintain high APM rates—this sort of engagement with online games and IT is not only normative but in fact highly valued, signifying diligence and dedication that is reflected in the quickness and precision of e-sports performance.

Finally, analyzing Korean online gaming culture according to how qualities of speed are correlated with particular gaming socialities lends important insights into a contemporary style of governance in Korea that is designed not only to manage online gaming and gamers, but also to

establish a normative model of relations among individuals, society, and both public and private institutions. This style of governance stresses "care of the self," a continual process of self-regulation accomplished through techniques and strategies for knowing and acting upon oneself ("technologies of the self"). In e-sports, care of the self is indispensable to a pro-gamers success in matches and entails drilling the body, testing game-specific strategies, and participating in a community of other expert practitioners. Teaching appropriate, effective care of the self is also the primary task of online game addiction treatment facilities that work to align problematic gamers and their gaming practices and behaviors with a normative, "healthy" model of IT use. Would be addicts are provided with different technologies of the self—e.g. self-diagnostics, individualized treatment plans, and group therapy opportunities like those at the Internet RESCUE School—that are intended to help them better regulate their engagement with online games and integrate gaming into their daily lives so that it does not become unmanageable.

As a political project, care of the self in game addiction management is associated with a growing conservatism and emphasis on personal responsibility in Korean governance. Proposals like the Game Addiction Bill would offload responsibility for dealing with addiction to game companies by requiring them to donate a portion of their profits to addiction treatment efforts. Game addicts, too, are encouraged to be proactive in their own treatment, and legislation like the Shutdown Law is designed to give them tools—or, technologies of the self—that complement their self-regulation efforts. However, this style of governance does not fall easily within a definition of neoliberalism whereby traditional state responsibilities and functions are discharged onto the private sector. The Korean government has been aggressive in regulating online gaming, as well as in organizing and providing financial support to addiction treatment operations,

patients, research, and prevention outreach. At the same time, debate over the issue of online game addiction has exposed fissures in the government at the cabinet-level with respect to managing Korean online gaming culture. The Ministry of Culture, Sports, and Tourism has long been a supporter of e-sports and the Korean game industry, subsidizing loans to game companies and drafting legislation like the Act on Promotion of E-sports to make funds available for building e-sports stadiums. The Ministry of Gender Equality and Family, on the other hand, has led the charge around addiction management, developing the Shutdown Law and establishing the Internet RESCUE School. The objects of their intervention are motivated by different interpretations of not only online games' place in Korea's information society, but also of normative expectations for IT use. Despite their oft-conflicting goals, both share an interest in helping to calibrate online gamers and gaming with normative models of engagement with games, their attendant aesthetics, and their ethical entailments.

As we enter the second half of the 2010s, Korean online gaming culture is undergoing some potentially momentous transitions. It remains to be seen whether or not the smoking ban in PC *bang* will lead to mass closures. The Shutdown Law is still in effect—regulating access to online games according to age—and mobile gaming appears poised to challenge or even supersede online PC games in both popularity and profits. The e-sports landscape is as volatile as ever, with a more crowded field of sports competing for broadcast partnerships, fan bases, and corporate sponsorships. And if passed, the Game Addiction Bill would not only entail tough regulations on the games industry, but also officially introduce a new medical and legal category into institutional practices. But change—rapid change, to be precise—has been the normative tempo of Korea's information society since its inception, and online gaming culture has been

swept right along with it. In the final analysis, Korean online gamers are like K in his taxi in *I Have the Right to Destroy Myself*, bombing down the highway feeling dizzy and anxious, but also feeling a rush of excitement. They are calibrated with the pace of the metaphorical taxi, and those that are not yet, like K, soon will be.

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