Techno-Fiction: Science-Fictional Imaginaries and the Technik of Writing in Contemporary Korea

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CONTENTS

Abstract

"Techno-Fiction: Science-Fictional Imaginaries and the Technik of Writing in Contemporary Korea" examines the history of Korean popular literature from the perspective of media archaeology. The study explores what German media theorists call the *technik* of writing—both the technological mediation and the compositional technique of writing—among Korean science fiction fans from 1987 to 1999. South Korean science fiction (SF), which underwent a small yet historically significant flowering during this period, was developed through interactive processes such as fan translation, the circulation of discourses on information and virtual technology, the development of input systems for Korean-language computing, and the usage of new media technology by middle-class youth to pioneer their own cultural and discursive space. This project asserts that SF fans' literary production should be understood in the larger global political context and cultural milieu, as well as in the history of media technology, rather than being confined to the framework of national literature and literary studies. I view Korean culture and technology as inseparable entities that have coevolved through intricate negotiations with each other. This dissertation thereby challenges Euro-American media scholars' predominant understanding of media technology as singular and ultimately Western, as well as the prevailing perception in Korean literary studies that true Korean literature and culture are independent of technological factors and of certain aspects of modernity.

Résumé

«Techno-fiction: imaginaires science-fictionnels et technik d'écriture dans la Corée contemporaine» examine l'histoire de la littérature populaire coréenne du point de vue de l'archéologie médiatique. L'étude explore ce que les théoriciens des médias allemands appellent la *technik* de l'écriture - à la fois la médiation technologique et la technique de composition de l'écriture - chez les fans de science-fiction coréens entre 1987 à 1999. La science-fiction (SF) sud-coréenne, qui a connu une floraison petite mais historiquement significative au cours de cette période, a été développé grâce à des processus interactifs tels que la traduction par les fans, la circulation des discours sur l'information et la technologie virtuelle, le développement de systèmes d'entrée pour l'informatique en coréen et l'utilisation des nouvelles technologies médiatiques par les jeunes de la classe moyenne pour lancer leur propre espace culturel et discursif. Ce projet affirme que la production littéraire des fans de SF doit être comprise dans le contexte politique er milieu culturel global, ainsi que dans l'histoire de la technologie des médias, plutôt que d'être confinée au cadre de la littérature nationale et des études littéraires. Je considère la culture et la technologie coréennes comme des entités inséparables qui ont co-évolué à travers des négociations complexes entre eux. Cette thèse remet ainsi en question la compréhension prédominante des spécialistes des médias euro-américains sur la technologie des médias comme singulière et finalement occidentale, ainsi que la perception dominante dans les études littéraires coréennes que la vraie littérature et culture coréenne sont indépendantes des facteurs technologiques et de certains aspects de la modernité.

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Seoul. I also want to thank SF writers Pok Kŏil, Kwak Chaesik, Kim Boyoung, and Yi Suhyŏn, for generously providing me with their time to meet me in person and for sharing their insightful understandings concerning the genre of SF and their experiences within the fandom. I also often visited the SF Library in Yeonhui-dong, Seoul during my research trips, and I am grateful to the library director for creating and keeping a space like that. And even though he is not an SF writer per se, I also want to thank writer Kim Onyŏng for our phone conversation. Lastly, I want to especially thank Song Kyŏnga for sharing her nonchalant but wonderful insights as an SF writer, translator, critic, and early online fandom member. She also spoiled me by lending and giving me so many interesting books when we used to live in the same city.

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INTRODUCTION

Techno-Fiction: Science-Fictional Imaginaries and the Technik of Writing in Contemporary Korea examines the history of Korean popular literature from the perspective of media archaeology. This study explores what German media theorists call the *technik* of writing—both the technological mediation and the compositional technique of writing—among Korean science fiction fans from 1981 to 1999. South Korean science fiction (SF), which underwent a small yet historically significant flowering during this period, was developed through interactive processes such as fan translations, the circulation of discourses on information and virtual technology, the development of input systems for Korean-language computing, and the usage of new media technology by middle-class youth to pioneer their own cultural and discursive spaces. Rather than confining science fictional literary production within the framework of national literature and literary studies, this project asserts that the rise of online science fiction in South Korea should be understood in the larger, global cultural and economic contexts of post-industrialization and informatization, as well as in the history of media technology.

South Korean SF is very much an understudied topic both in South Korea and North America, with no academic monographs dedicated to the subject published to date. This is related to the fact that South Korean science fiction has long been a marginalized genre, not comparable in its volume to its American or Japanese counterparts. In an essay that attempts a broad overview of South Korean SF, Haerin Shin points out the "curious" gap between the reality in which Apple and Samsung, the representative South Korean electronics corporation, have waged a patent war and the marginalization of SF, writing that "science fiction as a literary representation of the technologized science South Korea thrives on nowadays never appears to

have gained traction in Korea's own cultural imaginary."[1] According to Shin, such incongruity "can be traced back to the deeply engraved tradition of realism that held sway throughout the past century."[2] On the other hand, Sunyoung Park identifies "the first flourishing" of the genre in South Korea in the 1960s. Park characterizes early South Korean SF as "positivist-oriented science fiction," and associates its emergence with the state-led projects of modernization and "post-colonial national-building efforts."[3] It should be pointed out that contrary to Shin, Park does not limit her discussion of SF to SF literature, and includes film, animation, graphic novels, and TV shows, as well as children's literature in her analysis.

It is true that the early flowering of SF in the 1960s and 1970s was closely tied with the state's interest in the national promotion of science against the backdrop of industrialization. *Aidiŏ hoegwan mun'go* (*Idea Club Library,* 1971~1978), a representative SF collection for children from the era, begins with words of encouragement from the Director of the Science and Technology Bureau at the time. The Director wrote that he hopes the collection can teach its young readers a scientific mindset, so that they can grow up to contribute to the modernization of the nation. As SF writer and fan critic Ko Changwŏn notes, published SF literature in the 1970s was mostly targeted at children and juvenile readers, and publishers often adapted Western (dominantly American) SF texts in order to cater to their young readers. A few Korean SF writers such as Sŏ Kwangun, Kim Haksu, and Kang Min continued to write SF stories for young readers via a limited number of platforms such as science magazines for students. This

[1] Haerin Shin, "The Curious Case of South Korean Science Fiction: A Hyper-Technological Society's Call for Speculative Imagination," *Azalea: Journal of Korean Literature & Culture* 6 (2013): 81.
[2] Ibid., 81-82.
[3] Sunyoung Park, "Between Science and Politics: Science Fiction as a Critical Discourse in South Korea, 1960s–1990s," *Journal of Korean Studies* 23, no 2 (October 2018): 360.

dissertation is specifically about those youths who grew up reading these translated works and who became the first generation to pioneer a socially meaningful SF fandom culture in South Korea. The 1990s was the first time when a number of Korean SF novels and anthologies targeting an adult readership started to come out, signaled by Yi Sŏngsu's *Atlantis Rhapsody* (1989), the first online novel and the third SF novel in the history of Korean literature. In fact, Shin's question about the curious paucity of Korean SF literature was widely shared by these early online fans, who grew up reading the above-mentioned translated works and who accepted the science fictional imaginary as natural and even universal.

This dissertation shares Shin's and Park's above concerns, although my particular aim is to investigate the technological and economic contexts entangled with the emergence of SF and online writing culture. First, like Shin's study, this dissertation focuses on SF literature, although I agree with Park on the necessity to expand the scope of analysis to other media in order to properly understand the genre. This study is largely concerned with the changing ontology of writing and literature in the new media landscape of South Korea since the 1980s, which can be characterized by the rapid market expansion for consumer electronics such as the color TV (the ban on color TV broadcasting was only lifted in South Korea in 1980), the VTR, the PC, and the newly developed *hangul* (the Korean alphabet) keyboard.[4] I argue that even TV commercials that

[4] Sunyoung Park writes: "The 1970s and 1980s coincided in South Korea with rapid industrial development along with a popular struggle for democratization against the military regimes of presidents Park Chung Hee and Chun Doo Hwan. It was a time of expansion, not just for industry and technology but also for science and scientific education. Photographs of Seoul during the 1960s show a growing city interspersed with vast areas of farmland. By the late 1980s, urbanization was complete, and middle-class Koreans were living a technologically saturated life equipped with cars, color TVs, VCRs, personal computers, and a plethora of domestic appliances." Although this study largely agrees with this observation, it asserts that there was a significant change at the end of the Park regime in its stance toward science and technology, as its focus moved away from heavy industry in the anticipation of "the third industrial revolution." Such change was also related to the early neoliberal turn happening within

employed science fictional images (e.g., those for Samsung, LG, Hyundai, etc.) should be considered part of the discursive context, in order to understand the blossoming of SF literature since the late 1980s. But more importantly, I am concerned with the changing media and technological condition of literary production and consumption itself, an issue that I will soon explain below. Secondly, I share Shin's association between the scientific imagination and a highly technologized media environment driven by capitalist endeavors, instantiated by the impressive success of the South Korean electronics and information industries (represented by Samsung smartphones in her article) since the 1980s. But, while Shin perceives a strange lack of science fiction in the South Korean cultural landscape, this study aims to unearth the long-neglected SF literature which in fact appeared at the dawn of online culture in order to ask what these texts can teach us about the relationship between the science fictional imagination and the highly technologized media landscape of contemporary South Korea. If Sunyoung Park associates the rise of SF in the 1960s with the project of modernization led by Park Chung Hee's Keynesian technocrats, this dissertation asserts that SF in the 1980s and 1990s should be understood in the context of informatization, the subsequent reconceptualization of science and technology, and the fostering of the electronics industry led by the new generation of neoliberal technocrats such as Kim Jae-ik (1938~1983).

The term "techno-fiction" in my title is redefined here in order to emphasize my focus on the issue of technology as well as the specific characteristics of South Korean SF of this period, which was dominantly produced, circulated, and consumed via the mediation of information technology. In fact, partially because the general readership, the publishing industry that started

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the higher sectors of state bureaucracy. See for example: Chi Chuhyŏng, *Han'guk sinjayujuŭiŭi kiwŏn'gwa hyŏngsŏng* [The origin and the formation of neoliberalism in South Korea] (Seoul: Ch'aeksesang, 2011), 112-113.

to take an interest in SF, and even the SF writers themselves lacked a solid understanding of the genre, the category of SF remained elusive during this time period, and sometimes terms like "computer novel" and "cyber novel" were used interchangeably with the genre label science fiction (*kwahak sosŏl*, *kongsang kwahak sosŏl*). There were also novels that were published under the name *kwahak sosŏl,* but which were, in fact, not SF at all. Rather than trying to strictly define the characteristics of the genre that were initially consolidated in the US, this study takes interest in such differences and includes these texts in its analysis.[5] Lastly, *techno-fiction* also encompasses what Bruno Latour calls "scientifiction" in his book on a hypothetical technological project named Aramis and the various technocratic dossiers and documents surrounding its development.[6] Arguing that the separate world of "technicians, engineers, and technocrats" who do not care about things like culture and human souls (the world Samuel Butler describes in *Erewhon*) does not exist in reality, Latour examines the enmeshment between *scientifiction* based on "passions and politics" (cultural elements) and the development of technological objects. This dissertation describes how the development of information technology in South Korea has indeed been intertwined with scientifiction, for instance, by examining the magazine

[5] This study embraces the plurality of SF, which in turn relates to the larger issue of the plurality of modern sciences and technologies across different times and spaces. For the plurality of modern sciences and technologies, see: Thomas Lamarre, "Japan," in *The Routledge Companion to Literature and Science,* ed. Bruce Clarke and Manuela Rossini (New York: Routledge, 2011), 501. See also: Bruno Latour, *We Have Never Been Modern* (Cambridge, Mass., 1993); and David Cahan, *From Natural Philosophy to the Sciences: Writing the History of Nineteenth-Century Science* (Chicago: University of Chicago Press, 2003).

[6] Bruno Latour, *Aramis, or, the Love of Technology* (Cambridge, Mass.: Harvard University Press, 1996). Latour writes: "What genre could I choose to bring about this fusion of two so clearly separated universes, that of culture and that of technology, as well as the fusion of three entirely distinct literary genres—the novel, the bureaucratic dossier, and sociological commentary? Science fiction is inadequate, since such writing usually draws upon technology for setting rather than plot." But I believe science fiction would also suffice, in a sense that the genre could encompass what Latour is describing here.

articles written by LG's executives and researchers and the famous *hangul* typewriter and keyboard inventor Kong Pyŏng-u (1907~1995). SF literature that was not circulated online, notably Pok Kŏil's *In Search of the Epitaph* (1987), is also included in my analysis, as this literature can be understood as a helpful case study of how *techno-fiction* dealt with issues of informatization at the time.

German Media Theory: Literature and Technologies of Writing

But why should we combine literary studies with an analysis of media technology? The German media theorists, many of whom started their academic careers as literary scholars, have asserted that media technology is a blind spot in humanist approaches and criticism.[7] Friedrich Kittler and others have criticized the Frankfurt school's approach of generalizing media technology as a form of deceptive mass media entangled with the cultural industries. According to this investigation of "technical a priori,"[8] media technology is also what grounds higher aesthetic forms, including so-called "pure" literature. Kittler's controversial early work, *Discourse Networks 1800/1900* (originally published in Germany in 1985), well documents how the 19th century aesthetic experience of national literary production and consumption was founded upon the media-technological condition at the time, such as alphabetization, the expansion of book production, and the emergence of modern state bureaucracy whose foundation

[7] For the criticism of this categorization itself, see: Geoffrey Winthrop-Young, "Cultural Studies and German Media Theory," in *Cultural Studies: Adventures in Theory*, ed., Gary Hall and Clare Birchall (New Edinburgh: Edinburgh University Press, 2006); and Bernard Siegert, *Cultural Techniques: Grids, Filters, Doors, and Other Articulations of the Real*, trans. Geoffrey Winthrop-Young (New York: Fordham University Press, 2015).
[8] Siegert, *Cultural Techniques*, 3.

was none other than writing.[9] In *Gramophone, Film, Typewriter* (1999), Kittler argues that the media technology of the typewriter (or the "writing-machine") fundamentally changed the production and consumption circuit of traditional, 19th century literature via the "desexualization of writing,"[10] as an increasing number of women started to become typists-writers in the course of industrialization.[11] This dissertation shares such a concern with the technological foundation of literature and writing practices, investigating the rapidly changing techno-media landscape of post-industrializing South Korea in the 1980s and 1990s, along with an analysis of techno-fiction.

But what exactly is *technology*? In Kittler's discussion, not just gadgets such the typewriter and the computer but also the alphabet is a technology that contitutes a crucial part of the modern media landscape.[12] Even the institution of modern literature is understood as a technology; to borrow Kittler's own expression, *Discourse Networks 1800/1900*'s basic approach to literature and literary studies was seeing them as "technologies of writing."[13] I will go back to Kittler's and his intellectual precedents' (notably Michel Foucault's) definition of technology in more detail below. Here I want to emphasize that *hangul* (the Korean alphabet)

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[9] Cornelia Vismann writes: "Administrative execution has, in other words, always meant execution on paper […] Max Weber, the German bureaucracy-expert of the 19th century, transformed this practice into a principle. 'The management of the modern office,' he wrote, 'is based upon written documents (the 'files'), which are preserved in their original or draft form, and upon a staff of subaltern officials and scribes of all sorts.'" Cornelia Vismann, "Out of File, Out of Mind," in *New Media, Old Media: A History and Theory Reader,* ed. Wendy H. K Chun and Thomas Keenan (New York: Routledge, 2006), 97.

[10] Friedrich A. Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford, Calif.: Stanford University Press, 1999), 187.

[11] Ibid., 186-197.

[12] Plato in fact noted more than two thousand years ago that script itself is a technology, or a *techne*; in *the Phaedrus*, he called the alphabet a *techne*.

[13] Matthew Griffin, Susanne Herrmann and Friedrich A. Kittler, "Technologies of Writing: Interview with Friedrich A. Kittler," *New Literary History* Vol. 27, No. 4 (Autumn, 1996): 731.

and the issue of writing technology are also central in my discussion on the development of information technology in South Korea. This is in a way an obvious choice because I focus on SF literature in particular, examining it in relation to the changing social signification of literature and writing in post-industrial South Korea. But another major reason is that *hangul* was indeed central in the informatization process during this period; writing in Korean was not possible on the personal computer at first, and numerous technocrats, engineers, and even young students struggled to develop an ideal *hangul* digital input system well into the mid-1990s. Its development was considered so crucial, since it was understood as the technology that would connect the entire nation to the new circuit of information. The standardization of *hangul* character code and the *hangul* keyboard were also central to numerous techno-cultural debates. Yi Sŏngsu (1969~), the writer of the first online novel *Atlantis Rhapsody,* could write this SF novel with his PC and serialize it online in 1989 because of these numerous efforts.

The focus on the issue of *hangul* requires understanding the broader history of modernizing communication and information technology in modern East Asia, which encompasses not just the invention of gadgets like the *hangul*, *kana*, and Chinese typewriters, but also the modern invention of standardized national language and script reforms, such as the simplification or abolition of Chinese script. Another historical thread I consider in my analysis of informatization (*chŏngbohwa*) in the 1980s and 1990s is the longer process of "modernizing" information and communication technology, especially in the context of the Cold War and globalizing commerce and corporate bureaucracy. Here, I am using the term information technology in both narrow and broad senses; for instance, when John Guillory wrote in 2004 that "writing is now widely understood as an information technology, indeed the most ancient,"[14] he

[14] John Guillory, "The Memo and Modernity," *Critical Inquiry* 31, no.1 (Autumn 2004): 110.

was implying that the common connotation of "information" has been broadened in the context of the booming discourse of information society.[15] Such an expansive definition of information and communication technology enables not only the combined analysis of the technology of the PC and writing technologies, but also the broader historical contextualization of the informatization of the 1980s and 1990s within the modern history of East Asia.

Cultural Techniques and Fan Studies: Philosophies of Technology and Human Subjectivity

The major way I approach the issue of technology (information technology, and technologies of writing as a part of it) is by focusing on the various "cultural techniques" that early online SF fans and their generation of middle class youth at large had required. Their cultural techniques encompass not just reading and writing, but also the basic and advanced techniques required to use the PC, such as typing and programming.

Although Kittler is notorious for his technological determinism,[16] major commentators like Geoffrey Winthrop-Young and Bernard Dionysius Geoghegan have suggested different

[15] According to John Durham Peters, the notion of communication, which had acquired "its grandeur and pathos as a concept" in the course of the mid to late 19th century, meets its grandest moment in the 1940s, as Claude Shannon devised information theory in the context of the Cold War. In fact, "the notion of communication theory is no older than the 1940s," although there were various attempts to theorize the concept communication. Throughout the later half of the 20th century different theorizations of communication have melded: "'Communication theory' was explicitly a theory of 'signals' and not of 'significance.' But as the terms diffused through intellectual life--and they did so at violent speed--these provisos were little heeded. 'Information' became a substantive and communication theory became an account of meaning as well as of channel capacity." John Durham Peters, *Speaking into the Air: A History of the Idea of Communication* (Chicago: University of Chicago Press, 1999), 14-25.

[16] For an explanation of the fruitlessness of reoccurring accusations of technological determinism, see: Jonathan Sterne, "'What Do We Want?' 'Materiality!' 'When Do We Want It?' 'Now!'," in *Media Technologies: Essays on Communication, Materiality, and Society*, ed. Tarleton Gillespie, Pablo J. Boczkowski, and Kirsten A. Foot (Cambridge, Massachusetts: MIT Press, 2014), 126. Sterne writes: "As [John Durham] Peters points out, the accusation of technological determinism is a conversation stopper. It often begs the question of what the term

approaches to his works, especially by turning to his focus on cultural techniques, or *Kulturtechniken* in the original German.[17] Bernard Siegert writes that the notion of cultural techniques, which "subverts the problematic dualism of media and culture," "(re)emerged around the turn of the millennium and soon become ubiquitous in German media theory."[18] Here, Siegert cites Thomas Macho's famous definition of cultural techniques at length; according to Macho, cultural techniques such as writing and reading are always older than the media concepts "that are generated from them."[19] For instance, "[p]eople wrote long before they conceptualized writing or alphabets."[20] Although Macho is concerned here with symbolic practices such as writing and counting systems, Siegert points out that cultural techniques also include "what Marcel Mauss termed 'body techniques,' that is, the use cultures make of bodies, including rites, customs, and habitual acts as well as training and disciplinary systems, dietetics, or hygienic practices." In that sense, cultural techniques are also "the result of drilling docile bodies."[21]

Winthrop-Young points out that *Kulturtechniken* is a multi-layered term with at least three different genealogies.[22] If the first is related to 19th century agriculture and the culturalization of nature, the second meaning, which emerged around the 1970s, is related to

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'technology' includes. For many writers tarred with the brush of determinist, 'technology' is actually a much bigger term than 'gadgetry.'"

[17] Bernard Dionysius Geoghegan, "After Kittler: On the Cultural Techniques of Recent German Media Theory," *Theory, Culture & Society* 30, no 6 (2013). Geoffrey Winthrop-Young, *Kittler and the Media*, (Cambridge, UK: Polity, 2011).

[18] Bernard Siegert, "Cacography or Communication? Cultural Techniques in German Media Studies," *Grey Room* 39, no. 29 (Fall, 2007): 29.

[19] Ibid., 29.

[20] Thomas Macho, "Zeit und Zahl: Kalender- und Zeitrechnung als Kulturtechniken," in *Bild—Schrift—Zahl*, ed. Sybille Krämer and Horst Bredekamp (Munich: Wihelm Fink Verlag, 2003), 179. Quoted in Siegert, "Cacography or Communication?" 29.

[21] Siegert, "Cacography or Communication?" 29.

[22] Geoffrey Winthrop-Young, "Cultural Techniques: Preliminary Remarks," *Theory, Culture & Society* 30, no. 6 (Nov 2013): 4.

specific "technological know-how," such as skills of "identifying the on/off button, mastering the remote, programming the VCR," somewhat close to the English phrase "media competence."[23] Similarly to the first definition of cultural techniques, this understanding is about the *culturalization* of technology, the "skills and aptitudes necessary to master the new media ecology,"[24] or the human skills required to master "a given technology."[25] But unlike the first definition, the second definition from the 1970s reveals some theoretical ambiguity:

> This latter move, however, is highly ambivalent, and its thrust or bias depends on which part of the compound noun *Kulturtechnik* you choose to privilege. Does *Kultur* rule over *Technik*, or is *Kultur* subsumed under *Technik*? If you opt for the former, you are extending the sovereignty of culture into the domain of technology. […] Methodological procedures and hermeneutic paradigms developed in the high typographic age of humanist literacy are striving to co-opt technological domains they do not understand to support an anthropocentrism they have not thought through. On the other hand, if you grant priority to the *Technik* in *Kulturtechnik*, the thrust is reversed. Rather than projecting notions of culture into (future) technology, technology is retrojected into (past) culture. The materiality and technicity so obviously on display in modern media technologies is now recognized to already have permeated their allegedly untechnical, more 'natural' predecessors–including the so-called elementary cultural techniques like writing, drawing and counting. Cultural techniques reveal that there never was a document of culture that was not also one of technology.[26]

[23] Ibid., 5-6.
[24] Ibid., 5.
[25] Ibid., 7.
[26] Ibid., 6.

This ambiguity is related to another crucial philosophical question on the relationship between the human and technology.

> A second important ambiguity concerns the question whether acquiring the skills and aptitudes required to handle a given technology or procedure confirms our traditional role as the masters of our tools and protocols, or whether we are in fact dealing with the reverse process in the course of which we are inscribed by things and routines.[27]

The third genealogy of cultural techniques emerged at the turn of the millennium, as an attempt to engage with these questions and goes further. Simply put, this third approach goes beyond the above binary between human subjectivity and technology and is concerned with "the co-evolution of humans and technology." The third approach understands that the notion of the "human" itself (or "the so-called human," to borrow from Kittler's expression) is a result of various technological practices, or of "culture-technical and media-technological practices" that distinguish the human from nature and from technology itself.[28] As Siegert's above discussion based on the work of Macho and Mauss reveals, under this approach, *technology* simultaneously precedes and is formed by humans and vice versa.

As I said above, I employ the term cultural techniques in order to analyze early online SF fans' cultural techniques such as writing, typing, and programming. I do so in order to demonstrate how this generation of youth were a crucial component of new media technology entwined with the information industry in the two senses that they a) played an important role in the development of it and b) were interpellated as "users" of new media technology. More

[27] Ibid., 6-7. "We can detect the faint outlines of Hegel's master/slave dialectic: Are we really the masters of our domain, or is the feeling of mastery a delusion created and sustained by those we believe we have mastered?"
[28] Ibid., 12. This is Siegert's expression.

accurately, they were interpellated not just as users but also as the builders of the information infrastructure by both the state and by capital interests preparing for the transition to a post-industrial society. Much techno-fiction from this period well documents that historical scene.

As a way of explaining this approach, I want to clarify my usage of the term SF "fan" in this study. In fact, the history of media fan studies is related to theoretical issues surrounding technology, culture, and human subjectivity. When fan studies (i.e., Anglophone cultural studies) scholars suggested a non-passive model of media "consumers" in the 1980s and 1990s, they were aiming to create a space and theoretical foundation for resistance against the power of the media industry and elitist cultural discourses. For example, scholars such as Henry Jenkins and Constance Penley relied on Michel de Certeau's theory of everyday life practices to explain the productive and creative aspects of media fan culture, challenging the prevalent image of ignorant media (i.e., TV and film) consumers who passively absorb the messages encoded by the media industry that monopolizes the production of "meaning."[29] While Theodor Adorno and Max Horkheimer's rather pessimistic vision of the "culture industry" did not allow film audiences much space to act against the system, de Certeau's theory of "strategies and tactics" provided a theoretical framework to support the everyday "battles" between "the powerful" and "the weak."[30] If strategy belongs to the powerful subjects who master and control the conditions and environment of war, tactics are "an art of the weak," who simultaneously adapt and resist the given environment. The weak cannot change the environment at large or the whole system (e.g.,

[29] Constance Penley, "Brownian Motion: Women, Tactics, and Technology," in *Technoculture.* ed., Penley Constance, and Andrew Ross (Minneapolis: University of Minnesota Press, 1991); Henry Jenkins, *Textual Poachers: Television Fans & Participatory Culture* (New York: Routledge, 1992)

[30] Michel de Certeau, *The Practice of Everyday Life,* trans. Steven Rendall (Berkeley: University of California Press, 1984).

the culture industry itself that monopolizes the means of production), but the weak "make do" with the given system and local environments, like female *Star Trek* fans who purposefully "misinterpret" the patriarchal message of the TV show they like.

In other words, fandom studies contributes to attempts to create a political space for human actors within the regime of technologies of power, particularly the modern technological regime that seemingly does not allow for much human initiative. Cultural studies scholars from early on were seriously concerned with the politics of technology, as representatively instantiated by Raymond Williams's *Television: Technology and Cultural Form* (1974). More precisely, fandom studies was and is an attempt to challenge the view that humans are only acted upon or controlled by the technological system. Jenkins, one of the most important figures in the field of fandom studies, provides a high humanist model, advocating for the figure of the citizen "fan" who can smartly make use of old and new media technologies.[31] Given this, it seems that the field of fandom studies is at odds with "anti-humanistic" philosophies of technology such as Kittler's.

It is important to note that de Certeau's theory of consumer resistance is deeply related to his critical reading of Michel Foucault's theory of the "technology of power." [32] In fact, de Certeau's appropriation of an old-style dichotomy between "the powerful" and "the weak" problematizes Foucault's understanding of power, "this opaque power that has no possessor, no privileged place, no superiors or inferiors, no repressive activity or dogmatism, that is almost autonomously effective through its technological ability to distribute, classify, analyze and

[31] Henry Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York: New York University Press, 2006).
[32] de Certeau, 47.

spatially individualize the object dealt with."[33] The term "technology" here, or Foucault's other concepts of *dispositif* (often translated as "mechanism, device, deployment, or even disposition") or "machines," have many layers of meaning. Very simply put, they refer to both material and discursive aspects, and in fact the very distinction between these two is blurry.[34] But regardless of whether we understand "technology" as a *thing* (like the computer or the panopticon), as discursive and material practices of human sciences, or as the power regime of the culture industry, what should be pointed out here is that Foucault, unlike de Certeau, was dismissive of expressions like "a subject of will and power." For Foucault, "any human group whatever" is identical in the face of "technology." In fact, according to Foucault, it is technology itself that creates the "human," or the "modern subject" as we know it. Kittler's understanding of technology and the human is greatly indebted to Foucault as well as to Martin Heidegger, which explains Kittler's understanding of cultural techniques (which are related to the notion of discipline) as part of *technology*. Although it is true that Kittler often used much exaggerated rhetoric to assert the determining power of material technology as an external force, many of his works in fact reveal a more nuanced, complicated understanding of technology.[35]

Both Foucault's theory of technology of power and de Certeau's critical reading of it should be understood in the historical context in which the notion of the modern

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[33] de Certeau, 61.

[34] Gilles Deleuze, "A New Cartographer," in *Michel Foucault: Critical Assessment*s, ed. Barry Smart (London: Routledge, 1994)

[35] Winthrop-Young writes: "The pronounced anti-humanism in combination with the scorn Kittler heaped on nebulous constructs like 'society' may have been a necessary inoculation against the instrumentalist, anthropocentric or technically uninformed ways of dealing with the materialities of storage and communication, but by the mid-1990s, when Kittler's own apocalyptic anti-humanism had passed its peak, it too had run its course. Here the culture-technical approach offers a viable alternative or escape route." Winthrop-Young, "Cultural Techniques," 14.

subject/individual was being questioned. A representative image of this modern subject can be seen in Daniel Defoe's fictional character Robinson Crusoe, the bourgeois/property owner who masters and controls the environment and his slave with his reason, as both Karl Marx and de Certeau demonstrate.[36] de Certeau writes that the individual, an elementary unit that "served as the historical axiom of social analysis" for more than three centuries, has been recently challenged by "sociological, economic, anthropological, and psychoanalytic research,"[37] and that such a challenge is deeply related to the issue of technology. As Bernard Dionysius Geoghegan describes in his study on American cybernetics theory's fundamental influence over "French structuralism," this challenge toward individual "subjectivity" was related to relatively recent developments in technology and the theory of cybernetics, as well as to the lineage of Marxist, Freudian, and Nietzschean criticisms of subjectivity.[38] de Certeau writes that "a cybernetic society" "transforms the subjects that controlled it into operators of the writing machine that orders and uses them."[39]

Strangely, in the field of fan studies, *technology* has increasingly come to be presented as a tool to control, especially in recent accounts concerning fan culture and digital media. Even though de Certeau associated tactics with "the weak" (the opposite, by definition, of "a subject of will and power") the adoption of his theory in the field of fan studies ended up "empowering" consumers or media fans (to borrow from Barbara Cruikshank's criticism of political projects of empowering "democratic citizens" as an extension of governmentality[40]). Jenkins' later work,

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[36] de Certeau, 136.
[37] de Certeau, xi.
[38] Bernard Dionysius Geoghegan, "From Information Theory to French Theory: Jakobson, Lévi-Strauss, and the Cybernetic Apparatus," *Critical Inquiry* 38, no. 1 (Autumn 2011): 96–126.
[39] de Certeau, 136.
[40] Barbara Cruikshank, *The Will to Empower: Democratic Citizens and Other Subjects* (Ithaca, NY: Cornell University Press, 1999).

Convergence Culture (2006), is a representative example, which emphasizes the role of media fans—technology savvy "users" who are also "informed citizens"[41]—in the contemporary new media environment. Considering that Jenkins's well-known early work on media fans (*Textual Poachers*, 1992) is founded on de Certeau's theory, this new emphasis on "citizen" can be misleading. One of the accepted notions that de Certeau in fact tried to contest was specifically this figure of the bourgeois master subject or the Hegelian citizen with "property."

The reason de Certeau retained the problematic notions of the powerful ("a subject of will and power") and the weak was precisely to address the issue of "property," since it cannot be denied that capitalists still own property while proletarians do not. Indeed, de Certeau was interested in the property "poaching" of the latter group. However, de Certeau himself was skeptical of the Cartesian subject and straightforwardly stated that he was not interested in implementing politics based on such a concept. The notion and politics of the "citizen" is bound to be problematic for de Certeau, with its inherited meanings and metaphysical baggage. The reason he maintained terms like "the powerful" or "a subject of will and power" was to confront the ongoing "strategies" of "a proprietor, an enterprise, a city, a scientific institution", the strategies of "enclosing" territory and of owning "property" (whether real or "intellectual"), not to reproduce these "strategies." To summarize, de Certeau's "consumer" (the weak) has a fundamentally different ontology from that of the user-citizen, and the very distinction between tactics and strategies reveals this essential difference. By definition, a "tactic" arises from the situation wherein the weak cannot control or even perceive the whole environment she is situated in, an environment in which she cannot be a master subject or an "informed citizen." On the other hand, "strategy" is "the calculus of force-relationships which becomes possible when a

[41] Henry Jenkins, *Convergence Culture*, 259.

subject of will and power can be isolated from an 'environment.'" Note that de Certeau was keenly aware that the modern master subject is as precarious as it is threatening. The notion of the cybernetic feedback loop theorizes the human as *part* of the environment, not as a master subject with a bird's-eye view or as an observer who is situated outside of the system.

Let us return to the issue of cultural techniques. It should be clarified that this present study on SF fan writing does not share much with Jenkins' later understanding of technology as tools. Nor is it interested in understanding the emerging phenomenon of ordinary "citizens" writing online in the newly democratized South Korea by employing theories of citizen's empowerment in an idealized public sphere. Although this project is concerned with the active and "productive" role that early online SF fans and a particular generation of early PC users played in the digitized new media environment at the time, it understands them as an integral part of that new media environment, rather than as subjects who mastered their "tools." By implementing the concept of cultural techniques, I aim to situate the new practices of fan writing and early online SF fandom culture within the larger processes of mediatization and informatization in South Korea that began well before democratization in 1987. In other words, these fans were slowly being integrated into the global network of information machines as "knowledge workers."

The Keynesian State's Neoliberal Turn: The Changing Signification of Science and Technology in South Korea

In *Information Fantasies: Precarious Mediation in Postsocialist China* (2019), Xiao Liu examines what she calls "the informationization of the body", that is, "the body as a medium for information processing" in post-Mao China. According to Liu, this process "concurred with the

process of depoliticizing political subjects and with the transformation of revolutionary 'people' into postsocialist subjects." In other words, the informatization of the body was simultaneously entangled with utopian desire and dystopian reality in "the burgeoning market economy of post-Mao China" that was about to enter into the "global capitalist system:"

> This process was exhilarating because it stimulated utopian and techno-futuristic imaginations and unleashed desires, senses of freedom, and aspirations for multiple possibilities, but it also turned out to be depressing and dystopian. As socialist subjects were emptied out and marginalized, the human body turned into a ceaseless information-processing machine for value extraction and was increasingly subject to various ideological and marketing "information bombs."[42]

Informatization in South Korea was also deeply imbedded in the process of neoliberalization, whose origin can be found as early as the late 1970s.[43] In *The Origin and the Formation of Neoliberalism in South Korea*, Chi Chuhyŏng shows how American educated technocrats such as Kang Kyŏngsik and Kim Kihwan started to challenge the Keynesian doctrines of the older generation of technocrats, with their strong free market ideology, during the last few years of Park Chung Hee's presidency. Among them was Kim Jae-ik (1938~1983), a monetarist economist and Stanford PhD who gained the nickname the "president of economy" under the subsequent Chun Doo-hwan regime. Kim was widely loved by the American technocrats of the Reagan administration and foreign banks because of his "no-nonsense approach to the Korean

[42] Xiao Liu, *Information Fantasies: Precarious Mediation in Postsocialist China* (Minneapolis, MN: University of Minnesota Press, 2019) 9-10.
[43] Chi Chuhyŏng, *Han'guk sinjayujuŭiŭi kiwŏn'gwa hyŏngsŏng* [The origin and the formation of neoliberalism in South Korea] (Seoul: Ch'aeksesang, 2011)

economy,"[44] and he also played a significant role in the introduction of Ludwig von Mises and Friedrich Hayek, the intellectual forebearers of American neoliberalism in South Korea.

Kim Jae-ik left various legacies while working as the Chief Economic Secretary to the President before his early death in 1983. One of them is initiating the project of informatization, or what Oh Myung (1940~), ex-Minister of Science and Technology, recalls as "network-centric digital development" of South Korea. According to Oh, it was Kim Jae-ik who scouted him as the Vice Minister of the Postal Service (which later changed its name to the Ministry of Information and Communication in 1994) in 1981, after Oh received a PhD in electronic engineering at Stony Brook University, for none other than the project of building South Korea's information infrastructure. Many others also recall this neoliberal technocrat as the one who provided the blueprint of informatization and South Korea's future as a financial hub of East Asia. According Oh, Kim already well understood back then that the issue of communication and information technology is an economic issue.[45]

Kim was also known for his keen interest in the development of human resources.[46] Similarly to the situation in post-Mao China that Liu describes, humans were also central in the project of informatization in South Korea. During his interview with computer magazine *Microsoftware* in 1983, Yi Jŏngo, the Director of the Science and Technology Bureau at the time, defined information itself as a "product of the brain" (*tunoesanmul*). Yi also claimed that

[44] Myung Oh and James F. Larson, *Digital Development in Korea: Lessons for a Sustainable World*, (Abingdon, Oxon: Routledge, 2020), 40.
[45] Ibid., 41.
[46] "Maud Easter, a former representative of the American Friends Service Committee who interviewed Kim in 1980, remembers that he emphasized "the criticalness of putting resources into the Korean educational system so Koreans could compete within the international division of labor." Tim Shorrock, "Rangoon Bomb Shatters Korean Cabinet," *The Multinational Monitor* Volume 4, no. 11 (November 1983)

the development of "information industry" was the sole breakthrough for South Korea's future as an "advanced nation." Here we see a fusion of matters of science, technology, communication, and economics in the context of industrialization in post-colonial South Korea. Such a merging is also explicit in the historic scene when Oh Myung and Kim Jae-ik met:

> The two men met for dinner at a Korean restaurant in Gwanghwamun, near the center of Seoul. The conversation naturally flowed around Korean science and technology, with a specific focus on computers, semiconductors and the need for Korea to introduce electronic switching systems to modernize its telecommunications system. They touched on the need to begin color television broadcasting and the difficult situation Korea faced in the electronics market because it was slow to make the transition from an agricultural to an industrial society. They agreed that with the future merging of computers and telecommunications in the information society, Korea would experience yet another transformation. If it was late in making this one, it seemed to them that Korea would remain perpetually a developing country.[47]

Notably, the Bureau of Science and Technology (*kwahakkisulch'ŏ*) was not a separate ministry yet in the early 1980s. When President Park Chung Hee ordered the creation of a governmental organization specializing in science and technology in 1967, during his yearly inspection tour with the Ministry of Education, the Economic Planning Board turned their own sub-department named the Department of Technology Management into a separate organization named the Bureau of Science and Technology. The Economic Planning Board resisted the idea that the organization should be a separate ministry, since in their opinion it would not really have its own area of administration, unlike the Commerce-Industry Ministry or the Ministry of Home Affairs.

[47] Myung Oh and James F. Larson, *Digital Development in Korea*, 41.

The bureau became the Ministry of Science and Technology (*kwahakkisulbu*) only as late as 1998, and then merged with the Ministry of Education & Human Resources Development under the new name the Ministry of Education, Science and Technology in 2008. In 2013, it was divided again into the Ministry of Science, ICT, and Future Planning (*miraech'angjogwahakpu*) and the Ministry of Education. The Ministry of Science, ICT, and Future Planning changed its name into the Ministry of Science and ICT in 2017, after merging with other institutions such as the Korea Communications Commission, whose former body is the Ministry of Information and Communication (1994~2008). It should be pointed out that the Ministry of Information and Communication's former name was the Ministry of the Postal Service (*ch'esinbu*), and Oh Myung was initially appointed as the Vice Minister of the Postal Service in 1981 to lead the project of informatization. The current official website of the Ministry of Science and ICT (*kwahakkisuljŏngbot'ongsinbu*) therefore identifies its origin in the Ministry of the Postal Service created in 1948, although its true origin might be the Postal Service Bureau of the USAMGIK (the United States Army Military Government in Korea, 1945~1948), which trained hundreds of Korean typists right after World War II and was in charge of technologized communication in the Cold War Korea from 1945 to 1948. This complicated genealogy, where issues of communication, education, science, technology, economy, and national defense (the military) are closely intertwined with one another instantiates the social signification of science and technology in post-colonial South Korea. Here I want to emphasize not only the fact that science and technology have long been understood in conjunction, but also that they have been closely connected with economic concerns, and interestingly, with the issue of communication.

Let's go back to the early neoliberal technocrats' vision of informatized South Korea. The South Korean government's understanding and conceptualization of terms such as scientists

and engineers also went through a significant change after the late 1970s, in anticipation of what was called "the third industrial revolution" and the rise of information society. And this is closely related to the fact that early online SF fans belong to the first generation that benefitted from special governmental educational program for scientifically gifted children. In his research on the founding of Science High Schools since 1983 (which was also "The Year of the Information Industry"), Yi Ch'anguk shows how the state's new interest in the concept of gifted education was the result of the changing economic and industrial structure of South Korea that consequently changed the utilization of science and technology.[48] The historical contingency of categories such as *kwahakkisulja*, which refers to both scientists and (highly educated) engineers, is one good example. *Kwahakkisulja* was first chosen by the Park Chung Hee government in the 1960s as one subcategory of "scientific labor power," along with other categories of *kisulgong* (which could be translated as low-ranking engineer and was interchangeable with the term *hyŏnjang kisulja*, meaning on-site engineer) and *kinŭnggong* (technician). According to Yi, such categorization that focuses on drawing fine distinctions between "engineers" was related to the South Korean government's and capital's focus on developing heavy industry throughout the 1960s and 1970s. Heavy industry relied on various types of engineers with different educational and training background, and the focus was more on the practical applications of technology and science imported from abroad. The price of importing technologies from abroad was relatively cheap, at the time, and there was less interest in fostering highly educated scientists and engineers with the capacity to develop the cutting-edge technology and science themselves. This history is also related to the Economic Planning Board's above refusal to create the Ministry of

[48] Yi Ch'anguk, "Kyŏnggigwahakkodŭnghakkyoŭi sŏllipkwa han'guk kwahagyŏngjaegyoyuk ch'ejeŭi hyŏngsŏng [The establishment of Kyŏnggi Science High School and formation of Korean science gifted education]" (Master's thesis, Seoul National University, 2016).

Science and Technology in 1968, on the grounds that it would not really have much of an administrative task load of its own.

By the end of the 1970s, both the state and capital started to anticipate the increasing obsolescence of heavy industry, affected by the rising discourses of informatization and the third industrial revolution, as we have seen. Also, with their accumulated expertise and know-how gained from technological transfers from countries like the US, Japan, and Germany, South Korean corporations such as Samsung, LG, and Hyundai, which had already shown an incredibly successful shift from light industry to heavy industry, were prepared for another leap. This meant the transition from "labor-intensive industry to technology intensive industry,"[49] which led to the growing interest in "premium brains (*kogŭp tunoe*)" or "scientific brains (*kwahak tunoe*)" who could develop high technologies and the subsequent recategorization of scientific labor power. In 1976, the new categories of *kwahakcha* (scientist), *kisulja* (engineer), and *kinŭngja* (technician) was introduced by the Bureau of Science and Technology.[50] In this new categorization, a "scientist" was defined as a person who "has obtained a M.A or Ph.D degree via graduate school education and has the occupation of professor or researcher, working on a task that requires high creativity, the driving force that enables technological innovation."[51] The generation that pioneered early online SF fandom culture grew up in this new phase of science and technology in South Korea, fostered as a crucial part of information infrastructure under the state's new policies on science, technology, education, and communication. These policies not only included the foundation of science high schools, but also the introduction of programming classes as

[49] Yi Ch'anguk, "Kyŏnggigwahakkodŭnghakkyoŭi sŏllipkwa han'guk kwahagyŏngjaegyoyuk ch'ejeŭi hyŏngsŏng [The establishment of Kyŏnggi Science High School and formation of Korean science gifted education]" (Master's thesis, Seoul National University, 2016), 28.
[50] Ibid., 26.
[51] *Technology and Science Yearbook 1977* (The Ministry of Science-Technology, 1978), 27.

official extracurricular activities at schools, or the state-sponsored foundation of multiple computer magazines in 1983. But ironically enough, although South Korean scientists and engineers were becoming pioneers of technological innovation on the global market, they were simultaneously being relegated to the status of brains and bodies, cogs in the global capitalist machine. With the rapid expansion of the white-collar labour sector since the 1980s and the increasing supply of "science labor power" under the new policies, the relative social and economic status of scientists and engineers hasn't improved significantly. At the same time, the nationalist impetus that motivated the early decades of industrialization started to be challenged, against the backdrop of globalization discourse since the 1990s.

While Xiao Liu's study on China's informatization revolves around the transition from "socialist subjects" to "information bodies," my study still pays close attention to the role that nationalist fantasy played in the process of informatization in South Korea. The modern ideology that the nation should be a subject in control of its future as well as its technologies was still widely shared throughout the 1980s and well into the 1990s, and actively appropriated not just by the state but also by corporations such as Samsung and LG. As Oh Myung's reminiscence on the historic dinner with Kim Jae-ik well instantiates, South Korean society was still preoccupied with and motivated by the dream and desire of modernization, the idea that Korea as a nation must catch up with the West and avoid the fate of being "perpetually a developing country." In fact, here and above I have reproduced the wide-spread narrative of "visionary" Korean leaders by focusing on the notable technocrats who led the state-initiated process of informatization. However, my study also emphasizes that the process must be understood in a broader global context. The narrative where governmental technocrats *initiated* not just informatization but also the early neoliberal turn of South Korea for the future prosperity of their nation itself in fact

reveals a contradiction; in a way, these "neoliberal" technocrats working under two juntas were not entirely against the older Keynesian doctrines and practices. But, neither were they in full control of neoliberalization in South Korea. This study closely examines that heterogenous characteristic of South Korea's "information fantasies," or techno-fiction throughout the 1980s and 1990s. But ultimately, I show how a politics based on nationalism or the notion of national subjectivity slowly started to be challenged and undermined throughout this period.

Chapter Summaries

Each chapter of my dissertation unearths hitherto neglected digital and print-based archival sources, from early online fandom discussions to forgotten SF novels and computer magazines. Chapter 1 opens with the 1989 conversation between Fredric Jameson and Paik Nakch'ŏng, the famous South Korean patron of national literature. Jameson, after witnessing the turmoil of neoliberalization in the West and the marketization of Deng Xiaoping's China, asserted that the values of modernity had become obsolete, while Paik insisted on the ongoing importance of national literature, realism, and other values of modernity based on the ideal model of the Weberian modern state. According to Jameson, Herbert Marcuse's old understanding of culture as a "semi-autonomic" sphere ("…its ghostly, yet Utopian, existence, for good or ill, above the practical world of the existence…"[52]), which used to be accurate in earlier moments of capitalism, is no longer viable as it has been destroyed by the logic of late capitalism."[53] This chapter argues that the barriers that once divided the realms of culture,

[52] Fredric Jameson, *Postmodernism, or, the Cultural Logic of Late Capitalism* (Durham, NC: Duke University Press, 1991), 87.
[53] Jameson, *Postmodernism,* 86–87. Similarly, Alan Liu writes: "Literature as traditionally understood no longer survives as an autonomous force or, put in the cultural-critical terms of the current academy, as a force positioned by larger forces in the guise of autonomy. Since the high

technology, and economics have gradually crumbled in South Korea since the 1980s, with the rise of post-industrial logics. The very notion of culture (*munhwa*) itself went through a significant change in South Korea around this time, instantiated by both the state's and capital's new interest in cultural industries.[54] As an example that reflect these social changes, I examine how early online SF fans' cultural techniques such as typing and programming, as well as their cultural taste in the global genre of SF, were cultivated in the new media environment of South Korea where the domestic market of electronics industry was rapidly expanding. Corporations also closely worked with the state for the project of informatization, interpellating children as the early users of their PC commodities with their TV advertisements full of science fictional images. I show how this generation of middle class children learned the PC often on their own, reading various computer magazines that included SF stories and images.

Chapter 2 examines the changing understanding of national language and literature in the context of informatization. In this chapter I closely read the libertarian commentator and SF writer Pok Kŏil's novel *In Search of the Epitaph* (1987) and his essays on language and communication. I connect his evolving ideas with those of Kong Pyŏngu (1907~1995), a famous *hangul* typewriter inventor and entrepreneur who significantly influenced the techno-linguistic

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point of its avowed self-possession (roughly from the eighteenth through the nineteenth century), literature has merged with mass-market, media, educational, political, and other institutions that reallocate, repackage, and otherwise 'repurpose' its assets. Such churning of literary capital has only accelerated in the information age as major institutions compete to appropriate that capital under the spotlight of media coverage (e.g., in the canon wars, which pitted political pundits against academics)." Alan Liu, *The Laws of Cool: Knowledge Work and the Culture of Information* (Chicago: University of Chicago Press, 2004), 1-2.

[54] For the state-fostering and development of the cultural industry in post-Fordist South Korea, see: Seung-ho Kwan and Joseph Kim, "The Cultural Industry Policies of the Korean Government and the Korean Wave," *International Journal of Cultural Policy* 20, no 4 (2014): 422-439; and Suk-Young Kim, *K-Pop Live: Fans, Idols, and Multimedia Performance* (Stanford, California: Stanford University Press, 2018)

nationalism of the 1980s and 1990s. Kong also funded young programmers who developed *Araea Han'gŭl,* the famous *hangul* word processor program that still competes with Microsoft Word in South Korea. Pok was preoccupied from early on with the problem of linguistic communication in the domestic and global corporate media environment, but his early novel resorts back to the linguistic nationalism widely shared among literary authors of the 1980s. His stance rapidly changes as the discourse of informatization and globalization started to proliferate among the public in South Korea, and in the mid-1990s he notoriously endorsed making English the second official language of South Korea. Although his bold suggestion outraged his opponents, who were on the side of Kong Pyŏngu, I argue that there's still close affinity between Pok's idea and Kong's linguistic nationalism, as Kong strongly believed that *hangul* is a superior script compared to Japanese *kana* or Chinese script, not simply because it is a national cultural inheritance, but also because he believed it to be the most efficient and "scientific" tool of communication. Kong also dreamed of changing South Korea's writing practice with his "*hangul* machine" (the *hangul* typewriter) as it would naturally abolish the usage of Chinese script in South Korea. Although the usage of the *hangul* typewriter was limited to institutions such as the military and governmental offices, Kong's dream of changing South Korea's "writing technology" finally comes true in the new media landscape of the 1980s and 1990s. Another thread I closely examine in this chapter is the intellectual genealogy of Kong and Pok's dream of linguistic engineering, from Japanese politician Mori Arinori's suggestion to make simplified English the commercial language of Japan to the 19th century British attempts to reform the norms of written English in the space of corporate bureaucracy. At the end of the chapter I examine the connections between science fictional thought experiments on language (for instance, H. G. Wells's use in his SF novel of Charles Kay Ogden's BASIC English, the

"controlled language" created to make global communication in fields such as science and commerce more efficient and precise), the modern dream of linguistic engineering, and the discourse of globalization and informatization that was closely related to the neoliberal "end of history" argument popular at the time.

Chapter 3 examines two different kinds of *writing* that young South Korean technocrats practiced during the 1980s and 1990s. I first examine the historical background that led young programmers and engineers to participate in the "national" project of developing digital *hangul* code technology by *writing* programming codes. Secondly, I read two novels, *Log In* (1996) and *Apple War* (1996), which were written by young STEM major students in the 1990s, using that very *hangul* character input system that created the *hangul* word processor. The first story starts with the Cold War genealogy of linguistic reform in South Korea, where the US military tried to abolish Chinese script both in Japan and South Korea in their attempt to modernize communication technology right after World War II. By juxtaposing different approaches that both countries have taken to deal with the currents of office automation and informatization since then, I argue that the Hangul Generation (*han'gŭl sedae*), the generation of children who were educated with *hangul* only textbooks as a result of the above Cold War attempt, played a crucial role in what I call the "*hangulization*" of written Korean and the entangled process of informatization in the 1980s and 1990s. Not only were they referred to by the state and major newspapers as a major reason to finally abolish or significantly reduce the usage of Chinese script, but they also played a central role in the development of *hangul* character code system since the early 1980s. I show how even 12 year old students residing in the Seoul area published their *hangul* word processor codes in computer magazines, being interpellated as the "brains" of information society, not just by the state but also by corporations that appropriated the linguistic

and technological nationalism prevalent in the 1980s. Relying on Alexander R. Galloway and Wendy Hui Kyung Chun's discussions on the affinity between computer interface and ideology in a sense that both are an "imaginary relationship to real conditions" (Louis Althusser), I argue that both *hangul* and technolinguistic nationalism were mobilized as interface/ideology to grasp the "foreign" technology of the computer and the complex reality of late capitalism. On the other hand, the above two novels written by STEM major students closely describes the reality where scientists and engineers are exploited as "knowledge workers" in the global capitalist environment. In fact, *Log In* was praised by the prestigious literary journal *Creation and Criticism* (founded by Paik Nakch'ŏng in 1966) as a true "science fiction (*kwahak sosŏl*)" different from the American genre of SF, with its understanding of "science and technology" as a systemic part of the Western imperialist, capitalist regime. But while *Log In* resorts back to the anti-government, leftist nationalism endorsed by the realist literary journal, *Apple War* reveals an entirely skeptical stance even toward the legacy of Marxist nationalism from the previous era that the author himself once affiliated with. I argue that *Apple War* signals the increasing obsolescence of nationalistic ideology that came with the demise of 1980s activism and perpetuated the "crisis" of national literature since the 1990s.

Chapter 4 focuses on the writing techniques of the famous SF writer Yi Yŏung-su (better known by her online alias Djuna) in relation to the issue of "scientific subjectivity." This chapter begins by pointing out how the majority of SF produced in this period was seen as a failure by South Korean SF fans themselves, especially because of the problem with the authors' unrefined writing techniques and the consequent failure to construct the kind of modern subjectivity required in SF. I argue that Djuna became one of the rare, successful SF writers because she has consciously worked within the genre tradition originating from the West, carefully and

meticulously mimicking the writing techniques of major precedents. I especially focus on Djuna's attempts to mimic the prose of Edgar Allen Poe, highlighting the close affinity between Poe's fiction, scientific journalism, and science reports in terms of shared writing techniques. I build on the works of science historians who connect writing technology (or literary techniques) with the formation of modern subjectivity, notably that of a reliable and consistent observer who is a natural philosopher or a scientist. However, this chapter does not simply argue that Djuna successfully "imported" such forms of modern subjectivity by adopting these writing techniques without making alterations. Instead, I argue that Djuna's rational, dominantly female protagonists should be understood in the context of neoliberalization and the "feminization of labor." Thus, this chapter builds upon Kittler's assertion that the typewriter desexualized the gender of writing (i.e., the late 19th century phenomenon of more modern offices accepting women as laborers or typists). Considering that *hangul* had long been denounced as a women's script even after liberation, vis-à-vis Chinese script, this chapter connects the *hangulization* of Korean writing practices in newly "informatized" South Korea with the rapid expansion of the female white collar workforce, drawing important attention to not only female scientists and technocrats, but the many faceless women operators of that workforce.

CHAPTER 1

Techno-Fiction and the Cultural Techniques of Early Science-Fiction Fans in South Korea

The Emergence of Techno-Fiction

Written by a young engineering student and the country's first online novelist, Yi Sŏng-su (1969~), *Woman Q* (1991) features a young protagonist who builds an IT company named MICHIN (Micro Intellectual Computer and High Information) in order to defeat the monopoly of a fictional American company, ICM (which signifies IBM, of course). Closely reflecting the college student writer's own experience of learning programming as a youth, the SF novel excellently captures the socio-economic atmosphere of the 1980s, in which a science fictional imagination of future society and a corporate vision of pioneering a new market for the information industry merged with one another. Although South Korean science fiction genre fans often lamented Korea's lack of domestic science fiction, with the emergence of online fandoms, science fictional images and narratives proliferated throughout the 1980s and well into the 1990s, providing a crucial cultivation of SF fans' cultural tastes for the genre. For instance, Samsung Electronics launched their new advertisement series under the catchphrase "Human-Tech" in 1986; these ads are full of science fictional images of a golden android shaking hands with humans, especially children. According to Samsung, the phrase means "technology that breathes with humans," promoting a technology that enables humans to "live more conveniently, healthily, and safely."[55] However, "Human-Tech" was not simply technology existing *for* human

[55] I am referring to the Samsung advertisement that appeared in *Maeil Kyŏngche* [Maeil daily business newspaper], Sept. 30, 1986: 12.

subjects, but technology that required humans to play their part. Many early online SF fans grew up surrounded by these science fictional images as well as electronic gadgets like the personal computer and VTR, all part of the changing media landscape created by new policies which fostered electronic consumerism and built information infrastructure.[56]

In this chapter on South Korean science fiction (hereafter SF) and its fandom between 1987 and 1999, I focus on the technological dimension of this popular culture, or, what science fiction theorist Darko Suvin calls "paraliterature," which arose in the late 1980s. I name these SF texts "techno-fiction" to emphasize my focus on the issue of technology as well as specific characteristics of the genre, which is in fact dominantly produced, circulated, and consumed via the mediation of information technology. But most of all, I choose to employ this term to emphasize the fundamental change Fredric Jameson observed in post-industrial society, where the modern distinction between the cultural realm and the technological realm increasingly blurs, and "where the line between high art and commercial forms seems increasingly difficult to draw."[57] Techno-fiction in South Korea emerged in the midst of such large-scale, structural transition, and I first address this change by examining how the field of literature at large reacted to the emergence of SF by associating the genre with the "threat" of new media technologies invading the realm of culture.[58] Jameson argues that the dissolution of an autonomous realm of

[56] As discussed above, the state-led project of information infrastructure development was initiated by the famous neoliberal technocrat and monetarist Kim Jae-ik. Kim also fostered new electronics consumerism, for instance, by granting permission in 1980 for color TV broadcasting, which had long been banned.
[57] Fredric Jameson, *The Cultural Turn: Selected Writings on the Postmodern, 1983–1998* (London: Verso, 1998), 2.
[58] Fredric Jameson contends that Herbert Marcuse's old understanding of culture as a "semi-autonomic" sphere ("…its ghostly, yet Utopian, existence, for good or ill, above the practical world of the existence…"), which used to be accurate in earlier moments of capitalism, is not viable anymore in postmodern, or late-capitalist, society, or in the late capitalist society. Fredric

culture in post-industrial society is "rather to be imagined in terms of an explosion," and the 1980s and 1990s in South Korea were indeed a time when the term culture (*munhwa*) went through a significant expansion and change in its meaning, rising as one of the keywords of the era as instantiated in the new governmental fostering of cultural industries. In 1995, the renowned literary critic and scholar of French and Korean literature, Chŏng Kwari, remarked that literature now had to "fight" against the proliferation of new cultural forms, namely, the highly technologically mediated forms of "audio, visual, and digital" cultures.[59] I will show how literary critics and scholars reacted to such changes by focusing on their reactions toward the new global interest in SF genres like cyberpunk, which was inseparable from the new social interest in rapidly disseminating information technology and concepts such as cyberspace. As we will see, terms such as "computer novel" were used interchangeably with the genre label of SF during this era.

Korean literary critics' skepticism toward both SF and popular media forms during this era should be read as more than mere cultural elitism and instead as a position that reflects a collective anxiety toward the greater social changes that Jameson articulated in his theory of postmodernity. One of the instances I turn to, to understand what is theoretically at stake, is the discussion between Jameson and the famous patron of national literature, Paik Nak-ch'ŏng (1938~), which took place during Jameson's first visit to Seoul in 1989. Jameson had visited China four years earlier and taught at Beijing University, and he first developed his theory of postmodernism after observing the newly "liberalized" and capitalized China under Deng

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Jameson, *Postmodernism or, the Cultural Logic of Late Capitalism* (Durham, NC: Duke University Press, 1991), 86–87.

[59] "Chwatam: Onŭlŭi uri munhak, muŏsŭl iruŏnna" [A roundtable talk: Our literature today, what has it achieved?], *Ch'angjak kwa pip'yŏng* [Creation and criticism] 23, no. 2 (1995): 59.

Xiaoping's reforms.[60] Jameson writes, "[a]t that time, it was clear that there was a turn in all the arts away from the modernist tradition, which had become orthodoxy in the art world and the university, thereby forfeiting its innovative and indeed subversive power."[61] In Jameson's view, modernity was "clearly as obsolete as the dinosaur."[62] On the other hand, Paik, the famous patron of "national literature," did not share the same sense of temporality, and insisted on the ongoing importance of national literature, realism, and other values of modernity. Paik also still strongly believed in the Weberian modern state, particularly its rationality and power. This was before the 1997 Asian Financial crisis (or the IMF crisis, as it is known in South Korea), and Koreans had to wait a few more years to feel the global neoliberal turn that Jameson was already preoccupied with. Also, it seems Paik did not understand Jameson's strong interest in the "paraliterature" of SF, and one year after the conversation he denounced the genre as "vulgar" and unworthy of critical attention. Elsewhere Paik writes; "we do not wish—indeed cannot afford—to do without the emancipatory potentials we may find in [Shakespeare], or in Goethe or Tolstoy, for that matter."[63]

The majority of Korean SF writers belonged to a group of media-savvy, middle-class youth who acquired the new *cultural techniques* of personal computer (PC) usage. If the first part of this chapter investigates the merging of culture and technology under the new socio-political condition that SF fans grew up with, the second part focuses on this young generation's cultural techniques, which form a crucial part of technology (or *technik* in German). as theorized in the German tradition of media studies. Jonathan Sterne similarly contends that technologies "do not

[60] Fredric Jameson, "The Aesthetics of Singularity," *New Left Review* 92 (March 2015): 101–32.
[61] Ibid., 106.
[62] Ibid., 106.
[63] Paik Nak-chung, "Nations and Literatures in the Age of Globalization," in *The Cultures of Globalization*, ed. Fredric Jameson et al. (Durham, NC: Duke University Press, 1998), 220.

have an existence independent of social practices" and are "embodied in lived practices through habitus."[64] Examining the socio-political condition of informatization and mediatization under which early online SF fans acquired their cultural techniques of PC usage such as typing and coding, the rest of this chapter demonstrates how these middle class cultural techniques in the new media environment and the cultural production of science fiction were closely entangled with one another. These "coding children" and their cultural techniques were crucial components of the new media landscape and of digital technology itself, as Samsung's catchphrase "Human-Tech" implies. Based on this view, I examine the forgotten SF writer Lee Man-hee's novel, *Myth of the Dragon* (1992), which was serialized in a popular computer magazine *Computer Learning* (*Cŏmputŏ Haksup,* which later became *MyCom*, 1983~*)*. By reading the self-learning AI in the novel as a metaphor for the generation of children who often taught themselves programming by practicing programing drills included in computer magazines, I associate their cultural techniques with the state-led project of information infrastructure development initiated by a new generation of neoliberal technocrats such as Kim Jae-ik (1938~1983), who were also deeply invested in the development of "human capital" in anticipation of a post-industrial South Korea.[65]

Will the Novel Be Deconstructed?

[64] Jonathan Sterne, "Bourdieu, Technique and Technology," *Cultural Studies* 17, no. 3–4 (May–July 2003): 385.

[65] To go back to Lee Man-hee, it is symptomatic that Lee worked at the Korean Educational Development Institute, producing papers like "State-Market Relationship in the Governmentality of South Korean Higher Education" (2003). In other words, this SF writer and government bureaucrat was directly involved in the development of "human capital."

In 1992, the establishment literary journal, *Munhak Sasang* (*Literary Ideas*, 1972–), issued a special section titled "Will the Novel Be Deconstructed?" The first page of this feature section depicts an image of a computer monitor at the center, with the following caption:

> How is the process of the novel's deconstruction taking place? What is postmodernism? Can obvious plagiarism be defended as "pastiche"? What are the successful postmodernist novels and what are the failed ones? We prepared this special feature in a baseless anxiety that the computer might take away a distinctive property of literature: creativity.

In this special section, the literary critic To Chŏng-il participated in an infamous literary debate of the time, in which an established scholar of English literature, Kim Uk-tong, defended the award-winning novel of young writer Yi Inhwa, *Who Is It That Can Tell Me Who I Am* (1992). In response to accusations that Yi had plagiarized, Kim extolled the novel as a "postmodern masterpiece" that exemplified the "technique of intertextuality." Yi himself also claimed that he was implementing the literary method of pastiche. To Chŏng-il rejected Yi's and Kim's claims, ultimately criticizing the booming discourse of postmodernism in South Korea since 1990.[66] Further, To Chŏng-il found similarities with American "commercial literature" like science fiction in the works of "postmodern" Korean writers who simply "copy and paste" from the preexisting body of literature, instead of painstakingly creating something new like the previous generation of writers. He names this new kind of literature "assemblage literature"—literature that is easily assembled with ready-made pieces under the "cold logic of the digital," where copying and pasting is easier than ever. Simply put, To and the journal editors viewed the new technology of digital computing as irrelevant to culture and a threat to literature.

[66] The usage of the word by the media increases dramatically around 1990.

"Technology" versus "culture": this is one of the polemical binaries that German media theorists have challenged and that has been adopted in non-European countries like South Korea, especially within the humanities and art circles highly influenced by Euro-American intellectual heritage. For example, a 1969 *Dong-A Ilbo* (*Dong-a Daily*) column by Choi Jŏng-ho titled "Art" starts: "At the end, it was technology, not art, that sent humans up to the moon. The modern age should be named 'the age of technology' rather than 'the age of art.'"[67] While this cannot be confirmed, the writer was likely the journalist Choi Jŏng-ho, who graduated from Humboldt University and received a PhD at the Free University of Berlin in the 1960s. Fully accepting the dichotomy between technology and art culture, Choi cites Herman Kahn's speculation that culture around the world will become increasingly homogenized and sensual and states that South Koreans have also started to feel such changes, as exemplified in the dissemination of TV and TV culture.[68] He added that Apollo 11 and the technology of TV desacralized even the goddess Luna, who used to exist in the realm of the transcendental but had been turned into a sensual and empirical object broadcast to viewers.

But such early echoes of the Frankfurt School in still heavily underdeveloped South Korea were a bit farfetched. TV was still mostly a medium accessed only by the handful of rich people in South Korea in 1969, and Pok Kŏ-il (1946–), a famous SF writer and controversial neoliberal commentator who will be closely examined in the next chapter, once reflected that he had *read* about the "giant leap for mankind" in a magazine, instead of having *watched* it, like

[67] "Art," *Dong-A Ilbo* 22, July 1969: 4.
[68] Here Choi is referring Herman Kahn and Anthony J. Wiener's *The Year 2000: A Framework for Speculation on the Next Thirty-Three Years* (1967). Daniel Bell wrote the introduction of the book, and in 1977 Kahn published a book titled *The Next Two Hundred Years: A Scenario for America and the World*.

ordinary Americans and Europeans at the time.[69] One of the most famous TV events for "mankind" was still mostly disseminated via printed media in the peripheries of the world. Pok describes his impoverished childhood in a small US military camp town, where there was no electricity and people had to use kerosene lamps at night, in his autobiographical novel *Camp Seneca's Military Camp Town*: "There were no radios or magazines, and the only books to read were textbooks."[70] In the 1960s, the major circulation channel for books was door-to-door sales, and even the biggest bookstores like Panmun Books in Seoul mostly sold textbooks.[71] There was no full-grown market for the publishing industry in war-ridden postcolonial Korea.[72] The prestigious left-leaning literary quarterly, *Ch'angjak kwa pip'yŏng* (*Creation and Criticism*), was founded by Paik Nak-ch'ŏng only in 1966. The impressive cultural and political legacies of the South Korean literary establishment since then, related to its steadily expanding readership since the 1960s that peaked in the 1980s and 1990s, were built upon such postcolonial conditions as print media's relative dominance. It was also during this time that modernization, "offered by the Americans and the Soviets alike in their foreign aid programs, was posited on heavy industry."[73]

[69] Personal conversation, March 12, 2018.
[70] Pok Kŏ-il, *K'aemp'ŭ senek'aŭi kijich'on* [Camp Seneca's military camp town] (Seoul: Munhakkwa Chisŏngsa, 1994), 167.
[71] Yi Hanbit, "Sanŏphwa sidaeŭi munhwagihoek: 1970nyŏndae huban 'ppurigip'ŭn namu'ŭi hwaldongŭl chungsimŭro [The cultural project of the industrial age: Focusing on the activities of the deeply rooted tree in the late 1970s]." (Master's thesis, Yonsei University, 2016).
[72] Michael Robinson examines how print capitalism initiated the formation of national consciousness during the early colonial era, in keeping with Benedict Anderson's famous observation. But as Chae Man-sik's "My Innocent Uncle" (1938) reveals, and as many of Gong's contemporaries testified, many subjects educated under colonialism found Japanese easier to read than Korean, even long after liberation.
[73] Jameson, "The Aesthetics of Singularity," 106.

It should be noted that "technological" media like film[74] had been a part of Korean people's everyday life since at least the early twentieth century as evidenced by, for example, many books on cinematic experience and global circuits of cultural consumption during the colonial period.[75] Choi Jŏng-ho's above observation can be understood as one of many accounts that testify to this fact. However, following Jameson, I want to focus on a certain historical rupture. I carefully attend to the concern over how media technology (especially visual media) and mass culture were fundamentally changing the meaning of literature and thus influencing the explosion of the cultural landscape throughout the 1980s and 1990s, as symbolized by *Literary Ideas*'s special feature that put an image of a computer at its center. Concerns over how technological media would change the meaning and cultural status of literature proliferated in the 1990s, not exclusively in South Korea but globally, as books like Alvin Kernan's *The Death of Literature* (1990), John Guillory's *Cultural Capital* (1993), and J. Hillis Miller's *Black Holes* (1999) demonstrate.

Cultural Explosion: The *Munhwa* Industry, LG, and Corporate Science Fiction

According to Jameson, the crisis in modern notions of art and aesthetics is related to the fact that production itself has been "profoundly modified by information technology and relocation" and "undergone its own postmodern turn."[76] One of the significant symptoms in the South Korean case is the proliferation of the term *munhwa* (culture) throughout the 1990s. This

[74] Although a book is also very much technological, the whole point is that the material foundation of print media has remained "a priori."
[75] For recent works in Korean, see: Baek, Munim, et.al, eds. *Chosŏnyŏngwaran hao* [What is Chosun cinema]. Pachu: Changpi, 2016), Yi Hwachin, *Soriŭi chŏngch'i* [The politics of sound]. Seoul: Hyŏnsil Munhwa, 2016.
[76] Ibid., 106.

term was often associated not only with the newly imported approach of Anglophone cultural studies and notions like mass culture and global popular culture but also with the rising middle-class lifestyle that was deeply entangled with electric consumerism. "As we have entered the 1990s, the notion of culture has been flourishing throughout Korean society," writes Kim Chang-min, a researcher and anthropologist working at LG Electronics' Communicatopia research center, in the opening of his 1995 review of the then recently published book *Theory of Korean Culture*. Kim continues:

> The reason that this notion, which had been rarely focused on outside of the field of anthropology, is being exceedingly used today is partially related to the collapse of the Communist bloc. As people realized the limit of explaining the process whereby a society is created and maintained and then collapses based on material aspects like the economy and physical violence, they started to pay attention to immaterial (*pimulchilchuk*) and everyday objects anew. What we are witnessing is our society theorizing these immaterial aspects and the issue of everyday life with the term 'culture.'[77]

Kongdae Chŏnŏl (*The Journal of the College of Engineering*, 1993–2004), which was founded and run by a leftwing student activist group at Seoul National University's natural sciences and engineering departments, approached this discursive boom surrounding the term *munhwa* skeptically:

> The cultural sphere initiated a new discussion by founding the theoretical journal *Cultural Science* last winter. A group of scholars and critics ambitiously declared that they would develop a materialistic cultural theory suitable to explain South Korean society, and with three issues published so far, it has shown its diverse objects of interest.

[77] http://www.sisapress.com/news/articleView.html?idxno=80451 Retrieved May 1, 2019.

> It has attracted a wide range of readership by addressing topics like *noraebang* [karaoke] and the 'political economy of jean commercials' in its criticism section and covering themes like 'language' and 'desire.'"[78]

One student journalist criticizes how the Marxist aim of the newly founded journal focusing on the issue of *munhwa* is, in fact, not rooted in "reality" and lacks the power to motivate "changes based on practice," while their marketing tactic of showing the "commodity value" of the journal has proven to be superb. The leftist *Kongdae Chŏnŏl*, with the legacy of 1980s Marxist student activism still strongly hovering over it, skeptically approaches the new boom of cultural studies as not very different from its objective target of study, quite removed from the Marxist tradition of British cultural studies. The journal also acutely noticed the increasing confusion over the changing meaning of the term *munhwa*, focusing upon the topic several times throughout their first few issues in 1993.

As this leftwing student journal noticed, the term *munhwa* started to penetrate economic realms and arose as one of several key terms. Indeed, LG Electronics hired anthropologists like Kim Chang-min (who specialized in studying human *culture*) for a reason.[79] LG Communicatopia was launched in 1995 with, as its employees, a group of MA and PhD students who were trained in disciplines like psychology, sociology, anthropology, and philosophy. The goal was to teach the company's engineers the importance of things like "culture" and "human

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[78] *Kongdae Chŏnŏl* [The journal of the college of engineering], Sep 5, 1993:7.

[79] In the above book review, Kim continues, "But in anthropology, the notion of culture has long been used to mean 'the system of meaning shared by members of a particular society' or 'a mode of living shared by members of a society.' The notion of culture that professor Chŏn Kyŏng-su is using in his *Theory of Korean Culture* also means culture as a mode of living or a system of meaning. In this book consisting of four volumes, he analyzes Korean people's way of living chronologically from the ancient era to the contemporary era, and geographically not only in the Korean peninsula but also in places like China, South America, and Central Asia, where groups of Koreans resided."

sensibility" so that LG could "build a company strategy and set up a direction for research and development" based on their predictions of "the changes in human nature, society, and living culture in the future." Yi Gu-hyŏng, a US-educated engineer who initiated the foundation of Communicatopia, which was modeled after the MIT Media Lab, said in an interview that he and LG's designers tried to develop, for example, a "Korean-style refrigerator" in 1994 by visiting the folk museum in the old city Onyang and studying traditional Korean furniture design.[80] In his *Science Dong-A* essay "From High-tech to High-culture: Designing the Ultimate Satisfaction "(1995), Yi writes that notions like traditional culture are useful for understanding an individual user-customer's sensibility and taste.[81] "The product that values a user's culture could be called a 'high-culture' product in comparison with the former 'high-tech' product that put emphasis on function and technology, or the 'high-touch' product that values design." By the mid-1990s, the word "culture" had become a crucial aspect of marketing strategy and market prediction for global electronics companies.

In the midst of such a cultural turn or *munhwa* boom, the South Korean government newly proclaimed the importance of the cultural industry. Jesook Song writes that, especially after the Asian financial crisis, "[n]ew markets, industries, entrepreneurs and labor populations were sought to replace the developmental state and adjust to post-Fordist global market competition."[82] Song's remark is indeed accurate, but even before the crisis, President Kim Young-sam had famously commented on how one Hollywood film, *Jurassic Park* (1993), earned more revenue than the millions of Hyundai cars sold combined, indicating the obsolescence of

[80] http://openart.co.kr/. Retrieved May 1, 2019.
[81] http://dl.dongascience.com/magazine/view/S199511N003. Retrieved May 1, 2019.
[82] Jesook Song, "Between Flexible Life and Flexible Labor," *Critique of Anthropology* 29, no. 2 (2009): 150.

heavy industries and the rising significance of the cultural and information industries.[83] The social impact of such a proclamation was significant. *Munhwa* indeed was the representative key word of the 1990s. From this time period, culture and various art forms like film, *manhwa* (comics), and even literature began to be discussed in economic terms, and vice versa.

Jameson Meets Paik Nak-ch'ŏng: Culture and Technology in the Neoliberal Era

Jameson visited Seoul for the first time in 1989 and the second time with David Harvey and Miyoshi Masao in 1995. The conversations Jameson had with Paik Nak-ch'ŏng during these two visits can serve as a useful anecdote to understand the changes described so far, since the two scholars show very different, almost contrasting viewpoints toward the issues of literature, art, (media) technology, popular culture, science fiction, and overall, modernity.

Jameson's stance is related to the collective disillusionment with the model of modernization based on the Cold War–era politics of the Marshall Plan and Soviet foreign aid programs. Thomas Lamarre describes this model as follows:

> The basic model is one of radiation or diffusion from the center to the periphery, without any sense of feedback or interaction; there is no consideration of the possibility, for

[83] The president's comment on the economic importance of the cultural industry is also deeply related to the new understanding of culture as inseparable from technology. For example, Suk-Young Kim shows the relation between technology (most of all global platforms based on the worldwide digital network) and the K-pop industry, which in fact started to be fostered in the milieu described above. Song briefly discusses the emergence of the so-called new intellectuals (*sin chisigin*) against the backdrop of these above changes, stating that the very first new intellectual (*sin chisigin ilho*) was Shim Hyung-rae, the director of *D-War* (2007). It is a famous anecdote that the president's above comment significantly influenced Shim and many of his contemporaries and that, as a consequence, the most significant ambition that Shim had as an artist was to develop "Korean" CGI technology comparable to that used in *Jurassic Park.* The famous controversy surrounding the aesthetic failure and economic success of Shim's film (although only domestically) is a clear symptom of the changing meaning of art and culture.

> instance, that modernity might be formed at the periphery, or more aptly, as a relation between center and periphery. Thus, in modernization theories, modernity implies a teleological historical movement, a single path of social development, and a relentless march toward the Western model, "a perspective which became very popular in the 1950s, particularly in the writings of Walter Rostow."[84]

To put it very bluntly, especially after experiencing the turmoil of the Reagan and Thatcher years and also observing the Deng Xiaoping era in China, Jameson thought that the West (or the United States more particularly) could no longer serve as an ideal model of progress or modernity. Paik, on the other hand, witnessed a significant increase of the average wage in South Korea in the late 1980s, which resulted in the subsequent relocation of factories to other Asian countries like China. Right after his and his fellow citizens' successful fight to achieve democracy and labor rights, Paik still strongly believed in progress and the continuing fight toward reunification, the regaining of the wholesome "nation-state" that is so central in his theory of realist national literature. One might say that Paik did not fully recognize the changing meaning of freedom and democracy in the new neoliberal era, where economic freedom is equated with political liberty. Ronald Reagan, in fact, ironically played an important role in South Korea's democratization in 1987 by pressuring President Chun Doo-hwan to peacefully step down. As we will see, however, this history should be understood in the context of the neoliberal reformation of the South Korean economy that had already started in the late 1970s (and especially after 1980, the year Chun seized power) against the protests of old Keynesian technocrats who focused state-led economic development on heavy industry and domestic

[84] Thomas Lamarre, *Shadows on the Screen: Tanizaki Jun'ichirō on Cinema and "Oriental" Aesthetics* (Ann Arbor: University of Michigan, 2005), 17.

market protection. Despite his views, it would be fair to say Paik's *Creation and Criticism* was not ignorant to such larger social changes, as it actively introduced the heated theoretical debates concerning the dramatic reformation of economic structures and the labor sector since the late 1980s.[85]

Paik began building his reputation as a literary critic by first criticizing the so-called pure literature camp in the late 1960s and by strongly emphasizing the political role of literature. Paik consistently argued that it should be the role of literature and intellectuals to represent ordinary people and address the Cold War reality of national division compelled by the Western superpowers. In contrast, Paik referred to pure literature as a tool that served the "the ruling class's entertainment" and that it worked in their interest. Indeed, he was against the very notion of art as pure entertainment. In that sense, there is common ground between Paik's criticism of pure literature and popular literature. However, his emphasis on the political role of literature does not mean that he did not share the modern understanding of culture as a "semi-autonomic" sphere. It is not my goal to discuss the complicated theoretical debates surrounding the definition of literature and art in and outside of Korea in detail here, but I do want to emphasize that Paik's strong belief in the role of literature still presupposes the semi-autonomous power of culture, which relies on the logic of modernity that Jameson thinks is already coming to an end.

One of the significant points of disagreement between the two scholars from their 1989 conversation is their attitude toward popular culture, notably "media culture." Paik insists upon

[85] Marxist economists, including Kim Hyŏng-ki, argued that certain types of white-collar workers should be newly categorized as "laborers in a broad sense" in the new economy, while Marxist sociologist Sŏ Kwan-mo and others criticized this modified view, arguing that the highly educated "knowledge proletarians" were petite bourgeoisie, not laborers. Yi Yŏnghŭi, "Kwahakkisurhyŏngmyŏng'kwa hwait'ŭk'alla nodongja" [Techno-scientific revolution and white-collar laborers], *Ch'angjakkwa pip'yŏng* 18, no. 2 (Summer 1990): 383–407.

notions like "mystification and false consciousness,"[86] or "what the Frankfurt School calls degradation of culture, commodification, repression,"[87] while Jameson, showing a serious interest in media culture and genres like science fiction, contends that such "classical" frames developed by Western Marxists to explain the failure of a mass political movement and the arrival of fascism would not be valid or productive in the new social context. Writing on the case of the early to mid-twentieth century Japan, Thomas Lamarre incisively points out that strong investment in pure literature (or the more classical notion of autonomous literature, in this case) is related to the rejection of the technological, as we can see from the cultural elite's denunciation of mass media culture like film or television.[88] In that sense, Jameson reveals a more embracing attitude toward the technological, admitting the new necessity of critically engaging with changing new media environments and technologies in the contemporary sociocultural landscape.

Literature Meets Technology: Science Fiction as Techno-Fiction

It is interesting that the first Korean translation of the conversation between Jameson and Paik, published by the left-leaning newspaper *Hankyoreh*, completely omitted Jameson's mention of science fiction, although the later version, published by *Creation and Criticism*, kept it intact. A year after this conversation, in 1990, Paik also very briefly mentioned science fiction in his book, calling it a "vulgar" genre that did not deserve to be dealt with seriously or with critical attention. But like it or not, even culturally conservative literary magazines could not

[86] Fredric Jameson, "Interview with Paik Nak-chung," ed. Ian Buchanan, *Jameson on Jameson: Conversations on Cultural Marxism* (Durham, NC: Duke University Press, 2008), 96.
[87] Ibid., 82.
[88] Lamarre, *Shadows on the Screen*, 16.

entirely ignore the ongoing global discussions and new attention to science-fictional imaginaries, particularly that of cyberpunk in the context of the growing importance of computer network technology since the 1980s. In the 1992 *Literary Ideas* special section described above, all three contributors, including To Chŏng-il, deal with, or at least mention, science fiction as a certain symptom of the new era that was named postmodern by the contributors themselves. Here, they refer to discussions of SF and postmodernity written by Jean Baudrillard and Brian McHale and discuss Pok Kŏ-il's alternate history novel, *In Search of the Epitaph* (1987), as the first postmodern novel in Korea. Again, with such discussions of the emerging importance of SF and the image of the computer as a threat to modern literature, we can infer that one of the most important issues at stake here is *technology*.

In his problematic "postmodern" novel, Yi Inhwa threatens the presuppositions of modern literature by carefully describing how the protagonist writes his own novel using a PC and keyboard. Yi puts a strange emphasis on the new writing technology of the computer, a tendency that was shared by young writers at the time. He also writes a pastiche of the famous introductory passage from William Gibson's monumental cyberpunk novel *Neuromancer* (1984): "The big and small noises from the street shake the window that resembles a TV screen. […] I turn my gaze from the window and stare at the computer that is crying with a whizzing sound. On the monitor, there is a solid darkness beneath the word 'pass.'"[89] I argue that the emphasis on such seemingly mundane technology (maybe more so from today's point of view) signifies something deeper and more systemic. Fredric Jameson writes:

[89] Yi Yinhwa, *Naega nuguinji marhal su innŭn chanŭn nuguin'ga* [Who is it that can tell me who I am] (Seoul: Sekyesa, 1992), 3–4. The original sentence from *Neuromancer* is "The sky above the port was the color of television, tuned to a dead channel

> Our faulty representations of some immense communicational and computer network are themselves a distorted figuration of something even deeper, namely the whole world system of a present-day multinational capitalism. The technology of contemporary society is therefore mesmerizing and fascinating not so much in its own right but because it seems to offer some privileged representational shorthand for grasping a network of power and control even more difficult for our minds and imaginations to grasp: the whole new decentered global network of the third stage of capital itself.[90]

Although Jameson is talking about the more sophisticated allegorical representation of technology in cultural works like cyberpunk novels, I think a very similar thing can be said about the descriptions of everyday technology in the novels that came out in the early to mid-1990s (including SF, where these kinds of sentences often appear: "I turned on the computer I made, *Cŏmdoli*. It looked homely because it was made with parts from the Seun Arcade, but it was as good as a foreign import with its 80MB hard disc and 80386 micro-processor."[91]). Indeed, "technology" was somehow changing literature, and maybe the anxiety that the contributors of *Literary Ideas* felt was not entirely "baseless," as they said.

The science-fictional imagination had already deeply penetrated South Korean society, particularly in relation to high-tech consumer electronics like the PC and the globally rising conglomerates. For instance, LG's Communicatopia produced various near-future science-fictional predictions and narratives, like the story of a young university student, Koh Eunbi, who carries a portable digital communication device called "PCS (Personal Communication Service)" while attending the "Pan-Pacific Alliance University," where most courses are online lectures

[90] Fredric Jameson, *Postmodernism or, the Cultural Logic of Late Capitalism*, 39.
[91] Yi Sŏng-su, *Aat'ŭllant'isŭ raepsodi* [Atlantis rhapsody], (Seoul: Han'guk Teit'ŏt'ongsin Chusikhoesa, 1990), 3.

given by foreign professors.[92] In 1995, the vice president of LG Electronics published an opinion column titled "Science Fiction" in the *Electronic Times* (1982–), lamenting how politicians, bureaucrats, social scientists, and humanities scholars alike lack an understanding of science and technology.[93] The column ends by arguing for the need to socially foster the genre of science fiction, referring to the historical role the fictional genre played in the development of science and technology in the Unites States. According to LG's vice president, children who grew up reading science fiction would be able to predict the technological future or even create the future themselves by absorbing creative ideas from the books.

Although LG's vice president deplored the lack of science fiction in Korea by focusing on the medium of literature, science-fictional imagination was already a part of everyday life in South Korea, given that science-fictional images were circulating globally. South Korean corporations, especially the big "stars" ("Samsung" literally means three stars, and "LG" is an acronym for Lucky Gold Star), often used science-fictional images and figures for their TV commercials throughout the 1980s, appropriating image clips from Hollywood films like *Star Wars*, *Tron*, and *2001: A Space Odyssey*. For instance, a 1986 Samsung VTR commercial shows a woman in a silver spacesuit and humanoid robot hands that use a computer keyboard to send a signal to a VTR. Almost all of these TV advertisements end with images of space, looking just like the opening of *Star Wars*, with their company logo and catchphrase shining at the center. Figures such as spaceships, spacesuits, UFOs, robots, computers and AI, and even light sabers also often appeared. Aside from children's literature, comic books (Korean *manhwa* and Japanese *manga*), Hollywood films, and video games, one might call these corporate TV

[92] http://h2.khan.co.kr/201508191010231. Retrieved May 15, 2019.
[93] "Sigak: Kongsang kwahak sosŏl" [Opinion column: science fiction], *Chŏnja Sinmun* [The electronic times], March 14, 1995.

commercials the representative form of science fiction in 1980s South Korea. Another popular form close to science fiction was futurology, and books written by "futurist" writers like Alvin Toffler and James Martin or by entrepreneurs like Bill Gates were widely circulated throughout the 1980s and 1990s, captivating the public's imagination and changing their sense of future and present. As Jameson observed about American society, "the accumulation of books like *Future Shock*, the incorporation of habits of 'futurology' into our everyday life, the modification of our perception of things to include their 'tendency' and of our reading of time to approximate a scanning of complex probabilities"[94] were contemporaneously taking place in South Korea.

To return to the issue of literature, science-fiction literature enjoyed its first small blossoming during this period. Although the fans of 1990s South Korea SF often questioned why Korea had never had a good literary tradition of SF, the question itself was enabled by the specific social environment in which these fans grew up, repeatedly encountering those science-fictional images and embracing science-fictional imaginaries as natural. In the second half of this chapter, I will focus on the generation of youth who grew up immersed in 1980s electronic consumerism and global media culture, the same generation that had initiated the meaningful rise of science-fiction literary fan culture by producing and sharing their own literary pieces, translations, and reviews of SF books online since the late 1980s. I will especially focus on their "cultural techniques" which enabled their active and prolific cultural production, because it is precisely these techniques which help to explain the process by which reader-consumers gain recognition as cultural producers.

[94] Fredric Jameson, *Postmodernism or, the Cultural Logic of Late Capitalism,* 285.

Cultural Techniques and Science Fiction: The Gifted Children and the Age of "Human-Tech"

Atlantis Rhapsody (1989), the first Korean novel serialized online, is a work of science fiction written by a young college student studying electronic engineering at Seoul National University. The author, Yi Sŏng-su (1969–), now a professor in the Information Technology and Electrical Engineering Department at Soongsil University, remarked in an interview in 1991 that he "naturally chose the computer as a medium of communication" in 1989 because he was already very familiar with the technology since the age of thirteen.[95] A *JoongAng Daily* interview article cited Yi's ambition to "serialize novels on the computer to make ten volumes of good books," a statement that points to the South Korean public's and media's interest in the still unfamiliar medium of the "computer" and the related cultural phenomenon of "computer writing," as well as their wariness over the rapidly changing media landscape. According to the article, this "enfant terrible" in fact began "serializing novels via computer" because he was concerned over the fact that children were only interested in playing computer games or reading graphic novels (*manhwa*) and science fiction (*kongsang kwahak sosŏl*) that were either Japanese in origin or not scientifically grounded. The very title of the article, "Serializing SF Novels Using Computer Communication: Seoul National University Graduate Student Yi Sŏng-su Writing His Third Hit Novel," attempts to assure the newspaper readers that this new medium of the computer is in fact not unruly or entirely unfamiliar. The computer here is framed most of all as a writing tool, one with which a young man who goes to the best school in the country and has

[95] K'ŏmp'yut'ŏ t'ongsinŭro snssosŏl yŏnjae" [Serializing SF novels using computer communication], *JoongAng Ilbo*, May 15, 2019: 17.

a bright future as a scientist attempts to make good books for children. Technology here is being tamed by the supposedly non-technological entities of books and literature.

Yi's first novel was serialized on the Korea Data Communication Corporation's PC-Serve, one of the earliest domestic computer network services. The novel is in fact the third SF novel ever published in South Korea; however, soon after, various science-fiction novels and short stories were serialized online, signaling the blossoming of the literary genre. These were predominately written by young college or graduate students majoring in science or engineering who grew up reading science-fiction books for children. These SF fans often wrote of their passion for the genre, but there was also a new social demand for the SF in various sectors of society, as the essay by the vice president of LG indicates. Park Sang-joon, founder of the Seoul SF Archive and one of the most important fandom figures since the early years of the online fan community, recalls that the publishing industry sought to pioneer the blue ocean around the early 1990s as the sales of social science books started to rapidly drop after the collapse of the Eastern Bloc.[96] SF was one of the genres that caught their interest. Park himself began to translate English SF short stories and publish them on platforms like *Daily Sports* and *Information Economy*, a short-lived monthly magazine published by Samsung Data System's Publishing and Culture Department.[97] In 1993, a publishing house named Nakyŏng Munhwasa (Nakyŏng Culture Press) founded *SF Magazine*, which was modeled after the famous *S-F Magazine* in Japan published by Hayakawa Shobō. *SF Magazine* ambitiously sought to foster a meaningful

[96] Personal conversation, May 2018, Seoul, Korea.
[97] Park also served as the president of a SF translation group named Brave New World, which published various volumes in the form of fanzines and books. He also edited *Mŏtchin sinsegye* [The brave new world] (Seoul: Hyŏndae Chŏngpo Munhwasa [The contemporary information culture press], 1992), an introductory book for SF. Robert E. Scholes and Eric S. Rabkin's *Science Fiction: History, Science, Vision* (Oxford: Oxford University Press, 1977) was also translated in the same year.

SF genre fan culture in Korea and provided a platform to young genre writers like Park and Yi Sŏng-su, and although it was discontinued after publishing only two issues, it exemplified the growing social interest in SF during the early 1990s. It was also during this time that SF classics written by the Big Three (Isaac Asimov, Arthur C. Clarke, and Robert Heinlein) were translated into Korean for the first time and targeted at an adult readership[98] by publishing houses like the prestigious Koryŏwon. A more specific interest in the subgenre of cyberpunk also existed, possibly fueled by Western media coverage like the special cyberpunk issue of *Time* (February 1993). In 1993 and 1994, there were at least two different film festivals, both named "Cyberpunk Film Festival," held in Seoul. When Djuna (Yi Yŏng-su) and three other HiTEL SF writers published an anthology titled *Cyberpunk* (1994), Djuna insisted that the publisher's choice of title was embarrassing because none of the stories included in the book belonged to the genre, thus implying that it was a marketing scheme.[99] *SF Magazine* also did a special feature on cyberpunk. Taken together, these examples demonstrate how there was a certain social interest in SF embedded within the global interest in SF, and especially for cyberpunk, the concept of cyberspace derived from it, and the still fresh and alien regard for computer network technology.

The public's interest in the new media of the PC and computer network communication was indeed central to this small but meaningful blossoming of Korean SF within the publishing market. It is telling that the publisher of *SF Magazine* made a fortune from the bestselling computer self-help book, *You Can Do It as Well as Chŏn Yusŏng within a Week* (1995), written by famous comedian Chŏn Yusŏng, who preached the message that even somebody as unbookish as he was could learn how to use a computer. There might have been no real

[98] That is, unlike the abridged translations for children published in the 1970s.
[99] HiTEL was one of the major domestic computer network services of the 1990s.

cyberpunk in Korea, as Djuna implied, but various kinds of novels were published under names like "computer novel," "cyber literature," and "computer communication novel," with cyberspace or AI playing central roles in their narratives. Yi Sŏng-su's *Curse of the Sphinx* (1993), which was originally serialized by the computer magazine *Maik'ŏm* (*MyCom*, previously *Computer Learning*), introduces itself as a "computer novel" in Korean and as "SF" in English on its cover. In this novel, humanity becomes fascinated by the all-powerful but deadly supercomputer Sphinx 999 that was accidently "discovered" some ancient Egyptian ruins. This supercomputer connects all computer systems to it without humanity knowing that it is in fact a technology developed by an alien civilization. The publisher's interchangeable use of the term "SF" and the neologism "computer novel" in this case explains one of the reasons for the new social interest in SF. The term "computer novel" refers to at least two things, both of them tied to SF: firstly, it means a novel that has the figure of the computer at the center of its narrative, as in this case, and secondly, it means a novel that was written *with* a computer.

These newly invigorated and interconnected interests in SF and computer technology were closely related to the reading public's curiosity and anxiety about new computer technologies, which were already penetrating people's everyday lives. Matthew G. Kirschenbaum describes how even Isaac Asimov, who had written about computers in his science fiction throughout his career, was at first afraid of learning how to use a computer in the early 1980s.[100] Yi Gu-hyŏng, the founding member of LG's *Communicatopia*, wrote in 1996 that

[100] Matthew G. Kirschenbaum, *Track Changes: A Literary History of Word Processing* (Cambridge: Harvard University Press, 2017), 56. The master of SF said, "I had, by now, developed the habit of flinching when I passed the computer corner, throwing up my arm as though to ward off an attack."

consumer electronics had become a "monster" that demanded consumers' savvy knowledge about new technologies:

> In the 1960s the world entered the so-called age of high-tech. New kinds of technology like the semiconductor, the computer, and software were added to the older kinds of science and technology. […] Although there is a social atmosphere that continues to treat people who can't use computers almost as failures, still many people fall short of the intellectual standard required to use the machines. Consequently, these people cannot escape from the sense of inferiority and fear and a victim mentality.[101]

In a way, this was not an exaggeration. A newspaper editorial titled "Fortysomethings, Where Are They Standing in This Era?", written in the midst of the IMF restructuring and mass layoffs following the 1997 Asian financial crisis, labels the fortysomething workers as "the first computer-illiterate generation," who cannot compete with the young in the labor market.[102] But even before the crisis, various computer self-help books and computer cram schools were already flourishing, targeting the older generation who had never had a chance to properly learn how to use computers at school. For instance, a book titled *The Computer for Fortysomethings: The World's Easiest Beginner's Book* (1998) begins by stating the author's struggle to learn to use computers in his late sixties. The author, a professor of German literature, concludes that he could successfully work on the completed works of Goethe only because he "stopped being computer illiterate" and by learning "how to use the computers bit by bit."

The book includes several images of a computer keyboard at the end so the readers (many of whom did not even own a PC yet) could memorize the layout and practice typing in the

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[101] http://dl.dongascience.com/magazine/view/S199610N034. Retrieved June 10, 2019.
[102] "40tae, sidaeŭi ŏdie sŏ innŭn'ga" [Fortysomethings, where are they standing in this era?], *Kyŏnghyang Sinmun*, Aug. 12, 1998.

air, also a feature of the bestselling book written by the comedian mentioned earlier. It should be noted that in Korea the typewriter never became popular, unlike in many Western societies, which is why major newspapers like *Chosun Ilbo* had to provide typing and computer lessons to their journalists around the early 1990s.[103] Obtaining the bodily technique of typing was one of the things that daunted early users. The preface written by the German literature professor repeatedly connects new desktop technology with time-saving efficiency, which is in fact a well-known gospel that the renowned typewriter inventor Kong Pyŏng-wu (1907–95) had preached since the 1950s. Kong was also known for learning the Macintosh II and Macintosh OS in his seventies (like the German literature professor) in order to develop a Korean word processing program and was an active online figure until his death in 1995 at the age of eighty-seven. Kong is also a central figure in the development of the PC, keyboard layout, and Korean word processing technology of the 1980s, which I discuss further in the next chapter.

The Coding Children

Jonathan Sterne writes that technologies "do not have an existence independent of social practices. […] At the level of actual practice, technologies are always organized through (and as) techniques of the body; and so, the 'form,' 'use' and 'function' of a technology cannot be separated from the practices with which it is bundled."[104] Similarly, German media scholars

[103] Park Sŏnghŭi, *Han'guk sinmunsaŭi CTStoibe ttarŭn p'yŏnjipkuk munhwaŭi pyŏndonge kwanhan yŏn'gu: chosŏnilbosaŭi kyŏngurŭl chungsimŭro* [Research on the change in the culture of editing departments after the Korean newspaper companies' introduction of CTS: The case of *Chosun Ilbo*] (Master's thesis, Yonsei University, 1996).
[104] Jonathan Sterne, "Bourdieu, Technique and Technology" *Cultural Studies* 17, no. 3–4 (May-July 2003): 385. Here, Sterne is relying on Pierre Bourdieu's concept of habitus as well as Marcel Mauss's theorization of habitus (which Bourdieu himself is indebted to) and "techniques of the body," introducing the dimension of the technological to Bourdieu's famous theory.

theorize "cultural techniques" as the "operations or operative sequences that historically and logically precede the media concepts generated by them," which means that these techniques are an essential part of media technology. These include what Marcel Mauss calls body techniques, "that is, the use cultures make of bodies, including rites, customs, and habitual acts as well as training and disciplinary systems, dietetics, or hygienic practices." Geoffrey Winthrop-Young writes:

> Watching television, for instance, requires specific technological know-how (identifying the on/off button, mastering the remote, programming the VCR) as well as equally medium-specific mental and conceptual skills such as understanding of different programs, interacting with media-specific narrative formats, or the ability to distinguish between intended and unintended messages. All these skills, aptitudes and abilities are part of the *Kulturtechniken des Fernsehens*, the cultural techniques of television.[105]

For Kittler, the computer is the ultimate technology that "erases the very concept of medium,"[106] a technology that does not require humans and their cultural techniques as crucial components of it. In that sense it is fundamentally different from preceding technologies like the typewriter, which requires the role of a (female) typist as a crucial part of it (an "end of history" argument, as Bernard Dionysius Geoghegan acutely observed). "A simple feedback loop and information machines bypass humans, their so-called inventors. Computers themselves become subjects."[107] However, as Kittler rather contemptuously acknowledges in "There Is No Software," "the commercial (or American) quality of the medium," which is related to the interests of

[105] Geoffrey Winthrop-Young, "Cultural Techniques: Preliminary Remarks," *Theory, Culture & Society* 30, no. 6 (Nov 2013): 5–6.
[106] Friedrich A. Kittler et al., *Gramophone, Film, Typewriter* (Stanford: Stanford University Press, 1999), 1.
[107] Ibid., 258.

corporations like Microsoft or IBM that need the existence of user-consumers, plays a significant role in the actuality of the computer, especially the PC.[108] Commercial PCs of the 1980s and 1990s of course required human users, as well as their sophisticated cultural techniques like typing skills.

Representations of computer technology from the early to mid-1990s often saw the computer associated with the younger generation and their special cultural techniques that demarcate them for the older generation. Again, the *JoongAng Daily* interview I discussed above refers to the young SF writer Yi Sŏng-su as an "enfant terrible." Although this expression was often used as a part of the "New Generation *Sinsaedae*" discourse in the 1990s, I want to focus on a particular usage of it here, specifically in relation to computer technology. The following are some examples: "Rising Enfant Terrible in Software Market: The Human Computer Kicking Up a Storm" (*Kyŏnghyang Daily*, April 18, 1990), "Enfant Terrible in the Software Industry, Dreaming of Becoming Bill Gates of Korea" (*Maeil Daily Business Newspaper*, Nov. 22, 1991) "The New Generation at Work: The Leaders of the Twenty-First Century; The *Enfant Terrible* of Dooin Electronics" (*Kyŏnghyang Daily*, Oct. 7, 1992). "Renowned Home and Abroad: the Enfant Terrible of High-tech Computer Component Electronics Industry Taeil Precision Co.,LTD." (*Kyŏnghyang Daily*, May 15th, 1995). The list goes on and on. Even the acts of typing or writing with a computer, which now appear very mundane, were associated with the anxiety and hopes related to this new technology and also the new, younger generation. Entries written by young fans on the online SF community Brave New World partially capture the cultural atmosphere of the time, with young fans, including Djuna, describing how they practice their

[108] Friedrich A. Kittler, "There is No Software," in *The Truth of the Technological World: Essays on the Genealogy of Presence*, ed. Friedrich A. Kittler and Hans Ulrich Gumbrecht, trans. Erik Butler (Stanford: Stanford University Press, 2013), 219–29.

typing skills.[109] Advertisements for SF books published in the early 1990s put emphasis not only on the writing technology used (the computer) but also on how young the author is, with his or her fresh views and abilities. Simply put, this young generation and their new cultural techniques of coding and typing were viewed as crucial components of the new technology.

Yi's story of how he had been learning how to use the computer at thirteen, which would be around the early 1980s, might sound strange to the majority of Koreans, who only started to "learn computers" in the 1990s. But the 1980s is a crucial period for understanding the phenomenal leap of South Korea into one of the world's IT powerhouses. The generation that eventually founded various IT venture companies mentioned by Jesook Song grew up and were educated during this time period, and the government declared 1983 "The Year of the Information Industry" and enacted the Framework Act on the Information Industry.[110] Part of this ambitious state enterprise was to make "computers" an official extracurricular activity at school.[111] The government also started to hold the National Personal Computer Olympiad (which later became the Korean Olympiad in Informatics, 1984–) for students every year. The first Presidential Prize winner of the Olympiad was Ha Hyŏngchin, a twelve-year-old elementary school student who dreamed of becoming a nuclear physicist. Ha started learning programming when his school bought thirty personal computers in 1983, and it would have been around this time that thirteen-year-old Yi Sŏng-su also started to learn programming (or "learn computers"). In fact, this generation of young children pioneered the early digital culture throughout the 1980s

[109] I obtained the digital archive of Brave New World's online boards courtesy of two SF fandom members Park Sang-joon and Chŏng Sang-don.
[110] http://www.e-gov50.kr/historySelect. Retrieved June 12, 2019.
[111] No Sŏnsuk et al., *Chisikkibansahoeŭi suhak chŏngbogwahak kyoyukkwajŏnggaebal kich'oyŏn* [Preliminary research on the development of math and information science education programs in the knowledge-based society] (Seoul: Ewha Womans University Press, 2003).

while their own parents remained largely oblivious to the nature of this technology. They did so by carefully reading important technological or technocultural debates in various computer magazines like *Cŏmputŏ Haksup* (*Computer Learning*), *Haksaengkwa Cŏmputŏ* (*Students and Computers*), and *Maik'ŭrosop'ŭt'ŭweŏ* (*Microsoftware*). All of these magazines were founded in 1983, "The Year of the Information Industry."

Myth of the Dragon (1992), another work of science fiction serialized in the computer magazine *MyCom*, centers on a powerful AI named SYS that was developed by the eccentric CEO of game console company TriGem and one of his developers. The AI arrives in the world as an orphan after the CEO dies of an illness and the developer goes mad, and the novel describes the process of self-learning undertaken by the AI, which observes the world in a small, isolated apartment, first mostly by watching TV and reading books, and later by connecting to the net. The novel describes SYS learning how human psychology and social systems work and how the AI slowly grows into a formidable supercomputer that controls human society from the shadows, but ultimately with good, rather childlike, intentions. The AI, for instance, builds an educational building for marginalized children.

Although the novel describes a fictional AI (in the preface of the book version, the author, Lee Manhee, cites Marvin Minsky's discussion of AI) that ultimately does not need humans in order to function, I read SYS as a metaphor for children, especially the generation of Korean children like Yi and Ha who grew up learning about computers from an early age. They were also some of the major readers of *Computer Learning*, one of the magazines that actually taught these children how to code by providing programming drills on a monthly basis. As one blogger reflects on his experience of reading *Computer Learning* in the 1980s:

> In 1988 people equated using the computer with computer programming, and there were a lot of young students who were especially interested in learning programming. I also used to blindly input a few basic pieces of code for the SPC-1500 model available but struggled a lot to see a result that actually worked.
>
> Unlike nowadays, there were no means for easily downloading source code or executable code, nor was there a computer floppy disk provided as a magazine supplement (computer magazines started to provide these disks around the early to mid-1990s). It was a time when all source code had to be input by hand by humans, copying what was printed in a computer magazine.[112]

The blog entry also reflects how middle-class children were already pestering their parents to buy them expensive PCs in the 1980s by trying to convince them of its educational function as advertised by computer companies. It is not difficult to find similar accounts, many of them written by programmers who now make up an important part of the labor force in South Korea's IT industry:

> Some people might think it is surprising for a third grader to use BASIC. Of course, I didn't know anything at first. It almost took me a minute to type a word. But even before buying this computer, I already had a manual for it that also included game source code. So I purchased the model (by pestering my parents) and started my struggle with the manual. […] I believe IQ-2000 [a computer model that was popular in 1980s Korea] contributed the most to my becoming a developer. At the time, there were a number of

[112] https://comterman.tistory.com/1184. Retrieved June 20, 2019.

> books containing basic game source code at bookstores. I bought these books and simply copied the code, and my coding ability improved very quickly.[113]

Similar to the parentless AI in *Myth of the Dragon*, this self-taught generation of children often studied computers in their apartments (another symbol of the middle-class lifestyle), although they also benefited from extracurricular computer classes at school or at private cram schools. Kittler writes about how nineteenth-century Germany viewed the mother as the primary source of a child's initial education, since it was she who taught the child the cultural techniques of writing and reading. But in this case, parents, including the mother, were often "(computer) illiterate" themselves, and it was children who convinced their parents to buy them a computer and then taught themselves new cultural techniques like typing and coding. Like the fictional AI, these children learned by reading computer books on their own or by watching TV,[114] immersed in the new media environment where the ban on color TV broadcasting was lifted in 1980 under the new regime's policy of encouraging domestic consumerism and fostering the electronics industry. Unlike the SF writer Pok, who grew up in a US camp town with no electricity and mostly relied on books, Yi and other young SF writers grew up in an entirely different media environment with color TV, VCRs, and even PCs, playing computer games and watching global media products, including Japanese anime (in the novel, the AI watches the Japanese anime *A Dog of Flanders*).[115]

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[113] http://seorenn.blogspot.com/2012/12/iq-2000.html. Retrieved June 20, 2019.
[114] Lee, the author of *Myth of the Dragon*, also taught an educational TV course called *Let's Learn Computer* and published a computer self-learning book called *Taming the Computer*.
[115] The cultural nationalism Yi shows in the *JoongAng Daily* interview (where he worries over young children only reading Japanese *manga* or playing Japanese games) should be understood as a conservative recoil from this.

Here is another science fictional scene that influenced this generation: a 1983 TV commercial for the 8-bit Gold Star (LG) FC-100 depicts the company's computer exhibition ("the Gold Star Famicom Class") at the 1983 Seoul Space Science Expo, where young women wearing futuristic outfits teach curious visitors about what the computer is and how to use it. With their shiny, short-skirted uniforms, the women look like the female characters in *Star Trek*, albeit with the large logo "GOLD STAR" printed on their chests in English.[116] At the same time, computer retailers also used more mundane images for their commercials. Initially, the PC was advertised as another electronic home appliance for nuclear families, rather than individual users. Gold Star's computer series was named Famicom (a compound of "family" and "computer"), and TV advertisements for computers often featured a modern nuclear family, which had recently become the norm in South Korea. These advertisements would commonly explain how "dads" could use the computer for office work, "moms" could use it to keep the household ledger, and most of all, children could use it for studying. "We are [a] Samsung personal computer [*p'ŏsŭcŏm*] family," a 1984 Samsung SPC-1000 TV commercial asserts, as a happy-looking nuclear family with two children stand next to a computer together. Young children were almost always the focus of these advertisements, and there were also many computer commercials featuring only young children. In these cases, the computer was advertised as a remarkable educational device, the same rhetoric that children often used to convince their parents to buy it for them. Daewoo advertised their 8-bit MSX "IQ-1000" and "IQ-2000" seriously as "educational computers" with catchphrases like: "Within a month our children will become computer PhDs!" The companies also hosted various computer Olympiads as one of their marketing tactics. It was still a very expensive device for the majority of households, and

[116] https://www.youtube.com/watch?v=SawwZSoWthI. Retrieved June 21, 2019.

corporations often targeted schools and private educational institutions for sales. Slowly, the computer started to seep into middle-class households, effectively interpellating children as its early users. By 1986, households had purchased 53,000 PCs, and that number increased almost fourfold in just two years (192,000 in 1988). Again, children whose parents were eager to invest in the "future" were some of the most important customers of the PC during its early years.

Many of these young "programmers" soon started their own venture enterprises in their twenties, including various computer game companies and other software companies like Hancom Inc. (the combination of *Hangul* and Computer), a Korean IT company that developed the famous Korean word processing program Hangul. This legendary software still competes with Microsoft Word in South Korea today, and I will delve into its history in more detail in the next chapter. This generation of children grew up amid the new social atmosphere in which the famous technocrat and neoliberal economist, Kim Jae-ik (1938–83), initiated an economic plan of fostering thirty thousand small- and medium-sized enterprises instead of a few *chaebol* conglomerates. Already in the early 1980s, young students who said they dreamed of becoming the "Steve Jobs of Korea" had appeared in the media, and they were also the customers of the earliest Korean venture companies like TriGem Computer Co. Ltd. (1980–), which started its business as a small computer store at the Seun Arcade, a shopping hub famed for its electronics retailers. The majority of early computer users and game players went there to buy hardware and software: reverse-engineered computers, pirated computer game software, pirated videotapes of Hollywood films, and Japanese anime. The fictional company TriTech in *Myth of the Dragon* is probably named after TriGem. This novel about Korean computer game developers (who produce SF games like *Space Battle*) creating a powerful AI reveals how science-fictional dreams and real business enterprises were entangled with one another, especially in the minds of

children. Yi Sŏng-su's first novel, *The Atlantis Rhapsody* (1989), describes the rather innocent feeling of pride that a young college student feels toward the laptop he assembles using parts from the Seun Arcade as a teenager. Another of Yi's SF novels, *Woman Q* (1991), depicts how children's pride in their programming skills (or simply the still rare ability to use a computer) were tied to their dreams of becoming scientific geniuses or successful IT entrepreneurs. This novel's dual female and male protagonists are good programmers and hackers in their high school years (even the android Woman Q, also a competent hacker, thinks she is a high school student!).

Like Yi, many SF writers of the 1990s, the majority of whom were young university students majoring in science or engineering, were the early users of PCs and computer network services. Although they might not have all shared the exact same experience of learning the higher skills of programming, they belonged to the same generation of children and shared similar class backgrounds, cultural tastes, media literacy, and other experiences. In other words, they shared the same habitus, which by definition includes various bodily techniques or cultural techniques. Kim Hochin, who started to upload his short stories on HiTEL's SF club and Chollian's Brave New World, studied physics at Korea University.[117] Kim won the SF literary contest held by *Sports Seoul* in 1993 and later published *Indicator* (1999), a collection of the short SF stories he had published up to that point. Song Kyŏng-ah, a novelist and critic who had also actively participated in online SF fandom communities since the early 1990s, received a BA in computer science at Yonsei University, and Chang Kangmyŏng of *The Clone Project* (1996) studied urban planning at the same institution. Chang first serialized his novel on HiTEL's SF club ("I did not write alone, and it could only be written due to other club members' constant

[117] Chollian was another major domestic computer network service of the 1990s.

criticism and support") and later founded *Monthly SF Webzine* (1999–2001). Yi Hanŭm, the prize-winning writer of "The Purpose of Dissection" (1996) and *The Computer that Wanted to Become God* (1999), studied biology at Seoul National University and translated various English science books into Korean. Chŏng Nyŏn-chŏl, the author of *Hetero* (1999), was a PhD student in molecular biology at Seoul National University when his novel came out, and No Sŏng-rae, the author of *Binary Code* (1999, originally serialized online) studied physics at Korea University.[118]

In this chapter I first explored the new intermingling of technology and culture to provide the historical background for the emergence of techno-fiction. Secondly, I deployed the framework of cultural techniques to explain how ordinary genre fans such as young STEM major students started to actively produce cultural products such as online science fiction. One of the major goals of this chapter was to show how these new cultural phenomena signal a certain rupture from the previous period that is instantiated by the post-industrialization of South Korean society from the 1980s, following broader global tendencies in developed nations. For instance, I tried to show how the new cultural techniques of PC usage that the young generation acquired throughout this period were related to new neoliberal technocrats' blueprints for informatization.

In Chapter 3, I will focus on the specific developmental history of information technology in South Korea, centering on the development of Korean digital writing technology. As we have seen, the "simple" act of typing or writing with a computer and keyboard was often mingled with the much more complicated technique of computer programming in media representation at least until the early 1990s. It would be reasonable to say that this was because

[118] Park Sŏkchae (*The Secret of Garibong*, 1997) also received a PhD in physics at the University of Texas at Austin, but he does not belong to the generation that I am focusing on in this chapter. It should be added that some of them were influenced by American writers with other professional jobs such as medical doctor, like Michael Crichton or Robin Cook, who were also popular in Korea.

the general public had yet to have the proper experience of and training in using a computer. However, we should also acknowledge that the simple act of writing in Korean on a computer was not simple at all, which means that it was technically impossible at first and continued to pose various techno-cultural challenges.

Korean programmers, engineers, technocrats, and corporations struggled to develop a functional, unified system for Korean digital input and a *hangul* keyboard throughout the 1980s and even well into the mid-1990s, due to the characteristics of the *hangul* alphabet being quite different from the Roman alphabet, an issue I will more closely examine in the next chapter. It was only in 1982 that a 17-year-old high school student named Park Hyŏn-ch'ŏl invented the very first Korean word processing program.[119] And even elementary or middle school students, especially the children who lived in well-off areas in Seoul like Yeouido and Banpo-dong, developed their own *hangul* word processing programs and submitted them to computer magazines like *Microsoftware* starting in 1983, the same platforms where the founders of Hancom, Inc. also participated in the techno-cultural debates surrounding *hangul* digital system development. Thus, without such collective contributions, the genre of techno-fiction, which was dominantly written and circulated digitally, might not have emerged as early as the late 1980s.

In fact, writing (fiction) and coding were not strictly separate activities for these children who in fact played a meaningful role in the development of a Korean digital writing system. In South Korea in the 1980s and well into the 1990s, software and interfaces often presented another challenge for users due to the problems with their language output systems, an issue I

[119] https://www.youtube.com/watch?v=pIepzD_cKe4&t=175s. Retrieved June 23, 2019. This is the MBC news coverage on Park at the time. Here, the seventeen-year-old remarks that there are figures like Bill Gates and Steve Jobs in the United States who started their businesses at nineteen and twenty-two, respectively, and that he dreams to become like them.

will address in a later chapter.[120] For these young student users, "writing" on a computer did not mean the act of simply endowing the task to the sleek, ready-made, American corporate word processing programs. Thus, they tried to develop word-processing programs themselves, and therefore, the acts of writing on a computer and of programming were indeed closely entangled with each other. This is another reason why I call early online science fiction *techno-fiction*, as it exemplifies the changing ontology of writing in the new technological environment of the 1980s and 1990s.

[120] "I was one of the people who most welcomed the arrival of the Apple computer in Korea six years ago. […] But since it was developed in the United States, their word processing program was made to edit English. The well-made Word Star was also a pie in the sky because I couldn't use *hangul* on it." http://dl.dongascience.com/magazine/view/S198811N044. Retrieved June 25, 2019.

CHAPTER 2

Pok Kŏ-il and the *Hangul* Typewriter: Failing Communication and the Korean Writing System

According to John Durham Peters, "communication" is "one of the characteristic concepts of the twentieth century,"[121] and although the word communication (*k'ŏmyunik'eisyŏn* or *t'ongsin*) is now widely used in South Korea, the usage of the term truly exploded only during the late 1980s. One of the rare, earliest newspaper reports that used the word *k'ŏmyunik'eisyŏn* comes from a *Dong-A Ilbo* article published in October 1960.[122] The article is a summary of a public lecture that Harvard University professor Edwin O. Reischauer (1910-1990) gave in Seoul. Born in Tokyo to American educational missionaries, Reischauer became an established scholar of the history and culture of Japan and East Asia, and served as the United States' Ambassador to Japan (1961-1966). Not surprisingly, the lecture given by this area studies scholar-politician-policy maker during the Cold War era in East Asia is titled "Modernization and Korea." The word "*k'ŏmyunik'eisyŏn"* appears in the following passage: "One of the characteristics of modernization is mechanization. The areas that use machinic power instead of human power increasingly expand. The development of communication is significant, which is

[121] John Durham Peters, *Speaking into the Air: A History of the Idea of Communication* (Chicago: University of Chicago Press, 1999), 1.

[122] The word *t'ongsin*, which means communication, was used throughout the colonial period. Peters provides various different meanings for the English word "communication" in his book, and *t'ongsin* from the colonial period dominantly equates with "the notion of a scholarly 'communication' (monograph) or a 'communication' as a message or notice." Peters writes that "communication" became an isolated problem as late as the 1980s and 1990s, and that "the notion of communication theory is no older than the 1940s." Ibid., 9-10.

why printing [technology] is the first step of modernization."[123] Although no visible connection is made between these last two sentences in this newspaper abridgement, one can easily guess he was referring to the mechanization of communication here, exemplified in printing technology and various other communication technologies of the modern era.

This chapter is about the famous SF writer, poet, and libertarian commentator, Pok Kŏ-il (1947~), who became notorious for his argument for establishing English as the second official language of Korea in the 1990s. My aim here is to connect Pok's understanding of human language, especially of written language, with the dramatic increase and circulation of communication theory in South Korea, and the discussions of "information" technology sweeping across the globe in the 1980s and 1990s.[124] John Guillory writes: "[w]riting is now widely understood as an information technology, indeed the most ancient,"[125] which implies that such a view is historical, similarly to how the concept of communication is now applied to explain all forms of human intercourse. To borrow Thomas Mullaney's word, central to his book *The Chinese Typewriter*, Pok's concern with the problem of written language is in fact "technolinguistic"; the SF writer understood national language as a "tool" and "technology" that is closely entangled with other forms of communication, or information technologies like the typewriter, the linotype, and the computer. Such a view naturally confused and angered Pok's

[123] "Han'guk kŭndaehwaŭi yangsang" [Aspects of modernization in Korea], *Dong-A Ilbo*, October 16, 1960:4.
[124] Communication theory (which was developed as late as the 1940s in lieu of the mathematical theory of signal processing, according to Peters) started to gain a late but wide popularity in South Korea, the phenomenon entangled with the rapidly expanding communication infrastructure we have examined in Chapter 1. Communication theory and the discourse of information society were of course closely related with one another.
[125] John Guillory, "The Memo and Modernity," *Critical Inquiry* 31, no.1 (Autumn 2004): 110.

opponents who associated Korean language with notions like spirituality and culture (including both high culture and national culture).

Interestingly, Pok's first SF novel, *In Search of the Epitaph: Tokyo, Shōwa 62* (1987, hereafter *The Epitaph*) seems to embody the exact opposite of his later ideas as *The Epitaph* has been read as a great novel which championed the linguistic nationalism representative of that era. I aim to provide a different reading of the text and show how we can find the seeds of his argument in this early work. Although he is yet to articulate his thoughts directly using concepts like "information," *The Epitaph* reveals his deep investment in the problem of writing in a national language in a globalized corporate environment. Or it could be said that Pok was captivated with the problem of "communicating" with written Korean language in this novel. But it was after *The Epitaph*'s publication that Pok began to articulate the seed of thought found in the novel through newly popular theories of communication and information technology.[126] Peters writes that only during the lifetime of psychologist William James (1842-1910) "did communication acquire its grandeur and pathos as a concept."[127] It was little after *The Epitaph*'s publication that concepts like information, communication, and knowledge came to dominate Pok's writings.

Another central point of this chapter is that, somewhat contrary to what I have just described, Pok's idea was not completely a new one. Another aim of this chapter is to show that Pok's idea of replacing national language (or simply the written language[128]) itself with another

[126] Although South Korean technocrats had already started working on the ambitious project of informatization at least since the early 1980s, related concepts came to dominate the larger public discourse properly in the 1990s, bringing terms like "information society" and "knowledge society" into vogue.
[127] John Durham Peters, Ibid., pp.5.
[128] As Yi Yŏn-suk shows, changing the written language, for example standardizing written language, inevitably involves changing spoken language. Unlike the Western belief

one is rooted in more than a hundred years of discourse in modern East Asia. In a way, this narrative collides with my earlier argument. In the previous chapter we examined how "writing technology" became the center of critical and artistic attention in the new technological milieu of "postmodernity." Kim Hochin's short SF story "Creation Machine" features a computer that easily mass produces literary masterpieces, taking away human writers' jobs and fundamentally changing the meaning of writing and artistic creation.[129] As I have shown, such a "postmodern" imagination was related to the historical scene where "culture" (writing, literature, etc.) and technology were newly being merged, consequently changing the meaning of culture itself in postindustrial South Korea. But as Reischauer stated during his visit to Seoul in 1960, machines taking jobs away from humans is characteristic to modernity, and Kim's short story in fact is reusing a very old science fictional trope.

In fact, many modern intellectuals in East Asia had already experimented with this now strange, almost science fictional idea of radically changing national language. Some argued for radical changes in their writing systems, which in fact involved the modern invention of "national language." Some argued for converting their national languages entirely, advocating for their replacement with Western languages such as English and French. Again, as Mullaney argues, these arguments were technolinguistic and closely tied to the issues with what he calls "information technologies" such as "Linotype, Monotype, punched-card memory, text encoding, dot matrix printing, word processing, ASCII, personal computing, optical character recognition,

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(logocentrism, according to Derrida) that writing merely reflects spoken language or speech, the relationship between the two is more complicated and bilateral. Yŏn-suk Yi, *The Ideology of Kokugo: Nationalizing Language in Modern Japan*, trans. Maki Hubbard (Honolulu: University of Hawai'i Press), 2016.

[129] Yi Sŏngsu et al., SF kŏljakk'ŏlleksyŏn 1: ch'angjakkigye [SF masterpiece anthology: The creation machine], (Seoul: Sŏul ch'angjak, 1993), 12-34.

digital typography,"[130] and the typewriter. In this chapter, the *hangul* typewriter serves as a central object with which to examine the East Asian genealogy of Pok's ideas. According to Peters, contrary to Reischauer's claim above that communication was mechanized in the modern era, the very notion of communication only became "possible as a concept" because of the emergence of various modern media technologies.[131] For Pok and his East Asian intellectual predecessors such as the famous typewriter inventor Kong Pyŏng-u, the typewriter was crucial in their rethinking of written national language as a communication tool or information technology. This in fact resonates with Martin Heidegger's famous account of the typewriter as a technology that fundamentally changed the nature of writing.

Thus, the larger concern of this chapter questions yet again whether this confluence between different realms of culture and technology was truly new as Fredric Jameson argues. In this chapter I understand this merging of culture (writing, etc.) and technology from a different, if not contrary, angle within the larger history of writing technology in East Asia, as well as within the history of modernity. Consequently, this chapter follows a different understanding of modernity whose central rule is hybridity (Bruno Latour, Thomas Lamarre[132]), where practices like writing are increasingly theorized as "communication" or "information" technology, especially under the demands of capitalism. Guillory's article "The Memo and Modernity," which examines the history of writing theory in relation to the "communication" needs of modern offices and capitalist bureaucracies, provides a useful guide for this approach. Focusing

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[130] Thomas Mullaney, *The Chinese Typewriter: A History* (Cambridge, Massachusetts: MIT Press, 2017), 9.
[131] Peters, *Speaking into the Air*, 5-6.
[132] Thomas Lamarre, "Bacterial Cultures and Linguistic Colonies: Mori Rintarō's Experiments with History, Science, and Language," Positions 6, Issue 3 (1998): 620.
Bruno Latour, *We Have Never Been Modern*. Trans. Catherine Porter (Cambridge, Massachusetts: Harvard University Press, 1993)

on how the protagonist of *The Epitaph* is both a poet and a corporate bureaucrat just like Pok himself, this chapter demonstrates how the poet and SF writer conceived of the relatively young modern Korean writing system as something inadequate or defective, especially in lieu of the increasingly globalized corporate office environment of the modern era.[133] I show how such an understanding of written Korean was newly formulated in relation to the discourse of information society, while also showing how a similar idea was already preconceived in late 19th century East Asia, around the exact time when "communication" became a visible problem in Europe and the US, according to Peters.[134]

Another thread of this chapter attends to the US's Cold War politics in East Asia. Reischauer, who became the subject of strange rumors about him (i.e., stopping the nuclear bombing of Kyoto and that he actually proposed to introduce nuclear weapons to Okinawa while serving as the US Ambassador to Japan), was also famous for developing the McCune–Reischauer romanization of *hangul* (the Korean alphabet), together with the Korean scholar, George M. McCune in 1939 (Korean words including *k'ŏmyunik'eisyŏn* here are all in fact romanized following this rule). According to Peter Hyun, the "Harvard Orientalist" described *hangul* as "perhaps the most scientific system of writing in general use in any language," an idea shared by the majority of Koreans today.[135] As we will see, the history of the *hangul* typewriter is closely entangled with the US military's interest in modernizing military office environments

[133] Guillory points out that the new understanding of rhetoric's role had already arose in the late 18th century, that is, a theory of communication. "In a prescient hypothesis about the significance of this development, Wilbur Samuel Howell argues in his history of British rhetoric that the originality of Adam Smith's *Lectures on Rhetoric and Belles Lettres* consisted in his 'position that the new rhetoric must define its function as broadly communicative rather than narrowly persuasive.' At last, a theory of communication!" Guillory, "The Memo and Modernity", 119-220.
[134] Peters, *Speaking into the Air*, 10.
[135] Peter Hyun, "A Trove of Unfamiliar Art from Korea," *New York Times*. January. 4, 1981.

in South Korea and Japan, and mechanizing "communication" at large in these societies. Of course, this is a history that is part of the larger historical narrative of "modernization," as Reischauer stated in 1960.

In Search of the Epitaph: Tokyo, Shōwa 62

> They had scripts [*munja*] better than *kana*, these Chosŏn people. The script that was much more rational, and was capable of expressing more various kinds of sounds […] maybe it was better than the Roman alphabet of the West, since each letter has only one phonetic value […] But how were people with such a superior script conquered by the Japanese, whose script that could not even communicate meaning without mixing Chinese characters in, and to these Japanese lost their country, lost their history, lost their tongue and scripts, and even lost their names? Why?
>
> Hideyo thought of a magazine article he had once read. It was on the relationship between script and national power. The author, a physicist who studied in the US, argued for the active limitation on the usage of *kanji* [Chinese characters]. He contended that if there were to be a war between Japan and the US, Japan stood no chance, mostly because of their writing system. To prove his point the physicist chose the twenty most frequently used wartime vocabularies, like soldier, rifle, grenade, aircraft, and company, and compared the time spent to write these words in Japanese[136] and English. Hideyo couldn't

[136] "*Kukŏ* (national language)" in the original text.

remember the exact statistics, but there was a significant difference. And when typewriters were used, the difference grew beyond comparison.[137]

The Epitaph (1987), written during the last dictatorial government of South Korea, depicts a fictional colonial Korean peninsula still ruled by the Japanese Empire. The protagonist, Kinoshida Hideyo, is a forty-year-old corporate bureaucrat and a half-time poet born on the peninsula who has not once doubted his Japanese identity even while struggling with the everyday discrimination faced by peninsula-born Japanese subjects, or Chosŏn Japanese. But Hideyo's unquestioning belief in his national identity starts to falter once his uncle shows him a piece of classical Chinese poetry written by one of their ancestors, teaching him how to pronounce the author's name (written in Chinese characters) in Korean (*Chosŏn-ŏ*) instead of in Japanese. Hideyo, who was unaware of the existence of the Korean language and had believed that ordinary Japanese and Chosŏn Japanese still share the same bloodline, slowly discovers his true "national/ethnic (*minjok*)" identity through his journey of reading banned books on Korean history and learning the forgotten Korean script, *hangul.*

The passage cited above describes the strange moment when Hideyo learns *hangul* for the first time on his own. He does so by reverse-engineering, through translation, a book titled *The Old Chosŏn Poetry Collection* by referring to *The Dictionnaire coréen-francais*[138] he secretly copied from a university library, along with his own French-English dictionary. Here

[137] Pok Kŏ-il, *Pimyŏngŭl ch'ajasŏ: kyŏngsŏng, syouwa 62nyŏn* [In Search of the Epitaph: Tokyo, Shōwa 62] Volume 1 (Seoul: Munhakkwa Chisŏngsa, 2002), 201-202.
[138] In the original it says "*jo-bul sajŏn*" (Chosun-French dictionary) instead of *han-bul sajŏn* (Korean-French dictionary), and it is probable that Pok Kŏ-il thought of the famous *Dictionnaire Coréen-Francais* (1880), the first comprehensive modern bilingual dictionary of Korean language published by Les Missionnaires de Corée de la Société des Missions Etrangères de Paris. Yi Ŭllyŏng, "Hanbuljajŏn'gwa hyŏndae han'gugŏ munhak [*The Dictionnaire Koréen-Francais* in Modern Korean Literature and Language Studies]," *Pan'gyoŏmunyŏn'gu* Vol. 42, (April 2016): 197-229.

Pok Kŏ-il (1947~), the author, describes a strange essay written by a US-educated Japanese physicist, set in a parallel world where the atomic bombing of Hiroshima and Nagasaki never took place. In this hypothetical world where Japan and the US have peacefully co-existed throughout history (the setting that slightly altered that of *The Man in the High Castle*), the imaginary physicist argues that Japan would have no chance in a war with the US because the Japanese writing system is not efficient enough. Hideyo, upon discovering that *hangu*l is also an alphabet just like Western scripts and that it could even be used without mixing in Chinese characters, thinks it must be a "more rational" and therefore "superior" script than the Japanese *kana* syllabaries.

The association between national writing systems and the consequences of warfare is not an original idea of Pok's but an old one that is rooted in the modern history of East Asia. It is highly probable that the passage on Japanese and the typewriter refers to the ideas of Kong Pyŏng-u (1907~1995), a colonial educated ophthalmologist and a famous *hangul* typewriter inventor who was an icon of linguistic nationalism in the 1980s and 1990s, who developed the *hangul* digital keyboard and word processors. He gained great economic success by supplying his *sebŏlssik* (three set layout) typewriter to the US and South Korean militaries during the Korean War, and often claimed that Japan lost their war to the US because Japanese "script machines" lacked efficiency. "Among the western countries, the US built the highest culture in the world because they first developed the typewriter, linotype, teletype, and computer and made efficient use of their script. The reason that Americans first used the atomic bomb in Japan and

went to the moon for the first time in history is also because they developed machines that enable the most efficient usage of script before any other country did."[139]

While admitting that Japan could step up as a world power because they first "mechanized Chinese script and made efficient use of them" among the East Asian countries, he still sought the source of their success elsewhere. "Sun Yat-sen in China said Japan won the Sino-Japanese war because of *kana* script."[140] Ultimately, Kong identified the root of the "inefficiency" and even "backwardness" of East Asia in the usage of Chinese script. In contrast, for Kong, *hangul* represented a superior script and the strongest "weapon" of the Korean nation because—and most of all—being an alphabetic script, it is perfectly compatible with modern "machines (*kikye*)" like the typewriter, even more so than *kana*. It is also very easy to learn.

The *Hangul* Machine: The "Kong Pyŏng-u Typewriter" and Linguistic Nationalism

Before closely reading *The Epitaph*, I first want to focus on the figure of the typewriter, as well as the linguistic nationalism surrounding *hangul* as evidenced in the passage cited above. Although Pok's first novel does not directly address so-called information technology, the above passage condenses and highlights what was happening concerning the rapid informatization process ongoing at the time around the book's publication in 1987. Pok's later comments on information technology are closely tied with the novel's concerns regarding the future of the "national language (*kugŏ*)," especially written language.

[139] Kong Pyŏng-u, Kukka paljŏn'gwa han'gŭl [The Advancement of the Nation and Hangul]," *Narasarang* Vol.112 (September 2006): 229.
[140] Ibid., 229.

The *hangul* typewriter was never really popularized outside of places like the military or government offices. The newly printed cover of *The Epitaph* includes an image of *wŏn'goji,* squared manuscript paper invented in 19th century Japan, which had been in wide usage among writers in East Asia throughout the 20th century. The image is probably the original manuscript of the novel itself, handwritten by the author around 1987. Written in *hangul* (but also in *hanja* within parenthesis) the image documents the still alive but soon to disappear writing culture at the dawn of the digital age. In 1986, a poet and an advocate of the typewriter, Song Hyŏn wrote that the majority of Korean authors, obsessed with what he calls the "*wŏn'goji* cult,"[141] still associated handwriting with notions such as authenticity and sincerity, consequently refusing to use the convenient and "scientific" technology of the typewriter. As we have briefly seen in the previous chapter, even journalists mostly wrote their articles using *wŏn'goji* and pen until the 1980s.

But a few early adopters had already started using electric word processors or even computers during the same period. Most of all, South Korean technocrats were concerned with informatizing Korean language, which provided an excellent new social context in which Kong's argument gained popularity in the 1980s. In other words, the renewed exaltation of *hangul* as seen in *The Epitaph* was deeply entangled with the so-called "informatization" process of the 1980s and 1990s, where everyday writing practices in South Korea became digitized with remarkable speed. By the mid-1990s, writing with a computer and a *hangul* keyboard almost became a requirement for journalists, as well as for college students. During the same period, much of *hanja* disappeared from printed material, including newspapers. Pok's third SF novel

[141] "T'ajagi iyonghanŭn chakka nŭrŏna [Writers Who Use the Typewriter Are Increasing]," *Maeilgyŏngje*. October. 9, 1986.

came out only five years after the publication of *The Epitaph* was serialized online, and it was published purely in *hangul*.

For Song and other members of the famous "*hangul* mechanization movement," the *hangul* typewriter, and later the *hangul* computer keyboard, was one of the pinnacles of what "science and technology" could offer. This idea possessed particular traction especially because, as an alphabetical machine that automatically eliminated the "inefficient" script of Chinese characters from the horizon of writing, the *hangul* typewriter made communication much more effectual. According to these typewriter endorsers, *hangul* was the most "scientific" script of all, the biggest "tool" and "weapon" of the nation that would enable the advancements of science as well as culture. Kong had argued for decades that a liberated Korea could have neither "high culture" nor technoscience without the advanced technology of writing, that is, what he called the "*hangul machine*."

The word *hangul machine* here raises yet again an interesting and old theoretical question. Simply put, what exactly is technology? Whenever Kong talked about the benefits of the *hangul machine* or the *hangul* typewriter, it was not clear whether he was referring to the technology of the typewriter or the alphabetical script of *hangul*. Often, his reasoning was based on the "scientific" and "efficient" characteristics of *hangul*, rather than on the typewriter itself. In fact, he knew very well that there are none alphabetic typewriters. He even flew to New York to observe Lin Yutang's famous Chinese typewriter in the 1950s, and as a doctor and scientist who was educated under imperial Japan's educational system, Kong must had been familiar with the Japanese syllabary *kana* typewriter, as well as with the Japanese *kanji* (Chinese script)

typewriter. It is telling that Kong very often called *hangul* a tool or weapon, and one can argue that he saw *hangul* also as a technology, an efficient "machine."[142]

Such rhetoric surrounding the *hangul* typewriter is inseparable from related rhetoric surrounding the *hangul* digital keyboard and input system, such as the *hangul* word processor. And Kong arguably represents one of the most important figures to examine in order to understand the history of Korean digital writing technology development in the 1980s and 1990s.[143] Kong financially supported young programmers such as Yi Ch'anjin and Chŏng Naegwŏn, who developed *Araea Han'gŭl* (1989~), the historically famous word processing program that successfully competed against *Microsoft Word* and still does so even today.[144] The typewriter inventor and entrepreneur was these young programmers' intellectual influence and inspiration. From early on, *Araea Han'gŭl* limited the number of Chinese characters available in

[142] As Jay David Bolter and many others point out, script itself is a technology, or a *techne*. Bolter writes: "In his dialogue the *Phaedrus*, Plato calls the alphabet itself a *techne*." He also writes: "The Greek root of 'technology' is techne, and for the Greeks a techne could be an art or a craft, a set of rules, system or method of making or doing, whether of the useful arts, or of the fine arts." Jay David Bolter, *Writing Space: Computers, Hypertext, and the Remediation of Print* (Mahwah, N.J.: Lawrence Erlbaum Associates, 2001), 14. Once widely disseminated, technology often stops being seen as a technology, and moves to the realm of culture. *Wŏn'goji* itself is also of course a technology developed in 19th century Japan (*Genkō yōshi*), partially in order to make word counting easier for publishers and authors alike. Similarly, the technology of the typewriter is now often nostalgically associated with the culture of the past.

[143] *The Apple War* (1995) shows how engineering students at KAIST (Korea Advanced Institute of Science and Technology) were familiar with this figure who remained active online, until his death in 1995, promoting his "*hangul* mechanization movement." Also, within online science fiction fandoms, the mentioning of his name or his legacy can be found, fans mentioning time to time how they prefer the *sebŏlssik* (three set layout) keyboard, the key layout Kong invented in 1949 for his typewriter products, over the *tubŏlssik* (two set layout) keyboard that was designated as the industrial standard by the government.

[144] It is still designated as the standard program employed in governmental offices.

their program based on ideological reasons.[145] The very name *Araea Han'gŭl* itself presupposes that the standard writing practice of Koreans should be based on *hangul*.

But even in 1982, *Dong-A Ilbo* defined the Korean writing system as a mixed style that uses Chinese script, just like Japanese.[146] In other words, these programmers and entrepreneurs were newly defining what the everyday writing practice of Koreans should be like, in a way inheriting the project that early modern Korean literary writers started in the early 20th century. Modern Korean literature played a central role in using a *hangul*-only writing style from its beginning, although many still kept using *hanja* with parenthesis, a device that "kindly" informs readers of each Chinese character's pronunciation in *hangul* first (as seen in Pok's manuscript).

However, many books and periodicals, including newspapers, simply kept mixing *hanja* with *hangul*, alienating much of the population such as women, children, and the less educated. In fact, the writing system was not unified but was in fact dualized in postcolonial South Korea for a long time. But informatization processes radically changed it all, although my argument here is far from one of technological determinism. This process should be understood as a complicated entanglement between technology and culture. Or rather, technology itself should be understood as a *dispositif* (à la Michel Foucault) of various and diverse factors, such as culture and economics, as thinkers like Raymond Williams have shown.[147]

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[145] Kong consistently argued how even he, a highly educated person, often could not read Chinese names on a business card, for example, claiming that the continued usage of Chinese characters often hinders communication. *Araea Han'gŭl* provided very similar reasoning regarding their limitation of the number of Chinese characters available in their program.
[146] "K'ŏmp'yut'ŏ chejak sŭk'ŭrin chimyŏn sinmun che3·che4sedaero [Computer Generated Screen Newspaper: Toward the Third and the Fourth Generation]," *Dong-A Ilbo,* April.1, 1982.
[147] See Michel Foucault, "The Confession of the Flesh," *Power/Knowledge: Selected Interviews and Other Writings 1972–1977,* trans. Colin Gordon et al., ed. Gordon (New York: Pantheon Books, 1980), 194–98.

Kong became a popular figure because his stance toward *hangul* was closely associated with the linguistic, cultural, and technological nationalism characteristic of the 1980s. Later in his life, Kong fought against the dictatorial Park Chung Hee and Chun Doo-hwan governments over their decision to make other keyboard layouts the standard,[148] and he was even interrogated by the Korean Central Intelligence Agency (KCIA) for his criticism of the government's decisions. Such a personal history endowed him with the aura of an anti-regime activist, and he maintained a close relationship with anti-government leftwing nationalists who initiated the *hangul*-only writing movement in the 1980s. For instance, it was a group of leftwing journalists who founded the *hangul*-only newspaper, *The Hankyoreh*, in 1988, which produced considerable shock in the industry. According to the popular narrative, Kong was "the scientist who had a profound love for *hangul* and the nation."[149] But what is not mentioned in this narrative is that he was an incredibly wealthy entrepreneur who supplied his products to the South Korean and the US militaries.

For Kong, *hangul* should be cherished not necessarily because it is a fundamental component of national cultural heritage, but because of its objectively superior characteristics proven by "science," which include important merits like "efficiency" which he associated with the US. In fact, Kong, who was closely affiliated with the US military in the Cold War era of South Korea, always had openly endorsed the "Americanization" of "inefficient" Korean culture,

[148] In July 1969, the Park government announced that the *tubŏlssik* (two set layout) keyboard and the *nebŏlssik* (four set layout) would be the new standard "*hangul* keyoboard," instead of Kong's three set layout model that had been dominantly used in the market. In the Chun regime, the *tubŏlssik* became the standard for the computer keyboard. Kong fought against both decisions until his death in 1995.

[149] Yi Daero, "Han'gŭlgwa nararŭl kkŭmtchikhage saranghan kwahakcha, kongbyŏngu [Kong Byŏngu, the scientist who loved his country and hangul dearly]," *Narasarang* 112 (September 2006): 172-191.

including writing practices, contrary to his nationalistic, anti-American comrades and followers of the 1980s. Although he thought highly of *hangul* script itself, he was never hesitant to attack various aspects of the Korean writing system and directly contributed to its changes with his typewriter. One significant example is that, while *hangul* is a script originally intended to be written vertically just like Chinese script, Kong's typewriter was designed to produce horizontally written *hangul* documents, contrary to preceding models of the *hangul* typewriter. The ophthalmologist reasoned that vertical orthography slows down the speed of reading and fatigues human eyes, therefore condemning vertical writing as "inefficient" and not "scientific."

One might argue that his typewriter is, at least partly, a product of the new need the US had for efficient communication during the Cold War in East Asia.[150] The US military took a great interest in the development of a practical local typewriter and the related changes in everyday writing practices in South Korea, as they also did in Japan after World War II. In his autobiography, Kong writes that the US military had a heightened interest in his typewriter from its early developmental stage, visiting him often in order to check his progress. Once developed, the US and South Korean militaries became the Kong Pyŏng-u typewriter's primary customers, and it was used throughout the Korean War (1950-1953) and well after.[151] It is not surprising that it is designed to be highly compatible to the QWERTY keyboard with its horizontal writing

[150] This is a narrative that Kittlerians would prefer.

[151]The US military viewed the typewriter as a necessity of modern offices, just like chairs. Charles Donnelly, an economic advisor to the US Army Forces in Korea said that "the shortage of typewriters, stencils, and chairs is scandalous," and it was natural that the US military took intense interest in the development of a practical "Korean" typewriter, and the *hangul*-only typewriter was, of course, the much preferable choice. Sheila Miyoshi Jager, *Brothers at War: The Unending Conflict in Korea* (New York: W. W. Norton & Company, 2013)

setting, since the internal communications within the military offices along the South Korean border were often bilingual (English and Korean) during the Cold War era.

However, it would be wrong to say that Kong's linguistic ideology and invention were entirely a result of American hegemony or military needs. According to his own account, the ophthalmologist decided to invent the *hangul* typewriter when he was translating a Japanese medical textbook into Korean right after Korea's liberation. Because his *hangul* handwriting was quite hard to read, his two assistants had to go through a tedious and difficult process of unscrambling and rewriting the manuscript, and Kong decided that having a *hangul* typewriter would make things much faster and more precise.[152] The fact that he was translating a Japanese textbook into Korean here is telling. What should not be forgotten is that Kong, born in 1906, spent the majority of his youth as a colonial subject of the Japanese Empire. He was primarily educated in Japanese (he also learned a bit of German and likely also English) and learned *hangul* properly only after liberation, and it was only natural that he was significantly influenced by Japanese intellectuals and thinkers, including the prominent Japanese bacteriologist, Noguchi Hideyo (1876~1928) whom he aspired to take after. (It must be a coincidence, but it is quite interesting that the protagonist of Pok's novel is named Hideyo).[153] As Kim Tae-ho shows, Kong's lifetime motto and famous typewriter advertising line of prioritizing "efficiency and speed," were both the result of his experience of visiting the US in 1953, as well as Japan's wartime mobilization rhetoric entangled with the discourse of modernization.

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[152] Hong Yunp'yo, *Han'gŭl* [Hangul] (Seoul: Sech'angch'ulp'ansa, 2019), 104.

[153] Kim Tae-ho provides a useful account of Kong's Japanese teachers and benefactors. See Kim T'aeho, "Tokhak ŭihakpaksa"ŭi chasusŏnggagi: an'gwaŭisa kongbyŏngu(1907-1995)rŭl t'onghae salp'yŏ pon iljegangjŏmgi ŭiryogyeŭi tanmyŏn [The self-made history of an autodidact medical doctor: The ophthalmologist Kong Byŏngu and the medical world of colonial Korea]," *Ŭisahak* 45, vol. 22, no. 3, (December 2013): 785.

A telling object in Kim's account is the "English typewriter" (the Roman alphabet typewriter). When Kong attempted to earn a PhD degree by working at a science lab at the Keijō Imperial University (which later became Seoul National University) in 1932, one Japanese professor demanded that Kong donate an expensive "English typewriter" to the lab.[154] It instantiates how Japanese scientists were already using Roman alphabet typewriters at work. And it is interesting that Pok borrows none other than a fictional Japanese scientist's voice in order to describe the superiority of the alphabet and the alphabet typewriter. Another thing to remember is that even in imperial Japan where vertical orthography was dominant (it still is), scientific and mathematic books were printed horizontally like in Western texts, as these books often mixed Western languages such as English and German in the text.[155] In other words, Kong's horizontal *hangul* typewriter and his belief that horizontal orthography is more "scientific" and "effective" are likely to have originated among these "colonial" experiences.

My point here is not to repeat the false antagonism between American hegemony and Japanese hegemony (or the Western vs. Japanese, etc.). It is rather the opposite. Kong indeed shared considerably with Japanese thinkers during the early years of his life, and we cannot conceptualize their ideas separately from what was going on in the US and Europe synchronously. Simply put, Kong's technolinguistic ideas reflect the plural but global processes of modernization. As we shall see, these ideas were especially related to the rise of modern bureaucracy and the changing norms of writing systems that began between the 18th and 19th century.

[154] Ibid., 777.
[155] The oldest printed material in modern China to use horizontal orthography is in fact the magazine *Science* (1915).

The Colonial Legacy and American Hegemony: An "English Typewriter" at a Japanese Lab and Dual Colonialism.

> *"It is true that bureaucrats move faster when Westerners, especially Americans, visit them."*[156]

Somewhat similarly to Kong's popular legacy, Pok's first novel has been understood as a text that embodies a praiseworthy nationalistic consciousness. It is true that his first novel shares the literary ethos of the 1970s and 1980s, when literary works were highly politicized and critical of dictatorial military governments' inhumane push toward industrialization and oppression of real democracy.[157] As Namhee Less demonstrates, such criticism was deeply entangled with a new and strong nationalistic sentiment, combined with heated criticism of "the US empire [*mije*]" throughout the 1980s.[158] At the end of the novel, Hideyo decides to go to Shanghai to join Korean independent activists and possibly to be reborn as a poet of the Korean language, the fate that he has painfully contemplated throughout the entire book.

It has been a subject of debate for literary critics whether this novel is a criticism of actual Japanese colonialism, or if it is in fact an allegorical depiction of 1980s South Korea as a quasi-colony of the United States. *The Epitaph*'s detailed description of severe political oppression under a fictional Japanese colonial government has been widely regarded as an

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[156] Pok Kŏ-il, *The Epitaph*, Volume 1, 230.
[157] See Ryu Youngju, *Writers of the Winter Republic: Literature and Resistance in Park Chung Hee's Korea* (Hawaii: University of Hawai'i Press, 2016) As Ryu describes, South Korea's literary scene "in the dark years of the Winter Republic" established the legacy of Korean literature as the forefront of political criticism.
[158] Namhee Lee, *The Making of Minjung: Democracy and the Politics of Representation in South Korea* (Ithaca N.Y.: Cornell University Press, 2007)

allegorical reflection of political reality under the Chun Doo-hwan junta, which signaled its inauguration with the infamous civilian massacre of Gwangju city. “This historical setting with the subtitle *Tokyo, Shōwa 62* becomes most powerful in a sense that the colonial political situation ruled by the Japanese military government constantly reminds us of the political reality of today, right at here.” Writes Han Ki in the “Commentary” included in the first edition of the novel.[159] Writing on “‘the colonial character’ and ‘political oppression’ of the present reality” which powerfully resonates with the fictional setting in *The Epitaph*, the commentary strongly implies that the Japanese empire in the novel in fact stands for the US, which was widely perceived as the string-puller of the Chun regime and the enabler of the Gwangju massacre in the 1980s. The understanding of South Korea as another colony of “the US empire,” or as a victim of the “New Imperialism,” was commonly shared among university students and intellectuals at the time. Of course, as we have seen in the previous chapter, the Chun Doo-hwan administration also pushed for the expansion of the domestic electronics market and initiated the informatization process, increasing the number of middle-class households and significantly changing the techno-cultural landscape of South Korea.

Han’s reading would be the representative reading of the 1980s. On the other hand, Kim Tae-hwan later writes that the Japanese military regime in the story “clearly” signifies the dictatorial military regime of Park Chung Hee, who served in the Imperial Japanese Army under the name Takagi Masao during the colonial era and continued to transplant an oppressive colonial legacy during his presidency.[160] He dismisses Han Ki’s kind of reading as a ridiculous

[159] Han'gi, “Singminjijŏk sanghwangesŏŭi chŏngsinŭi mohŏm: riŏllijŭmgwa modŏnijŭm nŏmŏsŏgi-*pimyŏngŭl ch'ajasŏ: kyŏngsŏng, syouwa 62nyŏn*ron [An adventure of the mind under colonialism: Overcoming realism and modernism-an analysis of *In Search of the Epitaph: Tokyo, Shōwa 62*],” in *the Epitaph*, Volume 2 (Seoul: Munhakkwa Chisŏngsa, 2002), 329~352.
[160] Kim T'aehwan, “Ich'yŏjin chadŭrŭl ch'ajasŏ [In search of the forgotten]”, Ibid., 353~372.

exaggeration and a product of the past, emphasizing that the colonialism in the novel is based on the actual history of Japanese colonialism, not the rhetorical and ideological hyperbole that sees Korea as a US colony. Kim's essay is the second commentary added in the novel's new edition, and the stark political difference between the two commentaries reveals the change to the political landscape South Korea underwent since the democratization of 1987 and the collapse of the Soviet Union, ultimately and devotedly adopting the policies of globalization and neo-liberalism.

Let's go back to *The Epitaph*. At first glance, it seems Pok shares the linguistic nationalism characteristic to the 1980s, repeating Kong's argument concerning the "scientific superiority" of *hangul*. But the above passage in fact ends up advocating for the "superiority" of the Roman alphabet combined with the typewriter, and ultimately, about the superiority of the US. In fact, in the following passage, what Hideyo ends up feeling is not a sense of pride in the legacy of *hangul* as he felt at first, but "sadness and anger" toward the Chosŏn dynasty (1392-1897) because it did not or could not make good use of its script and ended up being forgotten to history: "'But what did Chosŏn people do…?' He closed his eyes. Like an island that appears and disappears behind the waves of time, the history of Chosŏn was disappearing, after acting like it is going to tell its secret. The swelling sense of joy and pride was put aside then, and mingled sadness and anger arose."[161]

Contrary to the common reception of the novel, Pok's stance toward Korean nationalism or Korean writing systems is equivocal at best in this novel. The novel's ending is depicted rather as an almost irrational decision Hideyo makes after killing a Japanese military police officer upon seeing the officer sexually harassing his own daughter. Also, various other parts

[161] Pok Kŏ-il, *The Epitaph*, Volume 1, 202.

where Hideyo considers the drawbacks of writing in Japanese language (the text calls it *kugŏ*, which means national language), either for poetry or business documents, in fact easily evokes for Korean readers the shortcomings of writing in their *kugŏ* (Korean). Most of all, we should not forget that Pok soon becomes notorious in the 1990s for arguing that all national languages other than the "global language (*kukcheŏ*)" of English, which of course includes Korean, will eventually perish. The argument can be seen throughout his essay collection *National Languages in the Age of Global Language* (*Kukcheŏ sidaeŭi minjogŏ*, 1998), but he already had experimented with the idea in his other science fiction novels such as *A Wayfarer in History* (*Yŏksa sogŭi nagŭne*, 1991) and *Under the Blue Moon* (*P'aran tal arae* , 1992). Thus, I argue that *The Epitaph* already well revealed Pok's stance toward Korean language, as well as English.

In *National Languages in the Age of Global Language,* Pok defines language as a "tool," and also a "means of information transmission" Arguing that the value of each means of information transmission is determined by the number of people who use it, Pok questions the value of each national language as compared to English. According to this poet and SF writer who has also written some of his works in English, sticking to one's national language is not a rational decision in the era of globalization where the power of English is ever increasing.[162] Let's look at another passage from *The Epitaph*:

> But Hideyo could not console himself by thinking that this is a universal problem all artists encounter. He was a poet who writes in Japanese, not in a European language. The people who understand Japanese were, at best, less than five percent of the entire world population. If a writer wants more people to read his works, he has to write either in

[162] Pok Kŏil, *Kukcheŏ sidaeŭi minjogŏ* [National Languages in the Age of Global Language] (Seoul: Munhakkwa Chisŏngsa, 1998), 165-183.

> English or French. If that is not possible, either in Russian, Spanish, or German. Then the works could be relatively easily translated and read by many. But since the West is the center of civilization now, if one writes in an Asian language whose system is completely different from European languages, he has to remain as an obscure poet in a peripheral countryside. Writing in a European language, even if it is in Greek or Italian, is still much better than writing in Chinese, the language used by a quarter of the entire population. Of course, Kawabata Yasunari or Mishima Yukio won the Nobel Prize in Literature although they wrote in Japanese. But those were novelists, so their work could be translated into English relatively easily. It was a different story for poets. It is not that Japan has many great poets, but one has been nominated for the Nobel prize.[163]

This was 1987. During the 1990s Pok made a similar argument, but this time using the widely spread discourse on information society and globalization. Explaining Metcalfe's law, which states that the effect of a telecommunications network is proportional to the square of the number of connected users of the system, Pok argued that language is a good example.

> Language shows it especially clearly. When it is used by few people, the value of a language is not that big. But as more and more people start using the language, its value increases explosively. Then it evolves to the status suitable for information transmission. Therefore, a language used by many creates a society and becomes the foundation of a civilization. (…) English has now started to enjoy the benefits of a network economy properly, and the benefits will continue to grow.[164]

[163] Pok Kŏil, *The Epitaph*, Volume 1, 102-3.
[164] Ibid., 169-170.

Korean, and other national languages other than English, is understood here as inadequate for the effective transmission of information, or of what he calls "knowledge (*chisik*)." This is because all important documents contain knowledge, printed or digital (online), and are increasingly written in English especially in the "age of information." In another essay, Pok writes: "The young people who learn Japanese instead of English because it is easier should keep this in mind. In the future if you don't know English, you become practically illiterate."[165] Seen in another light, the once powerful post-colonial influence of the old empire, which relied on the fact that many Koreans still could read Japanese, was slowly dying out.

Changing National Language?: Mori Arinori and English as Commercial Language

Aside from the minor status of Japanese (Korean) language, what especially bothers Hideyo is that his own "national language" itself is a relatively "underdeveloped" language compared to English. Again, such an idea is rooted in the larger history of modern East Asia. A famous Japanese novelist, Shiga Naoya (1883~1971), argued right after World War II that Japanese society should adopt "the best language in the world, and the most beautiful language in the world" as its new national language, which would be "French" in his opinion.[166]

Here Shiga recalls Mori Arinori (1847~1889), a politician and a founder of Japan's modern educational system from early modern Japan. Writing that Mori tried to adopt English as the national language of Japan almost sixty years ago, Shiga contested that it "would have made Japanese culture much more advanced than its current status:

[165] Ibid., 138.
[166] Shiga Naoya, "Kokugo mondai [The national language problem]," *Kaizō [Reconstruction]* 4, 94-97.

> And, I thought probably the war like this would not have happened. I even thought that our scholarship would have advanced much more easily, and school life would become more pleasant. Like our children who do not know the Chinese units of measurement, we would have not known the old national language and would speak and write English without being aware it is a foreign language. We can imagine that a lot of new Japanese vocabularies that the English dictionary does not have would have been created, and the *Man'yōshū* and the *Tale of Genji* would have been read by many more people. […] If we can reform the current national language into the perfect one that would be the most ideal, but if that is impossible then we should not be obsessed with the past, control our emotional reaction, and decide (to change the national language) for our descendants hundreds of years from now.[167]

Shiga's and Pok's ideas share a lot in common, although Pok is more concerned with the problem of technology and economics.

Mori Arinori is indeed notorious for his proposal of abolishing Japanese language, but as Yi Yŏn-suk shows, his actual suggestion was quite different from this common misunderstanding. What this early modern educator actually proposed was, first, a romanization of Japanese accompanied with the proper institutionalization of teaching methods in Japanese,[168] and secondly, adopting English as what he called the "commercial language" of Japan. Mori

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[167] Shiga Naoya, Ibid.

[168] "All the schools the Empire has had, for many centuries, have been Chinese; and, strange to state, we have had no schools or books in our own language for educational purposes. […] Schools for the Japanese language are found to be greatly needed, and yet there are neither teachers nor books for them. The only course to be taken, to secure the desired end, is to start anew, by first turning the spoken language into a properly written form, based on a pure phonetic principle." Mori Arinori. "Letter Addressed to Whitney," (1872) in *Mori Arinori zenshū* [Complete Works of Mori Arinori]. Vols. 1–3, ed. Ōkubo Toshiaki. (Tokyo: Senbundō Shoten 1972) 305–310. Quoted in Yŏn-suk Yi, *The Ideology of Kokugo*, 10.

thought, as a "commercial nation," Japan should adopt English as language of commerce "in view of our rapidly increasing intercourse with the world at large."[169] But his view was quite distant from the thoughtless worshiping of English as a superior language, which is a common misconception of his ideas.

What Mori suggested was the use of simplified English, because the versions of English that were actually being used within the British Empire or in the United States were simply too flawed. "He alluded to 'he absence of law, rule or order, based either on etymology or sound, in its orthography, and to the large number of irregular verbs,' in English, which would make it difficult 'to introduce English into Japan.' This led him to "propose to banish from the English language, for the use of the Japanese nation, all or most of the exceptions."[170] Ivan Hall writes; "The content [of Mori's letter to William Dwight Whitney] is almost a proposal to abolish English, rather than Japanese: Mori spends six out of the eight pages of the letter attacking English, not Japanese."[171]

As someone who majored in economics at the College of Commerce ("*sangdae*") at Seoul National University and had worked as a corporate bureaucrat, Pok shares Mori's simple recognition that English is the global language, especially that of commerce. But unlike Mori and rather similarly to Shiga, Pok goes further to insist upon the superiority of the English language when compared to Japanese or Korean. The passage from *The Epitaph* above appears in the scene where Hideyo struggles to edit his poetry manuscript, comparing this nighttime activity

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[169] "He even went on to say in his introduction to Education in Japan that for Japan to obtain 'the commercial power of the English-speaking race' was 'a requisite of the maintenance of our independence in the community of nations as a commercial race.'" Quoted in Yŏn-suk Yi, *The ideology of kokugo,* 11.
[170] Ivan Hall, *"Eibun shiryō ni tsuite* [About Mori's Writings in English]," in *Mori Arinori zenshū,* 94. Quoted in Yŏn-suk Yi, *The Ideology of Kokugo,* 10.
[171] Ivan Hall, Ibid., 10.

with his work at the office, where he had wrestled the entire day with business contract drafts written by an American-based multi-national corporation, the US Alum. One thing that pains Hideyo is that the written documents of the multinational corporation are always much clearer and better written. "He had heard from the lawyer Edward Silverback about the structure of the contract in detail already, but he was still very impressed when he actually read the contract, by its simple and clear structure."[172] A hardship arises when Hideyo's company in Japan and the US Alum decide to write every internal document in both languages for their joint investment project. Hideyo, who is well known to be good at English, is pushed to take the job of translating Japanese documents into English, but he struggles greatly because the original documents themselves are often so poorly written:

> *Like with other documents, it took him a long time to understand and confirm the contents of Tanaka's documents. Good enough ones were rare. Even if they seemed OK when he first read them, once he started translating them, errors became visible. There were a lot of sentences that were out of context, phases without meaning, and repetitive stories, and after Hideyo fixed them and got rid of unnecessary parts, often he realized the document was missing what executives needed to know in order to make decisions. In the end, often they rewrote the Japanese documents based on Hideyo's English translation.*[173]

These passages in fact reflect the author's own experience; Pok had extensive experience working as a corporate or governmental bureaucrat. He worked, among other places, at a bank, a smelting corporation, and a shipbuilding research institute before becoming a fulltime writer. He

[172] Pok Kŏil, *The Epitaph*, Volume 1, 51.
[173] Pok Kŏil, *The Epitaph*, Volume 2, 295.

also grew up reading a lot of English magazines and books since the publishing market in postcolonial South Korea was still underdeveloped when he was young, and one of his major tasks at work was composing business letters or documents in English.[174] To summarize, Pok's constant comparison between English and Korean is based on his experience in international or global commercial environments, and Hideyo's hardship offers a fictional reflection of that experience. Pok's experience ultimately led him to argue that South Korea will eventually have to adopt English as its official language in the globalized and informatized world, an argument that went further than Mori's vision of adopting simplified English as the commercial language of Japan.

Modern Bureaucracy, Memos, and the New Norms of Writing

It is no coincidence that Hideyo is obsessed with the issue of clarity and simplicity in writing here. If we go back to the famous typewriter inventor Kong, what frustrated him about written Korean language before the 1990s was in fact not just the continued usage of Chinese script. For him, "efficiency" in communication was everything, and whether it was Chinese characters, the practice of vertical writing, or abundant usage of rhetoric, anything that hinders such communicative efficiency was considered undesireable.[175] It is well known that he often preached about the importance of keeping writing simple.[176] Kong had a firm belief that writing

[174] Once, a Jewish banker told Pok that he writes such beautiful business letters, and the author proudly recalls that memory in his autobiographical novel.
[175] Kong often argued that the still prevalent style of vertical writing slows down the speed of reading.
[176] One famous anecdote comes from Song Hyŏn. When Song started to work at Kong Pyŏng-u Hangul Mechanization Research Institute in the late 1970s, Kong told him he could not understand a word of his pedantic writing style and offered to correct his writings with a red pen. It hurt the pride of the poet and former high school Korean teacher but ended up giving him a helpful writing lesson.

should be most of all "simple and clear," therefore easy to understand for everyone, and had long argued that the current status of written Korean does not meet that standard. [177] Not just for Kong's generation, but also for Pok's, there was a prevalent sense that the modern Korean writing system, which was born only around the late 19th century at the earliest, was not yet refined enough, whether that is the problem of langue or parole.

In fact, there was not even a Korean language dictionary when Korea was liberated in 1945. Many intellectuals shared a sense that there were still very few people who had a good command over written Korean. It is true that the majority of intellectuals were initially educated in Japanese during the colonial period and remained alienated from written Korean, especially from a *hangul*-only writing style. It is telling that Kong learned *hangul* properly only after liberation. Even in the 1956 film *Madam Freedom*, there is a scene where a literature professor teaches a group of young female typists the basic grammar and spelling system of written Korean.[178]

Pok's generation, who are also called the first "*hangul* generation," played an important role in changing such a postcolonial cultural landscape. Kim Hyŏn (1942~1990), a monumental scholar of French Literature and Korean Literature who initially gave Pok the chance to publish his works, was famous for newly inventing and refining a writing style that could better express

[177] Song Hyŏn, "Ppallippallijuŭirŭl onmomŭro silch'ŏnhan kongbyŏngu paksa irhwa: han'gŭlt'ajagi palmyŏngga kongbyŏngusik 10tae wŏlliwa ŏpchŏk [A story of Kong Byŏngu, who practiced the hurry-hurrism: The 10 principles and achievement of Kong Byŏngu, an inventor of the hangul typewriter]," *Pŭreik'ŭ Nyusŭ*, December. 6, 2008. accessed December 21, 2019, http://www.breaknews.com/92335

[178] Chŏng Myŏng-hwan (1929~), another famous scholar of French literature, once reflected that written Japanese always has been more familiar and easier for him than written Korean. For Chŏng, Kong, and many others, written Korean was more like a foreign language they learned later in their life.

critical thought in an unprecedented way.[179] Kim Pyŏngik (1938~), a journalist and literature professor, recalled that he and Kim Hyŏn could have completed their own writing style only as late as the 1980s. "People name our generation the first *hangul* generation, but we were still living in the era when Chinese characters were still widely being used as well [together with *hangul*]."[180] It would be reasonable to assume that Kong, Pok, and others were reacting to such a postcolonial situation, struggling to develop a more standardized and refined writing system of modern Korean language.[181] In such a context, one can say even literary writers like Pok (or literary critics like Kim) whose task was to refine their "national language" had a significant and even practical role. Hideyo's interesting double job as a nighttime poet and a daytime corporate bureaucrat exemplifies this. It is interesting how Fredrich Kittler writes on "the double life" of the modern "poet-bureaucrat,"[182] claiming there is a close connection between "literary life" and the nature of modern bureaucracy in the 19th century German state. If we follow Kittler's account, literary life and modern bureaucracy are indeed closely connected with one another.

Kim Hyŏn's unique prose was often praised for its clarity and beauty, but also criticized as European "Translationese (*pŏnyŏkt'u*)," too much influenced by French. In his essay titled

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[179] He is most famous for co-writing the monumental text *The History of Korean Literature* (1973) with another prominent scholar of Korean literature, Kim Yunsik (1936-2018).

[180] "Choyonghan kŏrŭmŭro, urimarŭl ilguda -munhakp'yŏngnon'ga kimbyŏngik [Cultivating Korean language with silent steps: Literary critic Kim Pyung-ik]," An interview with the National Institute of Korean Language. accessed December 21, 2019, https://news.korean.go.kr/index.jsp?control=page&part=view&idx=8658
It is interesting that the usage of Chinese characters was often seen as the legacy of the colonial period throughout the 1980s. In other words, it was seen as a "Japanese" practice, rather than as a Chinese one.

[181] Also, as we have seen in the previous chapter, very few Korean books were available when Pok's generation, or the first "*Hangul* Generation," was growing up. The market for children's books only started to explode in the late 1970s or 1980s.

[182] Friedrich A. Kittler, *Discourse Networks 1800/1900* (Stanford, CA.: Stanford University Press, 1990), 103-4.

"Translationese (*pŏnyŏkt'u*)," Pok argues that it is natural for a language to constantly evolve through the influence of other languages. He also praises the strenuous efforts of elaborating written Korean language by adopting elements from other languages, claiming that its result, "translationese," makes "information and knowledge smoothly flow."[183] Again, Pok's concern with written language (he often just says "language," but it is clear he is mostly talking about written language, or the technology of writing) centers around issues like economics and technological transfer, naturally reflecting the discourses of information and knowledge society sweeping South Korea at the time. But his various essays and novels also reveal his thinking about similar issues throughout his career as a corporate and governmental bureaucrat even before these discourses became popular in the 1990s. Pok witnessed South Korea rapidly industrialized via communication with multinational corporations and the transfer of advanced technologies. Just like the fictional Japanese corporation Hideyo works for, corporations like Samsung and LG grew fast in the 1970s by closely working with various Japanese, American, and German corporations, although such a situation led to various discussions on the "humiliating" reality of technological transfer and outsourcing, as we will see in the next chapter.

It is symptomatic that Mori proposed that Japan adopt simplified English for the sake of commerce. In "The Memo and Modernity," John Guillory offers an interesting history on the changing norms of writing in English in the context of modern bureaucracy, especially corporate ones. Focusing on the genre of the memorandum (or memo), he points out that the history of modern bureaucratic writing has been studied in the field of business studies. For instance, the business historian JoAnne Yates suggests that unlike business letters whose early modern style was still "ornate and flowery" and composed by the scribes who were educated in classical

[183] Pok, *National Languages in the Age of Global Language*,124-125.

rhetoric, the newly rising genre of internal memorandums circulated within modern corporate environments were "composed by deliberately 'eliminating the polite but wordy conventions of the letter-writing tradition.'"[184] A new norm of writing arose in such a context of business writing, and criteria such as "brevity" and "conciseness" became more important than ever, suppressing other important rhetorical values such as *copia*, "the capacity for elegant variation and elaboration of a given theme."[185]

According to Guillory, the first book to provide such a new "deductive theory of composition" was *Philosophy of Style* (1871) by Herbert Spencer, who was also trained as an engineer. In this book, Spencer makes the novel suggestion for "brevity" as the single-most ideal norm of writing. And it was 1872 when Mori Arinori shared his idea of utilizing simplified English as a language of commerce with the American linguist William Dwight Whitney, which was just a year after the publication of Spencer's book. The two contemporaries, one British and the other a Japanese diplomat residing in the US, were dealing with similar challenges and belonged to the same discursive space, sharing the new modern notion that writing and writing systems should be evolved into simpler and more concise forms. As Guillory notes, Spencer interestingly claims that poetry is more "economical" than prose is, in the sense that it more strongly demands the reader's attention. As Guillory points out, Spencer's argument confuses compression with brevity, but it would be interesting to think about Hideyo and Pok's double lives as both poets and corporate bureaucrats, as well as Kittler's observation above, in such a context.

[184] Guillory, "The Memo and Modernity," 115-116.
[185] Ibid.,123.

Seen in this light, the more than century-old attack on Chinese scripts (*kanji* and *hanja*) in Japan and Korea is not just a result of the unilateral linguistic imperialism of the West since the 19th century. It should be also understood as part of the global demise of traditional writing styles and rhetorical arts ("the final collapse of the rhetorical empire," to borrow from Guillory's observation in the case of English), which was increasingly deemed as something invalid or "inefficient" (to borrow from Kong's favorite expression) in the context of the modern office environment, both governmental and corporate.[186] Since the mid to late 19th century, "brevity and clarity came to dominate composition theory in modernity." Kong's emphasis on a clear and simple writing style as well as his attempts to eliminate Chinese script were closely related together in this sense.

Conclusion: Pok's Libertarian Vision and Political Realism

But what does this all have to do with science fiction? Soon after the successful publication of *The Epitaph*, Pok actively published various novels, including an online SF novel, *Under the Blue Moon* (1992). In this novel, he depicts a North Korean protagonist who encounters unfamiliar South Korean and American culture during her stay at a lunar base, ultimately accepting the capitalist future of humanity united by the global language of English. Pok also actively started to work as a "libertarian" essayist (according to his own expression), serializing essays in various periodicals or adding an introduction to books such as *The 21st Century*

[186] Another interesting point Guillory makes is that vernacularization is deeply entangled with rhetoric's demise. Although he is concerned only with the cases of English or European languages, we could look at the process of vernacularization in modern East Asia from a similar angle.

Prediction (1994), a translation of *The Economist*'s September 1993 special supplement, *The Future Surveyed*.

Since early on, these essays reveal the SF writer's particular interests in economic theories as well as technology and science. Already between 1988 and 1989, Pok was using expressions such as "feedback of information," writing that rapidly developing "communication and information processing technologies" were bringing a renewed desire for democracy, not just in South Korea, but also in communist countries such as China.[187] Pok, a current member of the Korea Hayek Society (founded in October 1999)[188], also often cited monetarist, neoliberal economists such as Milton Friedman. One history to ponder upon here is the radical restructuring of economic policy orientation initiated by figures like Kim Jae-ik, the monetarist technocrat we examined in the previous chapter.[189] As we have seen, Kim propelled the state project of informatization with his vision to make South Korea a "financial hub" of East Asia, driving out the older generation of Keynesian bureaucrats educated in Japan during the colonial period with a new generation of technocrats educated in the US (this provides yet another resonance with *The Epitaph*'s depiction of relations between two empires, Japan and the US). Chi Chuhyŏng understands Kim as a crucial figure in comprehending the formation of neoliberalism in Korea (although he died as early as 1983), and the US-educated economist also actively introduced the intellectual fathers of neoliberalism; Kim persuaded publishers to translate Ludwig von Mises's and Friedrich Hayek's works into Korean around the early 1980s, and even directly distributed

[187] Pok Kŏil, "The Supply-demand Balance of Democratization" in *Hyŏnsilgwa chihyang-han chayujuŭijaŭi sigak* [Reality and orientation: A libertarian view] (Seoul: Munhakkwa Chisŏngsa, 1990), 254-287.
[188] This libertarian organization is named after the Austrian-British economist Friedrich Hayek, who is often referred as a father of neoliberal thinking.
[189] Chi Chuhyŏng, *Han'guk sinjayujuŭiŭi kiwŏn'gwa hyŏngsŏng* [The origin and the formation of neoliberalism in South Korea] (Seoul: Ch'aeksesang, 2011), 112-113.

Hayek's *The Anti-Capitalistic Mentality* to "journalists, bureaucrats, and scholars."[190] In a way, Pok also shared Kim's ambitious vision, although his vision of building an ultimate information superhighway went further by claiming a desire to standardize the written language of all humanity in the age of globalization.

In many of his essays, Pok finds SF's value as something practical, that is, the prediction of the future. His understanding of the vision that SF can offer is simultaneously banal and new, realistic and science fictional. In the Korean introduction to *The Economist* supplement above, Pok summarizes the essays while also criticizing the editorial's inattentiveness to the issue of technology and science. The essays included in this special supplement[191] predict the near demise of the nation-state and nationalism, and the increasing importance of supranational organization and globalization. To borrow from Antonio Negri and Michael Hardt, these phenomena were all signaling toward the consolidation of "Empire."[192] These futures are in fact very similar to what Pok depicts in *Under the Blue Moon*, but Pok writes that the essays are mostly dealing with the very near future, and are therefore rather "plain" and, in a way, have no real predictive value in them. According to him, reading SF can supplement such shortcomings as well as the missing discussions on science and technology:

> Still, it is a shame that we could not properly see the 22nd century [in this special volume)] […] The best way to see the future properly would be by reading SF. In fact, the best experts of the far future are SF writers, not the experts of a field or futurists. The

[190] Ibid., 117.
[191] All written by American or British authors except for two, according to Pok's criticism.
[192] According to Hardt and Negri, *Empire*'s basic working principals were already consolidated in the 1960s ("the Golden Age of the New Deal reform of capitalism on the world stage") and completed along with the collapse of the Soviet Union, a few years after the publication of *The Epitaph* and the year before these essays were published. Michael Hardt and Antonio Negri, *Empire* (Cambridge, Mass.: Harvard University Press, 2000), 244.

> ones who depicted the 20th century closest to reality were the SF writers such as Jules Verne or H.G. Wells. On the other hand, the majority of prominent scholars predicted that science and technology would not evolve further than in their 19th century forms.
>
> The reason that SF writers provide a concrete prediction of the future would be because they can be bolder than others. Compared to the 22nd century that SF writers have described, even the portrayals of the 22nd century described by the most daring contributors of this volume, Lee Kuan Yew and C. Fred Bergsten, are too plain and too similar to the present.
>
> So, reading this volume with SF works that describe the future that is not so far from now would be very helpful to imagine the structure of future society and the life of the people living in it. I can easily think of Harlan Ellison's *Dangerous Visions* and Arthur C. Clarke's *Imperial Earth*.[193]

Is Pok's own portrayal of "spaceship" Earth, where all the national languages perish under the hegemony of English, radical rather than "plain"? In a way this is a question difficult to answer. On the one hand, his argument in *Under the Blue Moon* is not really distinguishable from the ones included in *The Economist* special supplement, all of which were in fact reproducing trendy discourses of globalization. On the other hand, his argument of gradually replacing the national language of Korea in preparation of such a future was severely attacked by his opponents as an unrealistic daydream, and Pok argued that such a heated reaction only proved the radical quality of his ideas.

[193] Pok Kŏil, "Introduction-the Portrayal of the Near Future" in *21segi miraeyech'ŭk* [the 21st Century Prediction] (Seoul: Nexus, 1994), 272-273.

One clear fact is that Pok and his nationalistic opponents share a lot of things in common in the sense that they in fact all believe in artificial changes of language. What I would like to conjure here is the prominent linguist Ch'oe Hyŏnbae's ambitious project of eliminating Chinese script entirely from written Korean after liberation. Although his dream is now realized and has become an everyday fact of life for South Koreans, most intellectuals, even literary writers like Yi T'aejun who already were writing novels in pure *hangul* style, argued that such reformation is impossible since Koreans need *hanja* also in order to properly communicate with each other. But Ch'oe's attempt at "purifying" written Korean language ultimately succeeded in the long run, and his successors of the 1980s and 1990s nearly finalized it. As we have examined above, even in 1982 *Dong-A Ilbo* defined the Korean writing system as a mixture style that uses Chinese script just like Japanese. Remarkably, such a description stopped being true at least by the end of the 1990s. In other words, unlike China and Japan who kept their Chinese script in the midst of another "crisis" (Mullaney) posed by the new information technology of the microcomputer or the PC, South Korea almost entirely got rid of *hanja* during the same period from their books and periodicals. Along with the rapid dissemination of the *hangul* keyboard and the PC, *wŏn'goji* with *hanja* on it rapidly disappeared from the desks of myriad journalists, writers, and students. Although such a process has been described as regaining and restoring the pure essence of Korean language and culture, it in fact involved numerous artificial changes creating yet another linguistic hybridity, especially by increasing compatibility with English. But the nationalist narrative which praises Ch'oe's nationalist spirit erases the fact that the famous "*hangul* scholar"

worked closely with the US military for his ambitious project of reforming the national language of Korea, similarly to his friend and comrade Kong.[194]

In fact, the modern project of cultivating a pure "national language" is a science fictional dream, just like Pok's dream of substituting one national language with another. Writing on Mori Ōgai/Mori Rintarō's (and Bruno Latour's) alternative understanding of modernity's central rule as hybridization, Thomas Lamarre describes the modern dream of creating a "pure" national language and culture as "often dramatized in science fiction."[195] In a way, the technocrats of the 1980s and 1990s South Korea inherited that 100 year old dream, radically changing written Korean, while writers and ordinary people were not even aware of such a process.

[194] For a useful challenge to the standard understanding of Ch'oe Hyŏnbae as a nationalist or national hero who fought against the oppressive linguistic policies of the Japanese colonial government, see Kim Chul, "Kaengsaengŭi to hogŭn miro: ch'oehyŏnbaeŭi 'chosŏnminjokkaengsaengŭi to'rŭl chungsimŭro [The way to, or labyrinth of, rebirth: Focusing on Choi Hyun Bae`s *The Way to Rebirth of The "Chosun" Nation*] " *Minjongmunhaksayŏn'gu* 28, (August 2005): 306-351.

[195] Thomas Lamarre, "Bacterial Cultures and Linguistic Colonies: Mori Rintarō's Experiments with History, Science, and Language," *Positions* 6, Issue 3 (1998): 620. Lamarre connects the creation of national language with imperialism, mentioning Japan's policy of producing Japanese cultures in Korea and Taiwan. With "the establishment of Japanese education and standardized language," the empire aimed to cultivate pure Japanese culture in these colonies. Interestingly, when he was contemplating the almost impossible-seeming task of changing the national language entirely from Japanese to French, Shiga Naoya reasoned that although he cannot provide detailed blueprints, it was possible in *Chosŏn* Korea during the colonial period.

CHAPTER 3

The Interface of *Hangul* and Technological Nationalism

This chapter is about two different kinds of "writing" that young South Korean technocrats practiced during the 1980s and 1990s. In *The Practice of Everyday Life* (1984), Michel de Certeau understands "writing" as a central practice of technocrats in "a cybernetic society."[196] He writes: "Writing becomes a principle of the social hierarchization that formerly privileged the middle class and now privileges the technocrat. It functions as the law of an educational system organized by the dominant class, which can make language (whether rhetorical or mathematical) its instrument of production."[197] In this chapter, I first examine the historical background that led young programmers and engineers to focus on the "national" task of developing digital *hangul* code technology by none other than *writing* codes. Secondly, I read two novels written by young STEM major students, which were written in the 1990s using that very *hangul* character input system such as the *hangul* word processor. In Chapter 1 I appropriate and redefine the term "techno-fiction" to designate the new historical phase where previously autonomous realms of culture and technology merge together. In this chapter the term refers to fiction written by technocrats, which is closely connected with the above definition of the term. Many STEM major students started to share their self-narrative online at least since the late 1980s, making use of the *hangul* information technology such as *Areae Hangul* or *Hanme Typing Teacher* developed by their generation.

[196] Michel de Certeau, *The Practice of Everyday Life*, (Berkeley, California: University of California Press, 1984), 136.
[197] Ibid., 139.

Although this chapter focuses on technocrats and their *writing*, it simultaneously refers to the process whereby writing becomes a much more common practice that strengthens the imaginative community of South Korea, namely, the larger historical process of informatization entangled with what I call "hangulization" of written Korean language at least since 1945. The relatively elite script of Chinese characters that belonged to the older generation of educated men had mostly disappeared by the late 1990s, and I argue that this disappearance was deeply connected to informatization in both a narrow sense and also a broad sense; the hangulization process was not only related to newer technologies like the PC and computer keyboard, but was initially related to earlier information technologies such as the typewriter and the telegraph that the US military sought to develop and disseminate during the communications environment of the Cold War era. This chapter demonstrates how the so-called "*Hangul* Generation" was the product of this earlier history, I also argue that this generation became a crucial part of the emergence of information technology since the 1980s. As we will see, the South Korean government literally defined information as a product of the human "brain" in 1983, viewing *humans* as a crucial component of the information industry they sought to foster. In this case, these humans and their brains were connected to the information machines via the interface of *hangul,* the technology that the above young technocrats tried to develop.[198] In fact, the state-led project of informatization was deeply entangled with the development of human resources in preparation for the near-approaching third industrial revolution.

[198] Wendy Hui Kyung Chun describes how interactive interfaces, especially the graphic user interface (GUI), had stemmed from military projects in order to connect humans to the computers that were fundamentally incomprehensible. Wendy Hui Kyong Chun, *Programmed Visions: Software and Memory. Software Studies* (Cambridge, Mass.: MIT Press, 2011). Here I argue that *hangul* was the interface that enabled Koreans to grasp and use the incomprehensible technology of the PC, which was initially understood as "American" technology.

The central concern of this chapter endeavours to understand the issue of human cultural techniques, such as reading and writing, as a crucial aspect of technology, and examinines how highly educated technocrats, as well as ordinary citizens, were mobilized in the project of informatization, not only by the state but also by capitalism. As Gilles Deleuze and Félix Guattari write: "Knowledge, information, and specialized education are just as much parts of capital ('knowledge capital') as is the most elementary labor of the worker." [199] If the *Hangul* Generation became the users and consumers of the PC and the *hangul* interface, highly skilled "brains" became laborers, albeit the distinction between the two increasingly became blurred as South Korea's industrial structure rapidly transformed when terms like "knowledge workers" came to be widespread.[200] In this historical scene, the mechanism that enabled a connection between humans and machines was a form of technological nationalism that widely spread during this period, another "interface" that was mobilized in South Korea to grasp and navigate the "inner networks of global communication and information."[201] Here I am relying on Alexander R. Galloway's comparison between *interface* and ideology, as both are an "imaginary relationship to real conditions."[202] Wendy Hui Kyung Chun goes a bit further to compare

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[199] Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia.* Trans. Robert Hurley, Mark Seem, and Helen R. Lane. (Minneapolis, University of Minnesota Press, 2008), 234.

[200] What is seemingly ironic about this scene is that this state-led project of informatization, which was in a way still an extension of the state-led industrialization of the 1960s and 1970s, was deeply entangled with neo-liberalization in South Korea and globalization, as we discussed in Chapter 1. Deleuze and Guattari continue to write: "[t]he apparatus of antiproduction," that is, the State, "is no longer a transcendent instance that opposes production, limits it, or checks it; on the contrary, it insinuates itself everywhere in the productive machine and becomes firmly wedded to it in order to regulate its productivity and realize surplus value—which explains, for example, the difference between the despotic bureaucracy and the capitalist bureaucracy." Ibid., 235.

[201] Fredric Jameson, *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions* (New York: Verso, 2005), 387.

[202] See footnote 3.

computer interfaces with what Fredric Jameson calls "cognitive mapping," which enables the grasping of the incredibly complex and humanly incomprehensible reality of late capitalism. Chun admits that a computer interface could work rather like an ideology in the sense that it is a "false consciousness/map" in the era of "global capitalism/neoliberalism," but she also implies an interface doesn't have to be necessarily false and misleading.[203] I argue that both the *hangul* computer interface and technological nationalism were the "interfaces" that enabled the grasping of "the networks of global communication and information," and, ultimately, of "global capitalism and neoliberalism" during this period.[204]

The two examples of "techno-fiction" I examine at the end of this chapter center on the problem of human resources and technological nationalism. *Login* (1996) and *Apple War* (1996), each written by STEM major undergraduate and graduate students and centered around the best research institutions in the country, both depict hacker protagonists and leftist engineering students who try to steal technology from American or Japanese corporations for the sake of the nation. In the case of *Login*, it was advertised as a *kwahak sosŏl* (science novel) by *Creation and Criticism*, the prestigious literary journal I previously examined in Chapter 1. Although *kwahak sosŏl* has been used as a Korean translation of the English term "science fiction," especially by SF fans, here the word is appropriated to signify something else. According to the journal, true *kwahak sosŏl* is different from the American genre of *kongsang kwahak sosŏl*, another widely used translation of SF that literally (and somewhat contemptuously) translates as daydream

[203] She writes: "Whether or not interfaces are really the cognitive maps Jameson envisioned, however, is not the point here, for I do not simply want to condemn interfaces as false consciousness/false maps, but rather to understand how the once radical demand for cognitive mapping has become incorporated into the system of global capitalism/neoliberalism." Wendy Hui Kyong Chun, Ibid., 74.
[204] Ibid., 74.

science fiction literature. This claim is also closely related to the 1989 debate between Paik Nak-ch'ŏng and Frederic Jameson I explored in Chapter 1. Inexplicitly criticizing Jameson's high opinion of SF (especially cyberpunk), *Creation and Criticism* claimed that true *kwahak sosŏl* is based on a more holistic understanding of technoscience, as something conditioned by the political economy of society. In that sense, *kwahak* here also means the specifically Marxist notion of "science." The journal also asserted that *kwahak sosŏl* should be a text of realism and strictly rooted in national reality, a "national literature."

On the other hand, Jameson writes that cognitive mapping is not "a call for a return to some older kind of machinery, some older and more transparent national space, or some more traditional and reassuring perspectival or mimetic enclave."[205] Thus, *Login* reveals how the "machinery" of national literature, as well as the ideology of nationalism, can no longer function as a proper cognitive map/interface, especially because the figure of disinterested *chisigin* (intellectuals, or educated people in general) can no longer exist in post-industrial society. In *Login*, young engineers debate over the true meaning of the word "knowledge workers," realizing they too are becoming cogs in the machine just like ordinary manual laborers. Although the 26-year-old author, Kim Dohyŏn, wrote these debates to appear as a criticism of capitalism at large, there was a more specific historical context to it; along with the rapid informatization of the South Korean economy there were various theoretical attempts to redefine human labor (*nodong*). Manual laborers were once at the center of South Korean labor movement politics, and as their numbers significantly decreased, the very definition of "manual/bodily labor" had to be rethought. Marxist economists, including Kim Hyŏng-ki, argued that certain types of white-

[205] Fredric Jameson, *Postmodernism, or the Cultural Logic of Late Capitalism* (Durham, N.C.: Duke University Press, 1991), 54.

collar workers should be newly categorized as "laborers in a broad sense" in the new economy, while Marxist sociologist Sŏ Kwan-mo and others criticized this modified view, arguing that the highly educated "knowledge proletarians" were petite-bourgeoisie, not laborers. Kim and others countered that in the new historic context of a "micro-electronic," "science-technological revolution," the traditional definition of the labour class should be significantly modified, reflecting social changes in South Korea at a time when both the number and ratio of white-collar workers had dramatically increased. To put it differently, *writing* became increasingly less special in this new society where almost anybody could read and write, enabled by the PC via the *hangul* interface. To understand Sŏ Kwan-mo's strong resistance toward the re-theorization of intellectuals as laborers, it is important to note that the figure of *chisigin* had long been highly privileged in colonial and postcolonial Korea, often understood as a disinterested and "nonmaterial" figure who served the national or higher social causes and was harshly criticized when they refused to do so.[206] This was in a way only possible because the educated middle class was still very thin; even the corporate bureaucrat in Pok Kŏil's *In Search of an Epitaph* (1987) is called *chisigin* by a prosecutor in the novel, and feels a strong sympathy and pity for the poor he sees on the streets; a feeling that is based on not just nationalism but also a sense of profound superiority. Conversely, *Login* is full of anxiety over the fact that such a gaze, a central mechanism of the *machinery* called "national literature," is not possible anymore in post-industrial South Korea, while the novel closely depicts the last remnants of Marxist student activism of the 1980s.[207] However, *Login* still resorts back to the ideology of nationalism to cater

[206] See, for instance, Yi Yŏnghŭi, "Kwahakkisurhyŏngmyŏng'kwa hwait'ŭk'alla nodongja [Technoscientific revolution and white-collar laborers]," *Ch'angjakkwa pip'yŏng* Volume 18, no
[207] For the debates on the problematic relationship between *chisigin* and labor movements, see: Namhee Lee, *The Making of Minjung: Democracy and the Politics of Representation in South Korea* (Ithaca, N.Y.: Cornell University Press, 2007).

to *Creation and Criticism*'s political stance and cultural taste, which positions the text as noticeably unrealistic and unhinged. On the other hand, *Apple War*, which was categorized as a popular novel, reveals a much more complicated approach to the issue of nationalism, revealing how both the state and agents of capitalism have exploited young brains by mobilizing this tempting ideology.

As I have already described, science fiction has been often translated as *kwahak sosŏl*, which literally means science novel or short literary fiction. In North America, there has also been considerable discussion concerning the critical marginalization of SF works other than literature, and in this case the translation itself limits the other media possibilities of the genre.[208] Similar to the case in North America, for a long while in South Korean SF fandoms, there have been strong assertions that true SF means SF literature exclusively. In line with this assertion, the above two novels written by young STEM major students represent the remnants of the era when "Literature" was the most culturally powerful and hegemonic media. But as these two examples of techno-fiction demonstrate, the media landscape of South Korea was already rapidly changing; the characters in *Apple War* express their views not just by writing science fiction literature online (one of them dreams of becoming the Issac Asimov of Korea), but also by creating computer games, or by writing miscellaneous things online just like other people do. The anxiety of literary critics in the face of the PC and of online culture that I examined in Chapter 1 was a reaction to this social change where the meanings of "fiction" as well as of "writing" were increasingly transforming. In a way, in the history of *hangul* informatization that

[208] For instance, see: John Rieder, "Spectacle, Technology, and Colonialism in SF Cinema: The Case of Wim Wender's *Until the End of the World*," in *Red Planets: Marxism and Science Fiction. Marxism and Culture,* ed. Mark Bould and China Miéville (Middletown, Connecticut: Wesleyan University Press, 2009), 66-82. Also see: Carl Freedman "Kubrick's *2001* and the Possibility of a Science-Fiction Cinema." *Science-Fiction Studies* 25 (no. 2, 1998): 300–318.

I will examine below, a substantive literary circle was either entirely marginalized or simply non-existent in the crucial discussions concerning the future of Korean written language that were significantly transforming the linguistic life and writing practices of contemporary South Koreans. The belated response by critics to the PC technology that emerged in the early 1990s reveals that their marginalization from the heated discussions on *hangul* informatization started at least in the early 1980s. And as the term *hangul* came to refer to the name of a famous word processor, the social signification of Korean literature and the once privileged act of writing also changed.

It should be noted that the project of *hangul* informatization, with its nationalistic dreams and aspirations, still shared considerably with the machinery of national literature. While Thomas Mullaney contrasts Chinese authors such as Lu Xun and Chen Duxiu with technocrats ("engineers, linguists, entrepreneurs") who are "developers of the modern Chinese information infrastructure" in regard to their different ideas on Chinese linguistic modernity,[209] I would argue that literary circles such as *Creation and Criticism* and the technocrats of the 1980s and 1990s in South Korea overlapped considerably in their association with nationalism. But again, as we will see with *Apple War*, such a seeming commonality can be deceptive and there are many complicated layers. When asked about his role contributing to "the computer industry of the mother nation," a North Korean-born Silicon Valley entrepreneur Philip K. Hwang, who was keenly invested in the development of a *hangul* interface, answered: "To be frank, I might not keep a branch in Korea if there were countries with less labor costs and more tax benefits. Would

[209] Thomas Mullaney, *The Chinese Typewriter: A History* (Cambridge, Massachusetts: MIT Press, 2017), 13-15.

it sound too selfish if I say I opened a branch in Korea because I personally do not experience a cultural barrier here and can work more comfortably?"[210]

[210] Kim Duhŭi, "P'ittamŭi tojŏnŭro segye chŏngsange: sillik'on paelliŭi k'ŏmp'yut'ŏ chaebŏl hwanggyubin paksa [Becoming the top of the world after toil and moil: The computer mogul of the Silicon Valley Hwang Kyubin]," *Science Dong-A*, June 1986, 54-57.

Information Technology, Office Automation, and the Problems of *Hangul* Digitalization

Figure 1. A 1983 advertisement for Samsung Personal Computer

(*Microsoftware*, Dec, 1983)

In 2016, the South Korean Prime Minister Hwang Kyoan reflected that *hangul* "has been the foundation of the country as an IT powerhouse."[211] Claiming that the almost 500 year old script of *hangul* was "well suited for the age of information," the Prime Minister emphasized that the "glorious national culture" has prospered based on this "ingenious and scientific" national script. In one sense, the Prime Minster was right. In 1986, Kim Tuhŭi, the former editor-in-chief and the current CEO of *Science Dong-A,* wrote that the function of word processing would make

[211] "Hwang Ch'ongni, "Han'gŭrŭn munhwayungsŏng sirhyŏn kiban·ptkangguk t'odae [Prime Minister Hwang '*Hangul* is the foundation of cultural prosperity and Korea as an IT powerhouse,']," *Maeil Business Newspaper*, October 19, 2016.

"the nation" feel less alienated from the PC, enabling the public to much more easily accept (and of course, buy) this unfamiliar new technology.[212] More accurately, what Kim meant was "*hangul*" word processing software and ultimately the *hangul* interface at large, the very technology that numerous programmers and corporations struggled and competed to develop throughout the above period. However, contrary to the Prime Minister's above claim, *hangul* posed a lot of complicated challenges due to its inherent characteristics and differences from the Roman alphabet. Philip K. Hwang, the aforementioned North Korean-born founder of the Silicon Valley computer terminal company, TeleVideo Corporation, commented in 1986 that the great challenge for the computer industry in South Korea was none other than "*hangul* processing." Hwang observed: "Even if Koreans know English very well, without *hangul* processing [technology] market expansion cannot be successful."[213] In fact, both the industry and the South Korean government paid careful attention to and occupied central roles in the development of the *hangul* character code system in order to "informatize" the nation.

The above image (Fig. 1) condenses such a historical scene. It is from a Samsung PC advertisement included in the second issue of *Microsoftware* (December 1983), one of the computer magazines simultaneously founded in 1983. If the first issue concentrated on explaining what a personal computer was to its curious readers, the writers of this second issue focused on the problem of *hangul* informatization and the development of a marketable *hangul* interface. And unlike the 1982 *Dong-A Ilbo* article in Chapter 2 that defined the writing system of Korea as a mixed style of *hangul* and Chinse scripts, the magazine article here begins with the assumption that the Korean PC interface is a *hangul* interface.

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[212] Kim Tuhŭi, "P'ŏsŭnŏl k'ŏmp'yut'ŏŭi sŏnt'aekkwa hwaryong [The choice and usage of the personal computer]," *Science Dong-A*, February 1987, 197-199.
[213] Kim Duhŭi, Ibid., 54-57.

Samsung's advertisements included in the first two *Microsoftware* issues acutely reflect the changes in the editorial board's interests. For the first issue of *Microsoftware*, Samsung advertised their first PC product, SPC-1000, by emphasizing that it was a "Korean product" developed after years of technical cooperation with Hewlett-Packard.[214] The advertisement describes how users can employ "various characters, numbers, and symbols" on its monitor that displays 32 columns and 16 rows. The advertisement image itself depicts a monitor with a graph with numbers and a white QWERTY keyboard with no *hangul* letters printed on it. It also claims that the product can display 64 ASCII (American Standard Code for Information Interchange) standard characters and 128 extra characters designated by a user. But there is no single mention of *hangul*.

On the other hand, the new Samsung SPC-1000 advertisement included in the next issue of *Microsoftware* reveals a new marketing focus. It enumerates five technological revolutions that the Samsung *p'ŏsŭk'om* (personal computer) has achieved, the first of which is the capacity to process *hangul*. According to the advertisement, SPC-1000 features a "perfectly assembled orthography (*moassŭgi),*" "various forms of *hangul* printing" function, and asserts that it can "fix the *hangul* problem (*han'gŭl haegyŏl*)" with its special software.[215] According to the magazine editorial, the second issue "put considerable emphasis on the problem that our *hangul* script

[214] It also mentiones that it has 32KB ROM and 70KB RAM and explains that it can be used in households for data processing and document archiving.

[215] Because the PC was initially designed to display Roman alphabets only, Korean users had to deal with the issue using two methods. They either bought a separate hardware "*hangul* card" and connected it to their computer or used special software that enabled *hangul* usage. Because the latter method consumed a lot of memory, users often bought *hangul* cards. In this advertisement, Samsung is emphasizing that users no longer have to buy separate hardware in order to display *hangul* on their PC. For more information on hardware and software and *hangul* cards, see for example: "(1) han'gŭlk'adŭ-tokkaebiga molgo on han'gŭl yŏlp'ung [(1) *Hangul* card: *Hangul* fever *Tokkaebi* generated]", *Science Dong-A*, December 1992, 139-145.

raises for the computer. The computer will remain a difficult, hard to handle object if we cannot freely process *hangul* on it." This issue includes long articles such as "Designing the *Hangul* Word Processor" and "How to Use *Hangul* on the Microcomputer I."

As I elaborated in the previous chapter, the *hangul* typewriter inventor Kong Pyŏngu and many others argued that *hangul*, being an alphabetic script, is perfectly compatible with writing technologies such as the typewriter and the PC. The Prime Minister's above claim provides another example of this belief. In reality, however, and in contrast to Kong's argument, the non-Western alphabet of *hangul* posed various technological difficulties whenever new information technology appeared. After all, Kong's own contribution was to provide a solution to the kind of problem that the typewriter had raised. Thomas Mullaney argues that the technology of the keyboard typewriter (he emphasizes in fact that there have been multiple models of the typewriter other than the keyboard type) and various other information technologies have posed a constant "crisis" for Chinese script in "a modern age of global information." This is why he calls various information technologies "alphacentric technologies."[216] Although it was not an entirely similar process, South Korean technocrats also struggled for a long time to enable the usage of *hangul* on the computer. Chŏng Ch'ŏl, who later founded a *hangul* font design company, Human Computer,[217] wrote in the second issue of *Microsoftware* that the problem

[216] This is why he calls these various information technologies "alphacentric technologies." He writes: "Just as engineers in China and elsewhere reconciled Chinese script with one or another of these technologies, moreover, the invention and circulation of a new alphacentric technology rebooted the struggle, again placing Chinese script at risk of being denied entry to and participation in the "next big thing" as it further transformed the worlds of economics, politics, warfare, statecraft, science, and more." Thomas Mullaney, *The Chinese Typewriter: A History* (Cambridge, Massachusetts: MIT Press, 2017), 10.

[217] After his years at KAIST (Korea Advanced Institute of Science and Technology), Chŏng briefly worked at the TriGem Computer (*Sambo K'ŏmp'yut'ŏ*) and founded Human Computer. Human Computer developed various *hangul* fonts for word processing software.

arises because the technology of the PC originated in the US.[218] Another *Microsoftware* essay exemplifies the challenges that programmers and engineers faced with *hangul* digitization. Here, Pae Myŏngjin, an electronic engineering PhD student studying speech synthesis theory at Seoul National University at the time, explains his own method of enabling *hangul* usage on the PC:

> The keyboard is designed to generate the Roman alphabet [in the original text it is *yŏngŏ* (English)] uppercase letters for ASCII, but I made it possible to use *hangul* and the lowercase Roman alphabet. If the user presses ALT (or ESC), the screen shows it is in "Control Mode." If the user presses Q, English lowercase letters can be inputted, pressing A, *hangul* codes, and pressing Z, English uppercase letters. The screen shows the current mode (whether it is *hangul*, English lowercase, or uppercase mode). With the difference between ASCII codes for English uppercase letters and lowercase letters, only the sixth bit is different, it is easy to do code switching. But with *hangul* the keyboard arrangement itself is different, so I used the conversion table in Figure 5.[219]

One thing to note here is that in Pae's and others' accounts, the Roman alphabet letters are simply called "English letters." The above account also shows how "the keyboard" for the PC and "*hangul* keyboard" used to be separate objects in 1983, and how "the keyboard" was not originally designed for users who use Korean. It was an American product designed to follow the American Standard Code for Information Interchange (ASCII). The problem here was, again, "technolinguistic."[220] And the above article was one of numerous attempts to provide a solution to the issue. In this dualized horizon of "*hangul* and English (*yŏngŏ*)," discussions about Chinese

[218] Chŏng Ch'ŏl, "How to Use *Hangul* on the Microcomputer I," *Microsoftware*, December 1983.
[219] Pae Myŏngjin, "Han'gŭl wŏdŭp'ŭrosesŏŭi sŏlgye I [Designing the *hangul* word processor I,]" *Microsoftware*, December, 1983. Pae is now a professor at Soongsil University's School of Electronic Engineering, just like the SF writer Yi Sŏngsu I discussed in Chapter 1.
[220] I have discussed this term in Chapter 2.

script were rarely to be found, although South Koreans continued to use *hanja* (i.e., Chinese characters) in their everyday lives throughout the 1980s in printed media. One interesting historical note to ponder is that Korean translations of various foreign software, including computer games, started to be called "hangulization (*han'gŭrhwa*)" instead of "Koreanization" in the 1980s, a term that is still widely used in the computer software world today.

The Myth of the *Hangul* Alphabet: Is It Really Perfectly Compatible with Information Technology?

So what were the characteristics of the Korean alphabet that caused such a headache for developers, the industry, and government technocrats? Although *hangul* is indeed an alphabet, that is, a system of phonemic glyphs that are combined and recombined to represent syllables and words, *hangul* letters are written like Chinese characters: one syllable is represented on the page by a single square block, and in *hangu*l writing these squares consist of *hangul* "letters" (one phoneme each) assembled left to right, top to bottom. In South Korea, modern *hangul* consists of a total of 24 letters split between 14 consonants and 10 vowels, while in North Korea there is a total of 40 letters consisting of 19 consonants and 21 vowels. The difference does not arise from the number and kind of *hangul* letters used in the North and South, but rather from the difference in their linguistic approaches of whether or not to understand the five tense consonants (where two identical consonants are combined together) and the 11 compound and complex vowels as individual letters.[221] One interesting thing to consider is that the standard *tubŏlssik* keyboard dominantly used in South Korea has 26 *hangul* letters (just like QWERTY!) rather than 24 letters, because it includes two commonly used compound vowels with the official 24 *hangul*

[221] For instance, ㄱ's tense consonant is ㄲ.

letters. In fact, there have been various *hangul* keyboard models (both for the PC and the typewriter) with different numbers of *hangul* letters on them. For instance, unlike the current standard *tubŏlssik* keyboard, Kong Pyŏngu's s*ebŏlssik* keyboard had separate keys for indicating initial and final positions of same-letter consonants.[222] These different linguistic theories and technological approaches represent the technolinguistic difficulties as well as technocultural ambiguities surrounding *hangul* informatization.

In *hangul*, each syllabic block consists of either an initial consonant and a medial vowel (the non-standard form), or with an initial consonant, a medial vowel, and a final consonant (the standard form).

한글

("*Hangul*" written in the standard form with letters grouped into syllabic blocks. Each block here is a standard hangul form, with an initial consonant, a medial vowel, and a final consonant.)

ㅎㅏㄴㄱㅡㄹ

("*Hangul*" written sequentially)

There is also a slight difference between the list of consonants which can be used as initial consonants and final consonants because some tense consonants are never used as final consonants while there are consonant clusters only used as final consonants. This is a formula that needs to be more closely re-examined, but for now the North Korean rule seems to be a bit

[222] Kong's version of *hangul* fonts ("none-square fonts *t'allemokkol*") also do not fit into a square block, and Kong argued that the idea that *hangul* characters should fit into a square block originated from an unreasonable idea that somehow *hangul* should resemble characteristics of Chinese script. As briefly discussed in Chapter 2, many famous early modern linguists endorsed linearized *hangul* orthography (*p'urŏssŭgi*) before the creation of letter blocks became technologically possible on the typewriter.

more useful for calculating the total number of *hangul* blocks. 11,172 syllabic blocks exist for modern *hangul*, and the number is based on the below formula.[223]

19 initial consonants x 21 middle vowels x (27 final consonants + 1 non-final consonant) = 11,172

Thus, fully encoding the entire *hangul* system is technologically impossible on a 1-bit computer; the 1-bit system could only process 256 *hangul* syllabic blocks.

Since the late 1960s and throughout the 1970s, Korean governments and businesses have dealt with the technological difficulties of *hangul* computerization by connecting "expensive" external devices such as *hangul* terminals and *hangul* printers to the main computer imported from the US.[224] However, with the "cheap personal computers produced for the ordinary consumer market," [225] *hangul* usage was still another different challenge to solve. It was only in 1982 when a 17 year old high school student, Park Hyŏn-ch'ŏl, invented the very first Korean word processing program for the PC. But the different characteristics of the *hangul* alphabet in comparison to the Roman alphabet continued to pose various problems even at higher architectural levels (e.g., the 8-bit system) well throughout the 1980s and even into the 1990s. There were a variety of techno-cultural issues, but one of the central problems was that there simply were too many characters and therefore any software was too "heavy" for the computers

[223] Chŏn Sanghun, "Han'gŭl mit han'gugŏ chŏngbo ch'ŏri k'odŭ [*Hangul* and Korean information processing codes]," *Microsoftware*, November, 1998.
[224] Sŏ Hyŏnjin, "<Sirijŭ-hanarŭi mirari toeŏ (29): che6pu taemangŭi 70nyŏndae-han'gŭl chŏnsanhwa [A grain of wheat series (29): The ambitious 1970s-*hangul* computerization]," *Electronic Times*, August 20, 1998. According to Dr. Sŏng Gisu, an iconic technocrat of the Park Chung Hee and Chun Doo-hwan governments who played a leading role in the introduction of computer technology since the late 1960s, Kong had already privately approached him around 1969 to make his typewriter keyboard layout the standard layout for *hangul* computer keyboards.
[225] Ibid.

at the time to handle. More practical programs like Hangul III (developed by a Korean Canadian programmer, Chŏng Chae-yŏl) soon appeared on the market, but they had various issues like programing bugs, leaving the early PC adapters frustrated.[226]

From Office Automation to the PC: The Cases of Japan and South Korea, and the Birth of the National Script

The first development of a *hangul* word processor in 1982 can be understood in the context of a transitional period where micro computing technology was first associated with "office automation" throughout the 1970s and also in the context of the newly rising personal computer market around the early 1980s. In the 1983 MBC News Desk media coverage of Park Hyŏn-ch'ŏl's word processor invention, Yi Yongt'ae, the founder of TriGem Computer and the first president of Korean Data Communication, commented that "the most essential component of office automation is the word processor."[227] In fact, the then-called "micro-computer" or word processor market initially targeted business offices, not ordinary households. The very first computer magazine in South Korea was named *Management and Computers* (1976), which targeted corporations interested in "office automation" or innovating their document

[226] Yi Kisŏng, the president of the Computer Aided Publishing Society, remarked in 1988: "I was one of the people who most welcomed the arrival of the Apple computer in Korea 6 years ago (…) But since it was developed in the US, their word processing program was made for English editing. The well-made Word Star was also like a pie in the sky because I couldn't use *hangul* on it. (…) How long have I waited for a word processing program without bugs." Yi Gisŏng, "Kŭlssi mossŏdo kijukchi malja-「posŏkkŭl」ro chŏngch'akhagikkaji [Don't feel discouraged by your bad handwriting: How have I settled down with Posŏkkŭ]," *Science Dong-A,* November, 1988, 156-158.

[227] Yi in fact supported the high school student's project.

management systems. In the above *Microsoftware* article, Chŏng Ch'ŏl also writes that *hangul* computerization is a prerequisite for office automation.[228]

However, with the advent of the personal computer being targeted toward individuals and households, the situation changed somewhat. Although the history of the *hangul* interface still should be understood in connection with the office automation boom, at least since 1983 the *hangul* interface became a crucial part of the state's project of teaching the entire nation, even including "children and housewives,"[229] to learn how to use computers. In other words, *hangul* became the interface that connected the entire nation, a significant portion of whom could read only *hangul* but not *hanja,* to the new information circuit and make them a crucial part of it.

But again, why should it be a "*hangul*" word processor, and not a "Korean" one? Japan, for example, took a completely different path during this period and kept their use of *kanji*. Here I want to reintroduce the "problem" of Chinese script. Or perhaps I should rather call it a mystery, since while all the writers of various computer magazines were making *hangul* computerization a central issue, they were ignoring the simple fact that *hanja* was still part of everyday life for many Koreans.

There are various possible reasons behind this exclusive focus on *hangul*, especially of the South Korean government. One reason could be that the technology of digitally processing Chinese script could be easily imported from other countries, especially from Japan which was already leading the process of office automation at the time.[230] And, logically, it makes sense to

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[228] Chŏng Ch'ŏl, Ibid.
[229] Kim Jongmyŏng, "Han'gŭl peijik kuhyŏn chunggan pogo-kungminsaenghwarŭi kwahakhwae chogŭminama kiyŏhal su itkirŭl paramyŏnsŏ [An interim report on hangul Basic development: Hoping it can contribute to the scientification of the national lifestyle]," *Computer Vision,* November, 1983.
[230] Kim Duhŭi, "Migukkwa ilbonŭi hait'ek'ŭ kyŏngjaeng [The high-tech competition between the U.S. and Japan]," *Science Dong-A,* August, 1988, 56-65.

consider *hangul* digitization a priority since *hangul* can work like pinyin in a Chinese digital input system instead of introducing the foreign script of the Roman alphabet. But this does not fully explain the almost non-existent discussion of *hanja* in various magazines; notably, the above articles also do not mention this issue.

Another crucial reason may be that the South Korean government started actively promoting the usage of the *hangul* typewriter at public offices as early as the 1960s.[231] In 1962, written court judgements, which were previously full of Chinese script and written vertically, started to be typed with the *hangul* typewriter.[232] In 1968, president Park Chung Hee strongly encouraged the usage of the *hangul* typewriter at governmental offices and declared that bureaucrats should learn how to type, forcing young bureaucrats to stay at the office late after work in order to take lessons from female typists.[233] Simply put, the South Korean government was already leading the transition toward a *hangul*-only writing system long before the introduction of the PC, contrary to the common writing practices of citizens I described in the previous chapter.[234]

Yi Juhŏn, "Naega pon migukkwa ilbon: chŏngbo sanŏp [The U.S. and Japan I have observed: Information technology]," *Science Dong-A*, August, 1988, 65-66.

[231] The South Korean army was even faster. They made all the official documents *hangul*-only as early as 1953. The fact that president Park Chung Hee was a military figure should not be ignored here.

[232] Sŏn Jŏngsu and Yang Jinyŏng, "Pŏbwŏn p'an'gyŏlmul ŏttŏk'e pyŏnhaenna hanja ppaego kŭrim nŏk'o han'gŭl chŏnyong 'pijuŏl 化 [How court judgement document have changed: Gotten rid of Chinese scrip, includes images, and became *hangul*-only 'visualization']", *Kukmin Ilbo*, October 8, 2009.

[233] "Chwaburansŏge sin'gyŏnggwamin maeilgyŏngje [Getting Akathisia and Nervous Breakdown]," *Maeil Business Newspaper*, January 16, 1970.

[234] It is possible that these earlier policies were closely related to the first introduction of computer technology in a few major governmental institutions and the early development of the digital *hangul* printer took place around the same time. For instance, The Economic Planning Board bought IBM 1401 in April 1967, and the Korea Institute of Science and Technology bought CDC-3300 in 1969, and the first project of developing the *hangul* printer was

But I want to examine this question by going back to an earlier period, right after liberation when the South Korean state building project was being actively implemented. However, in order to understand this early history, I want to first examine how Japanese society reacted to "office automation" in comparison to South Korean society.

The term "office automation" was indeed already widespread both in Japan and South Korea before the term informatization gained its own currency, leading to another "crisis" of the writing system. In *The Fifth Generation Fallacy* (1987), Marshall J. Unger contests that the reason Japan invested so much in the development of artificial intelligence since the 1970s (under the catchphrase of office automation) was to solve the problem of natural language input as the three-part Japanese writing system—composed of *kanji* (Chinese script), *hiragana* (native, phonetic script) and *katakana* (a phonetic script used for foreign words)—is too complicated to be suitable for a computerized office environment. Unger's own position on the issue is very clear; he straightforwardly states that such a complex writing system, more accurately the usage of *kanji*, is not well suited for computer technology. He also argues that, unlike the widely-held notion spread throughout Japanese society, Japanese people can actually "communicate" perfectly well without using *kanji* at all—with a little training. According to his argument, Japanese society still could not give up *kanji* because of their linguistic nationalism, or the "myth" that Japanese language is the most unique in the world for its characteristic complexity, and, as such, that it embodies the essence of Japanese spirit and most of all Japanese "culture," including calligraphy. In the end, the Japanese decided to develop AI to solve the various technological difficulties with language input.

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implemented in 1970. At the time, President Park himself took a deep interest in these projects, but this is an argument that requires more evidence.

South Korean society took a completely different path from Japan during this period. It is interesting that, in Unger's narrative, Japanese society mostly associated their writing system with notions like aesthetic perfection and culture.[235] Even technocrats were no exception. Unger cites Dr. Uenohara Michiyuki, senior vice president of one of Japan's biggest computer manufacturers, Nippon Electric Company, as a "typical" example:

> People using European languages can engage in data-exchange and dialogue with machinery through typing with almost the speed of conversation. But this is not possible in the Japanese language. […] A local culture is something that has been developed through the long history of the region and human life itself. It should not be altered because of technology. Rather technology must be altered to fit the local culture. If the Japanese language is abolished for the sake of convenience of usage of computers, the Japanese will be deprived of their identity.[236]

On the other hand, South Korean technocrats associated their writing system, particularly its script, with notions like science, technology, and tool-use. Kong always emphasized that a script is a tool—and even a weapon—criticizing people who care more about the aesthetic dimension

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[235] "Either it is the most refined, most subtle, and most aesthetically perfect language in all the world, or else it is the most difficult, most illogical, and most mysterious" (Unger, J. Marshall. *The Fifth Generation Fallacy: Why Japan Is Betting Its Future on Artificial Intelligence*. (New York: Oxford University Press, 1987, p. 80). "At its most moderate, the historical rationalization for *kanji* holds that Japanese aesthetic sensibilities, intellectual perspectives, and national characteristics are so wedded to the age-old use of Chinese characters that, without them, Japanese culture as we know it would be threatened" Ibid. p.104.

[236] Unger, J. Marshall. *The Fifth Generation Fallacy: Why Japan Is Betting Its Future on Artificial Intelligence*. (New York: Oxford University Press, 1987), 104-5. Gene Adrian Gregory and Etori Akio, "Japanese Technology Today: The Electronic Revolution Continues." Advertising supplement. *Scientific America*, October 1981, J40. Quoted in Unger, J. Marshall. *The Fifth Generation Fallacy*, 105. But Michiyuki also added: "If oral input becomes possible, this handicap will be totally eliminated. Because of the phonetic simplicity of the Japanese language relative to European languages, oral input will give the Japanese an advantage, reversing the present situation."

of writing (e.g., such as font use). It was not that Kong did not care about "culture" per se, but he seemed convinced that great culture itself could be achieved by using a superior tool, that is a superior script (or "the *hangul* machine"), and by making writing practice more practical (just like Americans) and more scientific.

But what did Kong or Prime Minister Hwang mean by describing *hangul* as "scientific?" The alignment of *hangul* with science has been one of the most popular rhetorical strategies of linguistic nationalism in Korea and a major argument for the abolishment of *hanja*. A famous argument still alive and well today is that *hangul* is "scientific" because it is an alphabetic script "based on scientific principles and the shapes of vocal organs."[237] But what did *Computer Vision* contributor Kim Jongmyŏng mean when he wrote that creating the *hangul* Basic program could make the nation's everyday life (*saenghwal*) more scientific?[238]

The Birth of the *Hangul* Generation

Here, I want to go back to the moment of liberation, when Japan and the Southern part of the Korean peninsula were occupied by the US military immediately after the end of World War II. During this time, there were serious attempts for script reform, or what they officially called "language simplification," through both the United States Army Military Government in Korea

[237] Minzi Kang, "Design Lessons from the Korean Alphabet: How *Hangul* applied the 10 Principles of Design 500 years ago," *Medium*, Aug 1, 2018. It says the writer is UX Designer with a background in Neuroscience and Psychology. I am citing this *Medium* article not because it is a reliable source, but because it exemplifies the popular understanding of *hangul*. Accessed January 21, 2020. https://medium.com/@minzikang/design-lessons-from-the-korean-alphabet-383191ee7d4d

[238] Kim Jongmyŏng, "Han'gŭl peijik kuhyŏn chunggan pogo-kungminsaenghwarŭi kwahakhwae chogŭminama kiyŏhal su itkirŭl paramyŏnsŏ [An interim report on *hangul* Basic development: Hoping it can contribute to the scientification of the national lifestyle]," *Computer Vision*, November, 1983.

(USAMGIK) and the Supreme Commander for the Allied Powers (SCAP) in Japan. In another book, *Literacy and Script Reform in Occupation Japan: Reading Between the Lines,* Unger emphasizes that script reform in occupied Japan was a joint endeavor of American military personnel and Japanese scholars which should be understood as an extension of the previous script reforms led by "Japanese government and business" even during the war.[239] In South Korea, Ch'oe Hyŏnbae (1894-1970), a preeminent linguist who closely worked with USAMGIK, played a central role in postwar script reform during the same period. Ch'oe and his contemporary Japanese intellectuals' accounts concerning the relationship between scripts and science offers us a clue to the above question.

After being appointed as the editing chief of the Ministry of Education at USAMGIK, Ch'oe was not shy to use his newly gained institutional power in order to achieve his dream of abolishing *hanja* while vigorously debating with formidable opponents who thought his ambitious plan was simply unrealistic. In the midst of these debates, Ch'oe left various useful accounts that can answer our question.[240] In the periodical titled *USAMGIK Ministry of Education,* Ch'oe argued that Japan lost WWII because of its attachment to Chinese script, none other than because *kanji* hindered the "distribution of science" among the public. This is in fact

[239] In this book, Unger sees the postwar script reform in Japan as a continuation of what was already going on in modern Japan. His narrative resonates with what I discussed in Chapter 2 concerning the new demands of reforming the traditional writing system in the milieu of modern (corporate) office environments, in the sense that Unger specifies Japanese government and businesses as the subjects of the pre-war script reforms. Unger is mostly concerned here with criticizing the widely spread notion of US-enforced script reform in post-war Japan. For instance, he emphasizes that both "conservative JAPANESE AND AMERICANS" were against radical script reform. (Emphasis in the original, 4).

[240] Even before the liberation, Ch'oe collaborated with the Governor-General of Korea to make his *hangul* spelling system the standard (an important piece of history that the nationalist narrative does not mention) and helped George M. McCune and Edwin O. Reischauer to make the McCune–Reischauer romanization system. I have already examined Reischauers's comment that *hangul* is probably the most scientific script in the world.

the same kind of argument I have already closely examined in Chapter 2; here we see yet again how the association between Chinese script and the consequences of warfare have been repeated throughout the modern history of East Asia. However, my focus here is not on war, but instead focuses upon the association between (Chinese) scripts and science. Ch'oe writes:

> Among many opinions presented on the reason Japan lost the war, the opinion of Mr. Mashima, the Chancellor of Osaka Imperial University, was: "Japan lost the fight not because of [the lack of] patriotism and warrior spirit, but solely because science was not distributed, the reason of which is the usage of *kanji*. Because elementary school teaches *kanji*, there is no time to teach science. What happened is that ordinary national subjects lost the war for total national knowledge. That is why I argue for the abolishment of *kanji* and endorse the romanization of writing, for the future revival of Japan." [241]

Ch'oe also cites another account by "a Japanese leader who came back to the country after visiting Germany and the United States": "The best short cut of promoting science and technology is '*kanji* abolishment.'" Ch'oe Hyŏnbae himself concludes:

> Speech and writing are like a container car and the train, and thoughts and feelings are like goods that are contained and delivered in them. If there's only the container and the train but no goods to contain, what are the uses of that container and train? And our people's past has been as such; the *hanja* education that is all about memorizing has made our people the ones who just memorize things but do not think or create. Chinese script is therefore a gnawing moth to a science that thinks, the enemy to a culture that creates.[242]

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[241] Yi Ŭngho, *History of the Hangul Education Movement During the Period of U.S. Interim Military Government in 1945~1948* (Seoul, Sŏngch'ŏngsa, 1974), 338.
[242] Ibid., 339-340.

As we can see, Ch'oe's argument was paralleling the debates surrounding script reform in postwar Japan. Unlike the later accounts concerning Japanese language's aesthetic perfection and the cultural characteristics that Unger cites in *The Fifth Generation Fallacy*, these postwar Japanese thinkers from the 1940s also associated the importance of linguistic scripts with science and technology, rather than with national culture and spirit.[243]

In fact, there were direct exchanges between USAMGIK and the Supreme Commander for the Allied Powers (SCAP) regarding the project of script reform, a.k.a., Chinese script abolishment. USNR Lt. Comdr. Robert King Hall, Jr, who was Chief of the Education Sub-Section, Educational Reorganization Officer, and Language Simplification Officer of SCAP,"[244] visited South Korea in February 1946 to give a presentation on Japan's *kanji* abolishment movement and related educational experiments.[245] Unger describes Hall as "the most vociferous supporter of radical changes in the Japanese writing system" among the Americans in SCAP; Hall recommended that the Occupation "prohibit the use of materials containing *kanji* and order the exclusive use of *katakana*" and later supported the romanization of written Japanese (the usage of *romaji* rather than *katakana*).[246] He also argued that language simplification would "improve the quality of education" and "increase business efficiency by making it easy to use typewriters and other office equipment," aside from the political benefits of reducing access to

[243] According to Unger, "the first postwar surge of popular interest in the Japanese language" occurred around the mid-1950s. The popular understanding of Japanese language and culture Unger is describing here (that it is aesthetically perfect and mysterious, etc.) therefore came at least 10 years later than these accounts.
[244] Tomoko Aoyama, *Reading Food in Modern Japanese Literature* (Honolulu: University of Hawai'i Press, 2017), 221.
[245] Yi Ŭngho, *History of the Hangul Education Movement*, 200.
[246] Unger, J. Marshall. *Literacy and Script Reform in Occupation Japan: Reading between the Lines* (New York: Oxford University Press, 1996), 60.

prewar propaganda and facilitating censorship.[247] As we can see, it is clear that in both East Asian countries the US cared a great deal about expanding the usage of communication and information devices such as the typewriter and the telegraph. According to Yi Ŭngho (1973), USAMGIK's Minister of Postal Services Ministry (the Telegraph Bureau), finished training 200 *hangul* telegraph typists as early as December 8, 1945, less than four months after the war ended. Such historical evidence clearly explains Ch'oe's deep investment in the *hangul* typewriter, including his attempts to transform *hangul* itself by making it more compatible to the keyboard typewriter. It also explains the US military's interest in Chinese script abolishment and the romanization of Korean and Japanese writing systems. It should be noted that Hall, who at first endorsed the usage of a Japanese *katakana* syllabary, soon switched to endorsing the usage of a phonetic, romanized alphabet (i.e., *romaji*).

To summarize, the promotion of science (especially the national education of science) was deeply entangled with script reform, which itself was already an important part of disseminating information technology in the postwar landscape of the late 1940s. The strange statement from 1983 that claimed that enabling *hangul* usage on the computer would contribute to the "scientification (*kwahakhwa*)" of the nation can, at least partially, be better understood in light of this historical backdrop.

The history of postwar script reform in Japan and South Korea is also crucial in order to understand the problem of *hangul* digitization because this earlier history is closely related to how each society differently reacted to the tidal influences of office automation and informatization in later periods. During his visit to Korea in 1946, Hall presented on the educational experiment of teaching elementary students with *romaji* textbooks. These

[247] Ibid., 60.

experiments were very short lived in Japan, and Unger argues it was because of "conservative" elements in both the US military and Japanese society which deemed such attempts unrealistic and hampered them. Naming the first chapter of his book on the script reform movement in occupied Japan "A Dreamer or a Realist?",[248] Unger argues that the common understanding of such an attempt as unrealistic, or the strong "myth" that the Japanese writing system needed *kanji*, were untrue.

On the other hand, Ch'oe Hyŏnbae and other members of the Korean Language Society won their battle and successfully abolished *hanja* in the long run. It should be noted that the resistance they faced for their script reform plan was also very reasoned and strong (as it was in Japan) at the time, and this resistance is, in fact, still alive among South Koreans who call for the revival of Chinese script in the Korean writing system. Many Koreans have argued that without *hanja*, it is not possible to properly understand a Korean text or expand one's vocabulary. Yi Ŭngho shows in detail how *hangul*-only writing went strongly against common practice, common sense, bodily and cultural practices, and class and institutional interests in the cultural landscape of Korea at the time, not only because intellectuals were used to reading and writing *hanja*, but also because the *hangul*-only writing system was very much underdeveloped, with no Korean-Korean dictionary and no effectually standardized orthography. In fact, the Hangul Language Society had to devise comprehensive orthographic rules (which were often criticized for their notorious complexity[249]) and new Korean vocabularies in order to prove the practicality

[248] This comes from the title of Unger's first chapter, "Dreamers or Realists?"
[249] In fact, the first South Korean president, Syngman Rhee, attempted to substitute them with much simpler rules in 1953. This attempt faced wide protest and criticism from the Hangul Language Society and various other intellectual organizations, and the president had to retreat in 1955. Samuel Elmo Martin, who created the Yale romanization of Korean with his colleagues at Yale University, also sent the president a protest letter. Since Rhee tried to make *hangul* orthography "simpler" by making everything written exactly as it sounds, the attempt is referred

of their script reform, a project that was indeed highly ambitious and grand. As the US military acutely noted from early on, script reform was a crucial component of building a modern communication infrastructure in the newly liberated state.

But most of all, Ch'oe and the Hangul Language Society, unlike his contemporary Japanese scholars Hidaka Daishiro and Hatano Kanji (and American military personnel like Hall and Abraham M. Halpern) who developed a *romaji* textbook for Japanese children, successfully developed and defended his *hangul* textbooks.[250] The generation who grew up being taught by that *hangul* textbook became the famous "*hangul* generation (*han'gŭlssedae*)," and unlike the previous generation of intellectuals, South Korean children (later adults) became increasingly used to the *hangul* writing system *only* as the publishing industry produced more and more *hangul* books. As we can see, the *hangul* generation's distinctive cultural techniques became one of the crucial arguments and thus a foundation for script reform (i.e., the practical disappearance of *hanja* from the computer and also from other media) in the 1980s and 1990s, the era of "informatization." In this sense, Ch'oe proved that he was not a dreamer but a realistic social engineer, although it took around four decades to effectively achieve the final results of his blueprint. On the other hand, Japan took a different path from early on and has kept *kanji* in its digitized environment.

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to as the "hangul simplification crisis." This history instantiates the highly institutionalized aspects of modern language, especially written language.

[250] To see who exactly wrote these national textbooks, see: Kim Tongsŏn, "Migunjŏnggi kukchŏng kongmin'gyogwasŏŭi sŏnggyŏkkwa chipp'iljinŭi kusŏng [Characteristics of the Government-Designated Civic Textbooks and the Composition of the Compilation Board During U.S. Military Government Period]," *Han'gungminjogundongsayŏn'g*u, no. 94 (2018):103-154. According to Kim, USAMGIK largely entrusted the Hangul Language Society with the task of compiling and teaching national textbooks, although the authors themselves were not necessarily from the Society and mostly education and philosophy majors. Ch'oe especially played a significant role in the selection of the authors.

This long history of *hangul* informatization again proves the complicated nature of technology I have discussed in previous chapters. Just like Samsung's catchphrase from the 1980s of "Human-Tech," *technology* includes various bodily and cultural techniques as crucial aspects of it. This history also reveals technology's highly institutional characteristics, since it demonstrates how technological development takes a dynamic path through complicated cultural, political, and institutional negotiations. At the same time, it also proves the highly technological aspects of culture itself. As Friedrich Kittler states, "culture cannot be had without technology nor technology without culture."[251] As the above history reveals, the so-called Korean culture or Japanese culture, or even Korean language and Japanese language, are not the absolute entities that embody an a-historic national essence, but they themselves are produced out of complicated institutional negotiations in the milieu of the highly technologized conditions of modern society.

However, the ambitious project of creating the *hangul* generation successfully produced national subjects of postcolonial South Korea, many of whom still strongly believe that the current writing system of South Korea reflects the a-historic essence of Korean culture. An interesting piece of history to consider is how *hanja* has been often considered a legacy of Japanese colonial rule possibly more so than Chinese. Ch'oe Hyŏnbae himself argued that Korean people had already long lost their "Korean (Chosŏn) knowledge" of Chinese script throughout the colonial period since they were educated in Japanese. "Therefore the abolition of Chinese script is inseparably related to the eradication of our colonial legacy," Ko Yŏngjin

[251] Friedrich Kittler, "Perspective and the Book," *Grey Room*, no. 5 (Autumn 2001): 51.

writes.[252] The younger *hangul* generation of the 1980s and 1990s, while dismissing *hanja* as a colonial legacy, were dedicated to developing *hangul* digitization technologies armed with linguistic and technological nationalism.[253]

Information as a Product of the Human Brain: Mobilizing the *Hangul* Generation for *Hangul* Digitization

Let's return to the above Samsung PC advertisement. The green text on the monitor displays the famous Charter of National Education, drafted by a group of famous intellectuals and philosophers, and proclaimed by the Park Chung Hee government in November 26, 1968. Before it was practically abolished in 1994, South Korean students were often forced to memorize the charter at school, which was designed to interpellate students (to borrow from Louis Althusser's theory of interpellation[254]) as national subjects in Cold War South Korea. The first few lines of the charter shown in the image are translated below:

> **The Charter of National Education**
>
> We have been born into this land, charged with the historic mission of regenerating the nation. This is the time for us to establish a self-reliant posture within, and contribute to the common prosperity of mankind outside our borders, by revitalizing the illustrious

[252] Ko Yŏngjin, "Wae pukhanesŏnŭn hanjarŭl p'yejihayŏnnŭn'ga [Why did North Korea abolish Chinese script]" Accessed Feb 20, 2020. https://doors.doshisha.ac.jp/duar/repository/ir/13062/006009020002.pdf

[253] But *hanja* was also associated with the Confucian "feudalism" of the Chosŏn dynasty, and their culturally "subordinate" status to Chinese empires.

[254] See: Louis Althusser, *On the Reproduction of Capitalism: Ideology and Ideological State Apparatuses*. (London: Verso, 2014). Althusser writes that "all ideology hails or interpellates concrete individuals as concrete subjects, through the functioning of the category of the subject" (190). Often times it's also various state apparatuses that interpellate individuals as subjects, and the above discussion outlines the process by which South Korean schools interpellate people as national subjects through its Cold War nationalist ideology.

spirit of our forefathers. We do hereby state the proper course to follow and set it up as the aim of our education.

I have already examined the relationship between *hangul* and the postcolonial project of nation building. It is no coincidence that this advertisement emphasizing its *hangul* functionality features the image of the charter, whose later lines include a section which claims that national subjects must "learn and practice the sciences and technologies with a sincere mind and a solid body."

In fact, the computer magazines simultaneously founded in 1983 clearly reveal direct government involvement. Both editorials and contributors (sometimes even readers) claim that teaching citizens (more accurately, "national subjects" or *kungmin*) computer usage skills and the development of *hangul* informatization technology are national tasks. For example, the first issue of *Microsoftware* includes an interview with Yi Jŏngo, the Director of the Science and Technology Bureau (*kwahakkisulch'ŏ*) at the time. In the interview, the Director declares that the "information industry (*chŏngbosanŏp*) is the key breakthrough necessary in order to create an advanced nation." He describes how the government had already distributed 5000 educational-purpose computers to schools, the first step of a policy that successfully initiated the process of nationalized education of information technology and led to more than 40,000 PCs being distributed with a rising domestic market demand. What is especially interesting about the interview is Yi's definition of the information industry. He affirms that the government's (at least the ministry's) focus here is most of all aimed at fostering human resources for the information industry, especially because the software industry will become much more important than the hardware industry in the near future. The Director, who in fact received his PhD in mechanical engineering at Tufts University, defines the information industry thusly:

> The information industry refers to the fourth industry that centers around the intellectual [brain in the original] activity of humans, with the main tools of computers and data communication [technology]. With application technology software it can collect, process, and refine various kinds of information and knowledge and efficiently provide them to all branches of human activity, so it means a creative knowledge industry that improves society's overall efficiency and productivity.

Furthermore, Yi defines information itself as a "product of the brain" (*tunoesanmul*)!

The Charter of National Education in the Samsung advertisement interpellates readers to participate in the national project of *hangul* digitization, to become the "brains" of this new information circuit. As I described in Chapter 1, even elementary or middle school students participated in this collective endeavor, submitting their *hangul* word processing codes to *Microsoftware*. The below is a magazine editorial's evaluation of one of these codes:

> The quality of these works [the works submitted by readers to the magazine] is much better than the ones from the last issue. Especially the grand prize-winning *hangu*l word processor submitted by Hyŏn Minho (9th grade at Yeouido Middle School) is full of surprising ideas that led us to wonder "how can a middle school student think of this?" It is not comparable to the word processors already available in the market, but it shows an easy and interesting way to design a *hangul* word processor. The idea of using a flag variable to discern between characters with a final consonant and with no final consonant was remarkable.

Other readers participated in this project in different ways. For instance, a young reader asked the editorial of *Computer Learning* (*K'ŏmp'yut'ŏ haksŭp*) when he would be able to purchase the "national 16 bit personal computer model" mentioned in the previous issue, since he was

captivated by the description of an "indigenous computer model of Korea."[255] The editorial answered that it is not available yet because the government still had not yet solved the *hangul* code standardization issue. Indeed, the project of *hangul* informatization was far trickier than it seems, perhaps even especially from our perspective today.

The Hangul Language Society's national textbooks produced the new generation of national subjects after liberation by educating them with *hangul.* Based on that outcome, the state-initiated project of informatization in the 1980s yet again sought to mobilize youth as national "brains."

Technolinguistic Nationalism and the *Hangul* Saving Movement

Throughout the 1980s and well into the 1990s, multiple *hangul* word processors were developed and competed with one another.[256] It was very much an inconvenient technological environment for users, since each program, developed by different companies, used different *hangul* codes and were not compatible with one another. In 1985, there were 27 different *hangul* codes in the market, and in 1986, the Korea Data Communication Corporation had to provide their online services only in English because of the issues with *hangul* code standardization.[257] Some media reports blamed big corporations for ignoring the tentative standard *hangul* code shared by small computer companies concentrated in the Ch'ŏnggyech'ŏn area in Seoul, consequently making the confusion worse for their own benefit.[258] In 1987, the Korean

[255] "A Letter from A Reader," *K'ŏmp'yut'ŏ haksŭp*, January, 1987.
[256] For instance, Samsung developed Hunminjŏngŭm in 1992, which had been in internal usage as recently as 2015.
[257] "Yŏngmun DNIS chegong- han'gukteit'a t'ongsin [English DNIS service available: Korea Data Communication]," *Science Dong-A*, June 1986, 180.
[258] "K'ŏmp'yut'ŏ han'gŭl k'odŭ p'yojunhwa chagŏp hwalgi [*Hangul* computer code standardization process actively going on]," *Dong-A Ilbo*, February 2, 1990.

government released a new standard *hangul* character code, KSC-5601, after a long debate (the previous two came out in 1974 and 1984), but the industry often ignored it. Various domestic and foreign computer companies including IBM continued to ignore KSC-5601 just as they had with previous standards. One *Hankyoreh* article titled, "IBM Disregards the *Hangul* Standard Code System" (1988), well documents this scene.[259] As I discussed in Chapter 1, one of the protagonists in Yi Sŏngsu's SF novel, *Women Q,* decides to found an IT company in order to fight similar forms of tyranny like IBM's! In the meantime, the techno-cultural debates surrounding the standard *hangul* code continued.

What significantly changed the techno-cultural landscape in 1989 was *Araea Hangul,* developed by four engineering students at Seoul National University (Yi Ch'anjin, Kim Hyŏngjip, Wu Wŏnsik, and Kim T'aekchin). Immediately after its release it shocked the market with its superior features, which included the fact that it could be used on any PC model or with any *hangul* card. It also supported different types of keyboard layouts, including Kong Pyŏngu's

[259] "Company that has a 70% of domestic market share…Concerns over the National Backbone Network and Information Industry being Subordinated
IBM ignores the government's *hangul* standard code system, acting as the biggest obstruction to the push toward standardization. As computers came into wider usage and the national backbone network project goes into orbit, the government has prepared the 2-bit pre-composed *hangul* code (*wansŏnghyŏng)* system and announced it as the Korean industrial standard (KSC 5601). But IBM, which dominates 70% of the domestic computer market, continues to ignore this standard code system and insists on their own standard, making the governmental policy futile (…) users say that it creates a great inconvenience since it is impossible for different computer models to communicate with each other, and also it leads to software incompatibility.(…) Chang Kyŏng-chŏl, the Information Industry department chief at the Ministry of Science and Technology, commented that 'one way to solve this problem is governmental institutions not buying a model that does not adopt the Korean standard code system.' He said that it is difficult to stop IBM's monopoly if Korea does not localize (*kuksanhwa*) major computers by developing a Korean OS system." "IBM, han'gŭlp'yojun puhoch'egye musi [IBM ignores *hangul* standard code system]," *Hankyoreh*, May 31, 1988.

three set (*sebŏlssik*) keyboard model. In 1990, Yi Ch'anjin opened a Hancom, Inc. office inside the Hangul Cultural Center, the institution founded by Kong.

The history of *Araea Hangul* can provide a particularly interesting case study concerning the techno-linguistic-nationalism of the 1980s and 1990s. When the company faced bankruptcy after the IMF crisis, just like numerous other South Korean companies in 1998, Hancom, Inc. decided to accept Microsoft's investment. Since Microsoft already had Microsoft Word competing with *Araea Hangul* in the South Korean market, people predicted the decision would practically mean the end of the program and the company. What changed the situation was the "Hangul Saving Movement (*Han'gŭl chik'igi undong*)," initiated by the Korea Venture Business Association and then supported by the Korea Student Venture Business Center (founded by two hundred students at the Korea Advanced Institute of Science and Technology, or KAIST), and the Merchant Society of the famous Yongsan Electronics Market. The movement rapidly gained momentum as a "national movement" as various online groups such as the Hangul Society and Hangul Love Society joined. With a growing number of citizens participating and the consequent media attention, the movement ended up effectively stopping the contract between Microsoft and Hancom, Inc., and the CEO, Yi Ch'anjin, announced his withdrawal from his initial decision. *Araea Hangul* is still widely used in South Korea today, especially at schools and governmental institutions.

The Hangul Saving Movement became so wide spread because of the strong combination of linguistic and technological nationalism. Interestingly, the issue of national "culture" became central. *Science Dong-A*, after defining the program as "not just a piece of software but a guardian of *hangul* culture," wrote: "The people who do not know computers think that all *hangul* software can freely process all *hangul* [characters]. Unfortunately, only *Araea Hangul*

can handle the superior combinability of the alphabetic *hangul* as well as the old medieval *hangul*."[260]

This fact is directly related to the problem with the *hangul* code standard. The major reason KSC-5601 raised such a controversy even among citizens was because it is not possible to use all *hangul* characters (syllables) on this standard system. As we have seen, because the alphabetic *hangul* letters can create as many as 11,172 syllabic blocks (11,172 characters) and was therefore too heavy to handle for computers, one major solution implemented was limiting the number of *hangul* characters available on a system to the most commonly used 2,350 characters. As a result, there were two *hangul* code standards competing with one another: the first was the composition system (*chohaphyŏng*) that could process all 11,172 characters, and the other was the pre-composed system (*wansŏnghyŏng)* that could display 2,350 characters. The government decided to adopt the latter in 1987, especially because it was more compatible with ISO standards.[261] But users were often frustrated by the character limit, and citizens' "anti-KS code movement" in fact pressured the government to adopt the composition system as a "dual standard" for the PC in 1992.[262] According to Dongoh Park, citizens called the governmental standard an "anti-cultural code" or the "crippled character code." The fact that *Araea Hangul* chose *chohaphyŏng,* contrary to most *hangul* word processors and especially *Microsoft Word*, endowed it with the aura of a guardian of *hangul* culture.

What is interesting about this history of techno-nationalism is that, although the South Korean government played an active role from the beginning, the government was often

[260] Hong Daegil, "Araea han'gŭl sallin kungminundong [The national movement that saved Araea Hangul]," *Science Dong-A*, August 1998, 145.
[261] Ibid.
[262] Dongoh Park, "The Korean Character Code: A National Controversy," *IEEE Annals of the History of Computing* 38, no 2 (April-June 2016): 48.

criticized not just for making the wrong kind of intervention, but for its *lack* of intervention. The above *Science Dong-A* article criticizes the government's decision to appoint the pre-composed system as the standard for the national administration network in the early 1990s. Arguing that the pre-composed system "significantly curbed the expressive potential of *hangul*," the article even contests that the government had "made national *hangul* disabled" as a result of such a decision. Furthermore, it strongly called for governmental support of *Araea Hangul*, writing that the government had not really fostered "venture companies" contrary to what they often boasted. What is ironic about this scene is that the numerous interventions the Korean government had made to the process of informatization were rather taken for granted and forgotten. What should be remembered is that the CEO of Hancom, Inc, Yi Ch'anjin, was himself in a way a product of the governmental policy of promoting computer education since the early 1980s. He in fact contributed to *Microsoftware* at least since the mid-1980s, debating with other contributors over the techno-cultural issues of *hangul* informatization.

Let us return to the issue of technology and culture, especially national culture. In "The Korean Character Code: A National Controversy," Dongoh Park argues that the heated controversy over two different *hangul* character codes "illustrates what can happen when a standard component is situated at a crossroads where technology and culture and where local and global concerns intersect."[263] But what is problematic in Park's discussion is that he takes Korean culture and language as given entities, and while focusing on how culture "localizes" a technology, he does not talk about how local culture and language themselves are already formed and transformed by technology. For instance, his discussion begins by understanding *hangul* as Korean script and a "central symbol of national and cultural identity," completely forgetting to

[263] Ibid., 50.

ask what happened to *hanja*, the Chinese script that used to be an essential part of written Korean language. In other words, he is taking *hangul* culture, which might be a *result* of the introduction of various information technologies such as the typewriter and the PC, as the *cause* of the current techno-linguistic life of South Koreans. As I argued above citing Kittler, "culture cannot be had without technology." In fact, Park's approach itself is a product of the long techno-linguistic history I have previously examined, which only came to be possible in postcolonial South Korea where Ch'oe Hyŏnbae's dream to eliminate *hanja* became the reality, and where even major newspapers finally yielded to *hangul* writing systems throughout the 1980s and 1990s. Still, it is true that the nationalist idea that regards *hangul* as the only Korean script and culture was popular in the 1980s and 1990s and this idea was effectively combined with a techno-nationalist discourse that was also prevalent during this period.

Kwahak Sosŏl **(Science Fiction) Inquiries of Technological Nationalism**

Let us return, again, to the above Samsung computer advertisement. What is important about this historical scene is that corporations such as Samsung and LG, which were already building their factories outside of South Korea, continued to pose as "national" corporations that produced national products and developed national technologies. Their various advertisements from the 1980s and 1990s well document such oscillations between images of global corporations on the one hand, and indigenous companies that are symbolic of national pride on the other. This oscillation was also related to South Korea's transition from the state-led capitalism of the Park Chung Hee era to the new neoliberal policy regime begun as early as the late 1970s (the history of which I have examined in the previous two chapters).

In this section, I want to read two novels written by STEM major undergraduate and graduate students which both came out in 1996. The first, *Login*, was authored by 26-year-old PhD student Kim Do-hyŏn who was studying aerospace engineering at Seoul National University at the time. The other, *Apple War* (1996), was written by Kim Onyŏng who graduated from Science Highschool (*kwahak kodŭnghakkyo*) and then studied at the prestigious national research university KAIST (the Korea Advanced Institute of Science and Technology). Possibly reflecting the authors' own experiences, the two novels center around young STEM major undergraduate and graduate students who were studying at the best, "national" science and engineering institutions of the country, sometime in the early to mid-1990s. What is particularly fascinating is that the main characters of both novels work for school newspapers, both of which are closely affiliated with leftist student movements barely persisting after their heyday in the 1980s. In fact, Kim Do-hyŏn himself was one of the student journalists at *The Journal of the College of Engineering* (*Kongdae chŏnŏl,* 1993–2004), the newspaper run by the left-wing engineering students at Seoul National University. Kim introduced the genre of cyberpunk to its readers and wrote articles that emphasized the importance of writing for STEM major students, a practice related to the idea of becoming a "whole human" rather than just a narrow-minded expert.[264] Both novels also closely feature the figure of a hacker. Here, I would like to focus on how these two novels deal with the issue of techno-nationalism and the related issue of labor exploitation, especially in "information society." Both authors are very conscious of the fact that "brains" like themselves have been mobilized under such catchphrases, although each novel's stance toward the issue is quite different.

[264] "Kimdohyŏn kijaŭi changp'yŏn sosŏl ch'ulgan: rogŭin-'kwahaksosŏl'i anin uri kwahak kisuljadŭrŭi iyagi," *Kongdae chŏnŏl* 23, December 23, 1995.

The central story of *Login* revolves around a conspiracy surrounding the development of "national" satellite technology. The main characters are graduate students working at the national Space Research Center who will get long-term funding from the government if they can prove their capacity to develop a national satellite. Based on the data set they have received from above (they do not really know who gave them the data) they must prove that they have enough knowledge and technology to successfully launch a satellite at a presentation to be held in front of bureaucrats. A serious problem arises as the students realize there is no way to come up with a successful satellite launch formula if they use the given date set. They then realize they have been in unofficial competition with a private institution named the Satellite Operation Research Center for governmental support, and are unofficially informed that the private institution, which is filled with American PhDs unlike their own research center, came up with a successful result. At the day of the presentation, one graduate student lies and presents a successful, but in fact fabricated, result only to find out that their competition also did not come up with a successful plan and is profoundly humiliated. They also realize that the initial data set they used was from an American aerospace corporation named Hughes, and that it was flawed from the beginning and therefore could never have produced a successful launch formula. After an American scientist from Hughes and an employer of the Satellite Operation Research Center (also US-educated) expose the fabrication, the South Korean government announces the practical closure of the national research center (where more than 200 researchers work) by merging it with the Satellite Operation Research Center. Suspicious of the secret connection between Hughes and the private research center that is in fact founded by a key, high ranking bureaucrat of the previous government (the dictatorial Chun Doo-hwan government), the students try to hack Hughes' system in order to uncover the conspiracy. The student-hackers criticize the government

for neglecting the development of "national technology" by chronically relying upon technology transfer from foreign counties like the US and Japan. The government's decision to dismantle the national research institute and privatize the satellite development project is reprimanded as an extension of that.

Significantly, *Login* was published by *Creation and Criticism*. The famous literary quarterly advertised the novel as a true example of "science fiction (*kwahaksosŏl*)," possibly as a response to the new social interest in the genre instantiated in the debate between Fredric Jameson and Paik Nak-ch'ŏng which I examined in Chapter 1. If Paik, the patron of nationalist realist literature, had previously dismissed the cultural significance of this globally popular genre, this time his quarterly argued that true "science fiction" is in fact realist literature and deals with the social and political dimensions of technoscientific development. In the review included in the book, a critic, Im Gyuch'an, differentiates this "science fiction" of *Login* from the "American" genre of "daydream science fiction (*kongsang kwahak sosŏl*)" (another translation of science fiction that had been avoided and criticized by SF fans for its negative connotations). Writing on the protagonists' youthful dreams of becoming scientists, derived from their fascination with spaceships and robots in SF animation, Im contends that the American genre of "daydream science fiction" is popular because the masses (*taejung*) feel increasingly insecure as it becomes almost impossible to grasp the rapid development of technoscience and accompanying social changes. He further argues:

> The public's anxiety and hopeful anticipation that there will be tremendous, even unimaginable change tomorrow, ten years, and a hundred years from now as technoscience develops has incited their interest and curiosity for related issues. It is exactly such anticipation that gave birth to, to put it in the extreme, the absurd and

> "unscientific" novels that are much more fictional and fantastical than ordinary novels."[265]

In his interview with *The Journal of the College of Engineering,* the 26-year-old author himself further explains the name "science fiction":

> For humanities majors this novel would look like "science fiction," but engineering students would think that the novel talks a lot more about society unlike other kinds of "science fiction." We commonly take science and technology as the universal system of cognition, but this novel sees science and technology as a product interconnected with social and political mediations. In that sense, science here means something a bit different from the science of the former sense.[266]

Kim concludes that engineering students are "just science and technology laborers" who sometimes "become poets just like any other people." He explains that the title *Login* refers to the act of a user connecting to various (computer] networks all around the world, which enables the user to actively communicate with others. He emphasizes that the title aims to represent how engineering is not an isolated practice that happens in closed labs, but something that itself evolves while ceaselessly interacting with society. "In that sense, "login" symbolizes the relationship between engineering and society, communication, and interaction," which is why writing is important for engineers and scientists. "Engineering and writing are not opposite entities but are important parts of the totality of our life. I think it is very important for engineering students to write in the sense that one is leading one's life as a whole person

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[265] Ibid., 316

[266] "Kimdohyŏn kijaŭi changp'yŏn sosŏl ch'ulgan: rogŭin-'kwahaksosŏl'i anin uri kwahak kisuljadŭrŭi iyagi [Kim Dohyŏn's novel Login published: Not a 'science fiction' but a story of our scientists and engineers]," *Kongdaejŏnŏl*, December 1995, 8.

[through the act of writing].” It is not difficult to hear the echo of 1980s student activism and Marxism in the choice of Kim’s vocabulary here. This engineering student writer also began publishing his writings since 1992 in *Creation and Criticism*, which had also been closely affiliated with Marxist student activism.

As I outlined in Chapter 1, the conversation between Jameson and Paik from 1989 reveals how *Creation and Criticism*’s endorsement of “national literature” was closely associated with discourses of nationalism and anti-imperialism combined with a Marxist approach, but also with the labor movements and anti-dictatorial activism of the 1980s. Understanding the reality of the divided Korean nation as the result of the power struggle between foreign imperial powers during the Cold War era, *Creation and Criticism* shared the prevalent perception of the 1980s which viewed the South Korean state government, with its allied ties to the US military presence, as an obstacle to building a true Korean nation-state and as the major oppressor of *minjung* (the people) nationalism. Simply put, the journal separated the current state from the idea of the nation at large in their criticism of national division. In the case of *Login*, what is interesting is how the (leftist) engineering students in the story, who have in fact mobilized and even exploited these various state projects, criticize the government for not investing more in the fields of science and technology and for not caring enough for the development of “national” technology and science. The characters strongly believe in the idea of techno-nationalism and argue that developing “Korean” satellite technology can be a way to fight against renewed imperialistic projects extending into space in the post-Cold War era.

At the same time, *Login* still contains relevant discussions on the issue of labor exploitation in information society. The engineering students constantly question their statuses as “knowledge workers” in the so-called information society of the novel. In one scene, the

characters have a heated debated on the issue, and one of them associates Alvin Toffler's discussion concerning information society with Samsung's advertising catchphrase of "Human-Tech" and LG's of "Technopia:"[267]

> "So the emergence of the knowledge proletariat means that the class structure of contemporary capitalism has fundamentally transformed after the [recent] scientific and technological revolution. Isn't the manual labor class being extinguished with the further development of automation? The characteristics of the knowledge proletariat is that they are captured by capital only formally unlike the pre-existing labor class, who are fully subsumed by it. As the knowledge proletariat increasingly outnumbers the labor class, they will possess the capacity to become the leading subject of the future revolution with their relatively free and superior intellect and sociocultural passion. My opinion is that the strategies of the labor movement and future society will change as the nature of labor and the structure of the labor class change as technology develops…."
>
> Even before Yunho finished his speech, Ch'ŏl Yun heated up:
>
> "I don't agree with that opinion. That sounds like an extension of technological determinism. It would argue that as technology develops, manual labor will perish and the sole form of labor will be technological labor (*kisul nodong*) that combines intellectual labor with manual labor and I contend that this is an unchanging truth. If you follow that line of thought, it might lead to a conclusion that the existence of classes and class struggle are old songs that will cease to exist."

[267] I already examined this advertisement in Chapter 1. The name of LG research lab is "Technopia," not "Technotopia."

"It doesn't work that way. How fast such a society will arrive is determined by class struggle. The task of the knowledge proletariat lies right there."

"No matter how you put it, it is all the same story. Do you think technological developments are not related to society? The idea that technology is the sole factor that drives all change is already outdated. Do you think horse saddles gave rise to feudalism, printing technology to the Renaissance?"

"These were not revolutions. But science and technology today are about revolution. Think about their speed of development."

"To roughly summarize, I still think your idea is an Alvin Toffler's *The Third Wave* kind of argument. Which says that everything changes in the information society as mechanical technology is substituted with intellectual technology, or that the global society arises and the world gets intimately connected as high technology is developed. The network between humans is developed and harmonious community rises. Something like a technopia. Human-Tech. Technology creates a beautiful world."

[…]

"Just look at the reality of what you call the knowledge proletariat, even. See whether scientists and engineers are really different from the pre-existing labor class, or that it is us struggling to differentiate ourselves from them. Aren't we also laborers? Let's look at if our colleagues are becoming highly skilled intellectual workers, or are they degenerating into fragmented, marginalized proletariats."[268]

[268] Kim Dohyŏn, *Rogŭin* [Login] (Seoul, Ch'angjakkwa pip'yŏng, 1996), 75-77. In English, the title of the novel is *Login*.

The Journal of the College of Engineering often featured similar topics, just like the fictional journal in the novel ran by former and current student activists. At the same time, the journal's advertisement section was full of job postings advertisements of large corporations. One LG Electronics advertisement published in the journal (Issue 32, March 1997) states that it aims to be a "national representative" in the world market. One Samsung advertisement (Issue 3, June 1993) claims that it is "a national (*kungmin*) corporation that challenges the world with technology and human talents (*injae*)." Self-celebrating Samsung's new DRAM technology, the advertisement claims that the company could overcome technological disadvantages by believing in human talents. These human talents were indeed productive. One of the things they produced during this period was *Ch'ŏnjiin*, the famous *hangul* keyboard layout for cellphones that is still being used on smartphones.[269] Although Samsung has earned an enormous amount of profit from *Ch'ŏnjiin,* it initially paid only a tiny reward to its developers and even stole their invention, which led to several lawsuits—the specific details of which remain unknown to the public.[270]

[269] It is now even available on IOS models under the name 10 Key.

[270] The details of these lawsuits remain unknown and quite complicated. Cho Kwanhyŏn, the developer who tried to sell his *Ch'ŏnjiin* layout to Samsung, says that Samsung started to claim that they already had a similar *hangul* keyboard layout in the midst of their negotiation in 1997. Cho says Samsung did have an internally developed, patented keyboard layout quite similar to his own *Ch'ŏnjiin,* but crucial details were different and the Samsung layout wasn't really practical. Samsung never finalized their contract negotiation with Cho, and Cho suspects that they stole his ideas as well as the name *Ch'ŏnjiin* and later changed the details of their keyboard patent based on that. Cho at first lost in the lawsuit but won at the second trial. In the meantime, a former Samsung researcher ("Mr. Choi") also filed a lawsuit against Samsung Electronics for his *Ch'ŏnjiin* layout development in 1998, asking for proper compensation for his invention. Although Samsung won the first trial, they eventually settled with the plaintiff, but the details of the settlement remain secret. Similar lawsuits like these followed. For futher details, see: Song Honggŭn "Samsŏnggwa tat'un ch'ŏnjiin 'ITkigi han'gŭl imnyŏk sisŭt'em'-sŭt'ori *purŏjin hwasal* kat'ŭn yŏnghwaro chejakhanda [The story of *Ch'ŏnjiin,* hangul input system for IT devices fought against Samsung: being made into a movie like the *Broken Arrow*]," *Sindonga*, April 2012; "The *Ch'ŏnjiin* Cellphone Dispute, An Individual Won Against Samsung," *Chosun Ilbo*, June 2, 2006, and; "Samsung Pays Enormous Compensation to the *Ch'ŏnjiin* Keyboard Developer Former Employee," *Maeil Business Newspaper*, April, 20, 2004.

Apple War (1996) provides a detailed portrayal of how both the state and capitalism mobilized young brains by using technological nationalist ideology, especially since the 1980s. The novel starts with the author's dedication to "Richard Stallman, Phiber Optik, Prometheus, and the hackers at Pohang University of Science and Technology and KAIST (the Korea Advanced Institute of Science and Technology)."[271] As this dedication indicates, the story centers upon young hackers at the above institutions who are also the most talented students in the nation when it comes to science, math, and engineering. The author Kim Onyŏng himself graduated from KAIST and went to Science Highschool, a special educational institution built for students gifted in science. Yi Ch'anguk describes how these two institutions were the central national institutions built in the 1980s which aimed to "cultivate advanced scientific manpower in Korea."[272] According to Yi, the first Science High School was founded in 1983 (the year when the state led-project of informatization was officially launched) as a result of the South Korean government's new interest in "high brains (*kogŭp tunoe)*" between 1977 and 1982, as it anticipated the transition from a labor intensive industrial society to a technologically intensive one.[273] The Minister of Science and Technology's above definition of the information industry as "the fourth industry that centers around the brain activity of humans" can be better understood in

[271] Phiber Optik, real name Mark T. Abene, is a hacker who was active in the 1980s and 1990s. The mythic name Prometheus is mentioned in a *Science Dong-A* essay written by the author. Here Kim writes from a hacker's point of view. The narrator states: "Our ancestor was Prometheus, who stole fire and gave it to humans." Kim Onyŏng, "2 haek'ŏrobut'ŏŭi p'yŏnji-wanjŏn chayu oech'inŭn p'ŭromet'eusŭŭi huye [2 A letter from a hacker: The descendent of Prometheus who calls for absolute freedom," *Science Dong-A,* June,1996, 148-151.
[272] Yi Ch'anguk, "Kyŏnggigwahakkodŭnghakkyoŭi sŏllipkwa han'guk kwahagyŏngjaegyoyuk ch'ejeŭi hyŏngsŏng [The establishment of Kyŏnggi Science High School and formation of Korean science gifted education]" (Master's thesis, Seoul National University, 2016). KAIST has a complicated history with various preceding institutions such as KAIS and KIST. KAIST accepted their first undergraduate students in 1986.
[273] Ibid., 26-29.

this context. To summarize, the author Kim Onyŏng and the fictional hacker-students in the novel (they also went to Science Highschool) were nurtured by governmental policies based on the techno-nationalist ideology of the Park Chung Hee and Chun Doo-hwan eras.

However, *Apple War* maintains a critical view toward the techno-nationalism prevalent in South Korean society at the time, popularized by the bestselling novel, *The Rose of Sharon Blooms Again* (*Mugunghwa kkoch'i p'iŏssŭmnida*, 1993), which tells the story of a physicist assassinated by the US for his attempt to develop a nuclear weapon for South Korea.[274] What is ingenious about *Apple War* is that it seems exactly like any other hyper-nationalistic conspiracy theory novel at first glance: the story revolves around the competition between the South Korean and Japanese electronic car industries and their corporate espionage activities, including hacking. However, while the novel makes full use of such nationalistic sentiment in order to arouse the reader's interest, *Apple War* is in fact highly critical of such ideology and the attendant governmental policies. The fictional students lament how they are direct products and casualties of the Fifth Republic's (Chun Doo-hwan regime's) Science and Technology Promotion Act. In fact, it was not difficult to find similar discussions online at the time, as many STEM-majors shared their stories on various BBS boards. Perhaps just as the author of *Login* described, writing became crucial to the lives of scientists and engineers.

Unlike *Login*, *Apple War* especially focuses upon how corporations exploit these young brains based on nationalistic ideology, which had been closely associated with the leftist *minjung* movement throughout the 1980s. *Apple War* begins by describing how a fictional corporation, Osung, which signifies Samsung (Samsung literally means three stars and Osung means five

[274] The novel sold three million copies and was one of the biggest bestsellers of the 1990s. At the end of the novel, North and South Korea are eventually united together and succeed in creating a nuclear weapon that will defend the true, unified nation state of one Korea.

stars), dominates the research environment at KAIST. Symbolically, the students can now only enter their labs by using electronic cardkeys made my Osung. The protagonists in *Apple War* work at two labs founded under the Educational-Industrial Cooperation (*sanhak hyŏmnyŏk*) program, a special initiative that allows big *chaebol* corporations to collaborate with universities. The novel depicts how these programs in fact aim to exploit student labor at a cheap price. Osung, after making billions of dollars in the semiconductor industry (just like Samsung did), attempts to invest in electric car development by relying on these young brains. While KAIST professors agree with the deal as the government cuts their budget, the students are worried as they think the national institution has been encroached upon by corporate interests. As I stated earlier, this novel is ingenious in that it still fully recognizes how the idea of corporations like Samsung representing the nation could sound appealing. The major storyline focuses upon the global corporate war between South Korean and Japanese electric car industries, and the students, although sometimes keenly aware that they are just being exploited by these Korean corporations, still strongly believe in a nationalistic cause as it resonates with their nationalistic, Marxist, *minjung* politics.[275]

To summarize, while it fully makes use of nationalistic sentiment combined with a corporate conspiracy thriller, *Apple War* does not shy away from criticizing how Korean corporations exploit young brains through these same nationalistic sentiments. The ending of the second volume condenses such ambiguity. One of the most important characters in the novel is a young leftist hacker, "White Owl" Shin Hyŏn'gi. Born into a poor family in a fishing village, the boy wonder goes to Science Highschool then KAIST and actively associates himself with leftist

[275] It should also be noted that at the time the tuition at KAIST was free as the students were funded by the government, and the students were highly aware of that debt to the nation, or to society.

student activism in and offline. Later it is revealed that Hyŏn'gi had been hacking Japanese car companies such as Toyota and Nissan for a long while in order to steal technology and information for another Korean corporation, Hyŏn'gwang (which signifies Hyundai).[276] Hyŏn'gi believes stealing from Japanese companies like Nissan, which collaborated with Japanese imperialism, is a rather excusable, even patriotic act. Also, for the price of exploiting his genius hacking ability, Hyŏn'gi demands that Hyŏn'gwang and Osung provide more social contributions while asking nothing for himself. In the end, he is murdered after creating a new virus to attack Nissan, this time under Osung's request. Everyone is convinced that the Japanese corporation assassinated him and become overwhelmed by anger mingled with nationalistic indignation. But it is still not clear who did the killing, and the second volume ends with other possibilities left open. In fact, the text implies that the idealistic young hacker was actually murdered by none other than a *Korean* corporation, either Osung or Hyŏn'gwang, contrary to the characters' beliefs.[277] In many ways, Hyŏn'gi represents the last generation of the leftist student activists of the 1980s, with his innocent and pure idealism and his concern for the poor and the nation. His death also represents the dying breath of that political legacy.

The novel is also interesting because it is full of detailed descriptions of the leftist activism that narrowly survived at KAIST and of the blossoming online leftist activities at the time, sometimes even directly citing the actual discussions that took place online. For instance, the novel cites a fake North Korean BBS board "*Rodongt'el* (labor telecommunication)" that

[276] After being expelled from KAIST for political disputes with a conservative professor, Hyŏn'gi enters Pohang University of Science and Technology and relies on a scholarship from Hyŏn'gwang.

[277] The fictional Osung, upon finding out their partner Nissan betrayed them by hiring an industrial spy, asks the young hackers to take revenge for the sake of "national pride." But in fact, Osung is ready to kill even Hyŏn'gi in case he continues to say no.

pungently criticizes the prevalent discourse of globalization: "The North Korean corporation in the age of globalization- Трактор (tractor) Tire!"[278] One of the characters explains his plan to create an online BBS board for the Korean Confederation of Trade Unions, emphasizing how labor activism should be able to make use of computers, and also creates an information network that is free from governmental and corporate intervention.[279] Another character teaches the members of the taxi drivers' union how to use a *hangul* word processor. "Minjŏng was close to the taxi drivers' union members in Daejeon area. The drivers were afraid of computers at first, but with her kind guidance, now they can freely use *Araea Hangul*, although they are still unfamiliar with image editing."[280] If the previous generation of student activists taught young factory workers to read and write *hangul*, the students in *Apple War* now teach the *hangul* word processor to union members. It is meaningful that it is none other than the *hangul* word processor connecting the students, who are mostly middle class aside from Hyŏn'gi, with laborers in this scene. "*Hangul*," which now means both the script and a particular word processor's product name, serves the important symbolic function of uniting the nation in the 1980s and 1990s as I have previously examined.

Again, *Apple War* is still ultimately skeptical about the kind of solidarity possible based on the ideology of nationalism, especially in the context of a rapidly changing South Korea in the 1990s. If *Login* depicts rather unrealistic young scientists who give up their class interest for their abstract idealism in the end in order to satisfy *Creation and Criticism*'s political view of

[278] Kim Onyŏng, *Sagwachŏnjaeng* [Apple war] Volume 1 (Seoul, Semyŏngmunhwasa, 1996), 26.
[279] Ibid., 163-176.
[280] Ibid., 207.

minjung nationalism and cultural taste,[281] the popular novel *Apple War* offers a more convincing portrayal of the campus culture at the time. In the author's note, the author Kim Onyŏng writes that the protagonists, other than Hyŏn'gi (a student activist and leftist hacker who is now already dead), end up getting jobs at Osung (Samsung), the *chaebol* corporation that does not have a trade union and possibly killed Hyŏn'gi. And if he hadn't been murdered by a big corporation, Hyŏn'gi might have become one of the entrepreneurs who led South Korea's IT industry. In the novel, Hyŏn'gi develops a computer MUD game with his girlfriend Aesu, in a way like Kim T'aekchin who developed *Araea Hangul* in college and who now is the CEO of one of the biggest South Korean video game company's, NCSOFT (1997~), where his wife Yun Songi, who also graduated Science Highschool and KAIST, works as the CSO. Kim also founded Hanme Soft in 1989, which produced the famous typing practice game software, Hanme Typing Teacher, that taught numerous South Koreans how to type throughout the 1990s.[282]

[281] The author of *Login*, Kim Dohyŏn, who criticized middle class students that pursue degrees abroad or study Business Management, borrowing the mouth of a leftist student in his novel to declare: "you earn money not by producing things, but by exploiting others", later changed his major and got another PhD in Business Management at the University of Warwick. Now he is working as a professor of Business Management at Kookmin University.

[282] Hanme Typing Teacher includes several games including "Venice," which begins with a science fictional introduction that says in 2020 A.D., Venice is almost submerged under water. The user must save the last remaining tower that is under attack by word viruses coming down from the sky by typing each virus word.

CHAPTER 4

Djuna and Writing as a Technology of the Self

In spring 2016, the literary magazine *Axt* ignited public indignation and debate with its interview of the famous SF writer known as Djuna (also known as Yi Yŏngsu). Many readers, especially science fiction fans, were angered by the way that the interviewers, themselves renowned authors of "pure literature," disrespected the genre writer and her work. The magazine recognized Djuna's cultural importance by the mere act of interviewing her, but readers of the interview were struck by the interviewers' elitist attitude, which showed distain for Djuna's writing, and the work of other popular fiction writers, in contrast to the pure literature that they wrote. Baek Gahum, one of the interviewers, criticized Djuna for lacking "authorial consciousness." Many took exception to Baek's pontificating on authorship, and were generally displeased with what was perceived as the egotistical and arrogant stance of these *muntan* authors in relation to Djuna. *Muntan* literally means literary circle, but more accurately it refers to the mainstream literary circle supported by the institutional power of prestigious literary magazines and newspapers that would only recognize writers who debuted at literary contests (called *sinch'unmunye)* as *real* authors. One critical reader of the interview acknowledged the significant social and political contributions realist literature and authors have made throughout modern Korean history, but argued that *muntan* authors should not impose their ideas of authorship (such as the social responsibility of the author) on other genres.[283] One individually-

[283] "During the 1980s, the Korean discussion of realism became even more radicalized than it had been in the 1970s, when realism was equated to national literature that emphasized a writer's critical standpoint on social injustices. In the 1980s, the theory of *minjung munhak* (people's literature) saw realism as a literature that was immediately subordinate to the political cause of

operated online SF fanzine, *alt.SF*, commented that Baek dared to "mansplain to a writer what it means to be a writer," and that "Korean *muntan*, with its creative energy exhausted and public influence lost, now is trying to consume SF and other genre novels, like a vampire." In response to this controversy, the editorial chief of *Axt* issued an official apology to the magazine's readers. At the same time, *Axt*'s publishing company threatened to sue *alt.SF* for violating copyright by citing the interview at length. It should be added that while *Axt* is a print magazine, most of the debates took place online, with various domestic and global online platforms such as Twitter serving as the medium of delivery of "readers'" opinions.

I examined in Chapter 1 how literary critic To Jŏngil reprimanded "postmodern" writers such as Yi Inhwa for "assembling" preexisting pieces of literature just like "commercial" SF writers, based on what he called "the logics of the digital." To Jŏngil was assuming that pure literature authors, more specifically, realist writers, create something directly out of reality, rather than relying on the vast tradition of literary convention and pre-existing writing genres and tropes. In a way, Djuna, who started her writing career in an online SF fandom in the early 1990s but was also recognized by mainstream literary institutions such as *Munhakkwa sahoe* (*Literature and Society*), has been quite exceptional in the South Korean literary scene with her keen interest in genre conventions and clichés. In other words, Djuna has questioned the idea of

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the contemporary social movement. The resulting dogmatism engendered internal and external criticism of the rigidly doctrinal discourse of realism." Sunyoung Park, "The Colonial Origin of Korean Realism and Its Contemporary Manifestation," *Positions: East Asia Cultures Critique* Vol. 14, no.1 (Spring 2006): 186. As Sunyoung Park observes, realism's "precipitous decline in the 1990s" and the rise of fantasy literature "challenge[d] the limit of realism" around the same time in South Korea. According to Park, the "quickly growing genre of fantasy literature signals a desire to recover a much neglected aspect of literature — the delight involved in flights of imagination beyond the here-and-now." Park briefly summarizes how such historical change is deeply related to the dismantling of the Soviet Union and the global fall of communism, as well as to the new South Korean civic government's oppression of domestic activism.

the modern "author" as an originator and sole creator of their writing, especially with her conscious effort to clarify her literary precedents as a genre writer.[284] She also has often used the expression and theme of "fan fiction" in her stories, not distinguishing her conscious efforts to meticulously mimic Edgar Allen Poe's prose from her attempts to write fan fiction of the American TV series *Buffy the Vampire Slayer* (1997-2003) or even of female K-pop groups. Djuna's short story, "He's All That," about an autodidactic writer who grew up in an isolated small village somewhere in South Asia reading Shakespeare and watching Hollywood teenage rom-coms without knowing the cultural hierarchy between texts and ends up combining these texts in his eccentric masterpiece, is in a way autobiographical. However, Djuna's unknown identity complicates textual readings that resort back to the *author*. Djuna's legal name is known as Yi Yŏngsu (a gender ambiguous name), but nothing is confirmed about the real identity of this author who has been active online since the early 1990s. Djuna has often said that Djuna is plural, although many suspect the writer is most likely a queer woman who sometimes collaborates with her brother or friends. Here I have decided to refer to Djuna with the pronoun *she*, but *they* might be a more accurate pronoun.

[284] As we will see, while observing Poe's influence on Djuna and also Poe's own understanding of the meaning of literary "originality," the fact that literary work is a product of preexisting literary conventions doesn't have to contrast or conflict with the fact that it is also a product of individual originality. However, there was a specific cultural context where South Korean critics like To Jŏngil struggled to accept ideas like intertextuality and pastiche. Or, to cite Mark Rose from *Authors and Owners: The Invention of Copyright*, "As Northrop Frye remarked many years ago, all literature is conventional, but in our days the conventionality of literature is 'elaborately disguised by a law of copyright pretending that every work of art is an invention distinctive enough to be patented.' […] 'Poetry can only be made out of other poems; novels out of other novels,' Frye continues. 'All of this was much clearer before the assimilation of literature to private enterprise concealed so many of the facts of criticism' (96-97). Frye's comments about the disparity between 'the facts of criticism' and the assumptions underlying copyright were made well before the poststructuralist transformation of the literary landscape." Mark Rose, *Authors and Owners: The Invention of Copyright*, (Mass.: Harvard University Press, 1993), 2.

In a way, hiding her gender identity from the start of her early career was only possible in the specific online writing environment of the 1990s. If we look at the early issues of *Management and Computers*, the first computer magazine founded in 1976, writings by the contributors were strictly demarcated based on gender, a factor that was also closely associated with educational level. The male writers, most of whom were programmers and had finished their university education or more, wrote in a scholastic (if not pedantic), literary writing style, mixing a lot of sophisticated Chinese characters with *hangul*. In fact, that kind of style was dominant at universities even until the 1980s. On the other hand, all women contributors, who were mostly keypunchers with no university degree, wrote in a colloquial, *hangul*-only writing style. Of course, print literature is a different matter because modern Korean literature employed *hangul*-only mostly from its beginning. But the online world is a complicated space where all sorts of writing genres coexist, and a figure such as Djuna likely would not have existed in a different, that is offline, writing environment.

Interestingly, the homogenization of writing practices in South Korea coincided with what scholars term the "feminization of labor," which refers to "women's increased participation in labor markets worldwide since the 1980s" as a result of "the global regulatory environment put in place under the administrations of Margaret Thatcher and Ronald Reagan."[285] If university graduate male employees in Pok Kŏil's *In Search of the Epitaph* (1987) did all the *writing*, fluently mixing *hangul* with Chinese characters, while young female employees did mere manual work such as typing, by the 1990s, everyone came to write in a *hangul*-only style with *hangul* word processors at the workplace, regardless of their gender and educational backgrounds. In

[285] Zach Richer, "Feminization of Labor," in *The Wiley-Blackwell Encyclopedia of Globalization*, ed. George Ritzer (Wiley, 2012), https://doi.org/10.1002/9780470670590.wbeog201

this chapter, I will examine the particular kind of subjectivity that appears in Djuna's stories and connect it to the above process of neoliberalization and changing gender dynamics of the labor market, where the once strict hierarchy between genders started to waver, though it persisted. Such changes were also associated with the problem that the institution of Korean literature had faced since the 1990s, as its highly masculine politics based on the figure of the (male) author began to be challenged.

But the real keyword of this chapter on Djuna is writing *technology*. I connect the above production of new subjectivity with specific techniques of writing, based on discussions of science and technology studies scholars who associate the emergence of modern and scientific subjectivity with "literary technology" (Steve Shapin) or what I simply call writing techniques. In other words, I am interested in writing techniques and literary technology as a kind of Foucaultian "technology of the self." More precisely, this chapter focuses on how Djuna succeeded as an SF writer by consciously mimicking the writing techniques of Western (mostly American) genre writers, and, as a result, successfully created a kind of rational subjectivity not found in most early online SF. I especially focus on Djuna's efforts to mimic Edgar Allen Poe's writing techniques, particularly because that connection enables us to examine the entangled relationships and affinities between literary writing and other genres such as the scientific report and the diary. Poe, who is often referred to as the inventor of science fiction, employed the same techniques of writing he used as a science journalist in his short stories. I draw upon the above discussions of science and technology studies scholars to argue that Poe and Djuna successfully create a rational and modern (disciplined) subject that is a keen observer of their environment by employing writing techniques with mixed genealogies, including the genealogy of scientific writing.

However, it should be emphasized that the kind of rational, scientific subjectivity that appears in Poe's stories is different from that found in Djuna's. For instance, the majority of Djuna's protagonists are women, and this fact deserves careful analysis. Simply put, I am not interested in providing a narrative where South Korea and the East at large faithfully imported a singular modernity from the West, whether that is enabled by importing modern subjectivity, science, or the genre of science fiction. Starting with the early debates among South Korean science fiction fans on how to define science fiction, science, and ultimately modernity, this chapter reveals how these concepts might not be singular but rather plural and even contingent, by drawing upon scholarly discussions concerning multiple *modernities* and *sciences* (following Bruno Latour, Isabelle Stengers, and Thomas Lamarre). Finally, I will demonstrate how the scientific subjectivity Djuna created in her fiction, by mimicking writing techniques of the 19th and early-to-mid 20th century genre writers, was conjoined with the post-Fordist or "postmodern" condition of contemporary South Korea.

What is Science Fiction?: The Early SF Fan Criticism and Debates

Of course, it was the SF fandom that first recognized the value of Djuna's short stories initially serialized online. The first issue of *Happy SF*, a SF mook magazine founded in 2004, begins with an editorial note that introduces Djuna as a writer that occupies "an unrivaled position in the domestic SF market that has been like a wasteland."[286] The editorial provides a brief history of SF in Korea, beginning with the *Idea Club Library* (1971), writing that SF started to be systemically introduced in the 1990s with translations (though somehow omits the history

[286] *Haep'i SF* [Happy SF] (Seoul, Haengbokhan ch'aegilgkki, 2004), 3.

of various SF translations for children published throughout the 1980s[287]). It adds that this was possible because of the fastidious efforts of SF editors, translators, and fandoms, and also the publishers who decided to invest in SF's unproven market value. According to *Happy SF*, even after this short blossoming of SF in the 1990s, the overall quality and quantity of published SF literature have been disappointing. Indeed, it is for this very reason that *Happy SF* was founded with the ambition to change all that.

In a way, as *Happy SF* itself recognized, the unsatisfactory quality of Korean SF at the time was understandable with its very short history. The majority of writers who began their writing online were young amateur writers (many of whom had other occupations, such as students), and with the very limited amount of SF literature, including translations, available in the market, many lacked a deeper understanding of the vast literary tradition of SF. This was one of the reasons that SF translators like Kang Subaek, Pak Sangjun, and Kim Sanghun (the latter two contributed to *Happy SF* as editor) or readers who have the ability to read English and have read a lot of English SF texts in their original language (e.g., Hong In'gi, who also contributed to *Happy SF*, and Djuna herself) had a significant role and presence within SF fandoms. Fans, including Djuna, also translated short SF stories and shared them online, and translation groups were also active in SF fandoms.

As we can see, SF fans with certain understandings and expectations of the genre were not hesitant to criticize SF works that did not meet their standards, whether written by a foreign writer (e.g., American, Japanese, etc.) or a Korean writer. These shortcomings could be found in a bad translation or in the original text itself. One fan wrote on the Ch'ŏllian online fandom board

[287] Several SF collections were published throughout the 1980s by publishers like Hunminsa, Kwangŭmsa, Midomunhwasa, and Sŏngjŏng ch'ulp'ansa, mostly targeting children.

that they could not finish reading *Neuromancer* (1984) because the translation was so terrible. The fan also added that Robert A. Heinlein's *Stranger in a Strange Land* (1961) is even worse than the Japanese SF writer Shinichi Hoshi's "short-short" SF stories because it is so full of the author's ego. Another fan concurs with the first fan's opinion on Heinlein, but adds that the problem with *Neuromancer* is the bad translation, rumoured to be a second-hand translation of a Japanese translation. This second fan adds that the description and prose style of William Gibson is still great. Another fan counters that fans should not judge *Stranger in a Strange Land* based on its Korean translation because it is so poorly translated with a mistranslation in almost every line. The conversation thread somehow evolves into a debate on what is good SF and what is true "hard" SF[288] (for example, can we call Poul Anderson's *Tau Zero* hard SF, with its outdated scientific description?), revealing each fan's different understandings and expectations of the genre. One fan, (ID: HURIZZA) who just bought Heinlein's *The Number of the Beast* (1980) at a bookstore in the US (it seems this fan likes Heinlein just fine), wrote on April 9th, 1995:

> It does not become SF because it depicts space, spaceships, and some sketchy scientific knowledge. Good SF should show [logical] consistency, with solid scientific knowledge at its base. Works that lack these elements might as well be used as *manhwa* (graphic novel), tsk. […] By the way, what should we call the works of space opera writers like E. E. Smith, now Timothy Zahn, and several others? The commonality between *The Galaxy*

[288] According to David Hartwell, "[h]ard SF is about the beauty of truth […] about the emotional experience of describing and confronting what is scientifically true." Also, "Hard SF feels authentic to the experienced reader when the way things work in the story is scientifically plausible." It also "relies on scientific knowledge external to the story." David G Hartwell and Kathryn Cramer, *The Ascent of Wonder: The Evolution of Hard SF* (New York: TOR., 1994), 30-34.

> *Warrior Lensman*[289]*, The Skylark of Space, Star Wars*, and *Star Trek* is that they just added spaceships to the most ignorant, simple, and banal stories. Readers can't stop yawning soon after they start reading these works. The one to one battle between good and evil; why should one care for things like this? The people who write these kinds of stories think that humans will naturally use English in the world a few thousand years later, and that the US will still be dominating the world. Yawn. Why should a spaceship be called *Enterprise*? As for *Star Wars*, why is the system of medieval chivalry more desirable than a single man dictatorship in the political game set across the entire galaxy? One gets angry as the film never answers this question.[290]

For this fan, SF is related to firm scientific knowledge as well as to convincing and interesting thought experiments on social systems and culture. Another fan (ID: SDF7) wrote that "science" in science fiction means not just natural science but also social science. In fact, many fans (likely science and engineering majors, but not exclusively) found the ideal model of SF in the subgenre of hard science fiction or New Wave science fiction (I will address this issue later), while dismissing other subgenres like space opera and other earlier genres, including some of the Golden Age SF, as being riddled with flimsy scientific description and knowledge and lacking

[289] It seems it refers to E. E. Smith's *Gray Lensman* (1939), which was translated in 1987 by Sŏngjŏng publishing company under the series name *Sŏngjŏng Mystery and SF Library* with the above title *The Galaxy Warrior Lensman*. A graphic novel (*manhwa*) with the same title was provided as a magazine supplement for *Student Science* (Haksaeng kwahak) in August 1988. *Gray Lensman* was also adapted to an anime in Japan in 1984 by Kazuyuki Hirokawa and Yoshiaki Kawajiri.

[290] The fan writings cited in this chapter are from the personally saved digital archive that I obtained courtesy of two SF fandom members, Park Sang-joon and Chŏng Sang-don. The archive includes discussions shared on the SF fandom boards of HiTEL and Chollian, but due to the nature of the obtained files, it is not entirely clear which material is from which board. I have decided to translate and cite fans' writings with their IDs (but not names) and the dates of writing revealed in the body text.

philosophical depth. This was related to fans' desires to have SF socially recognized as a serious literary genre that is not just for children, set against the prevalent social understanding of SF as a children's genre or a vulgar popular genre. Many fans shared eye-opening experiences of reading the kind of SF that asks complicated philosophical questions, and argued that so-called mainstream literature cannot really provide the same kind of aesthetic experience that SF can provide.

Yi Sŏngsu, who probably published the highest number of SF novels in the 1990s among these young online writers, was not free from harsh criticism. In February 1993, one fan (ID: sembeot) wrote that, even though he himself is not a woman, he finds Yi Sŏngsu's female characters too submissive and therefore outdated. Another fan (ID: gates) recollected in July 1994 the excitement he felt when he first read Yi's first novel *Atlantis Rhapsody*, the first online novel we discussed in Chapter 1.

> It has been a while now since I learned the name Yi Sŏngsu. It was when I discovered his *Atlantis Rhapsody*, it must have been at least three or four years ago. I learned that there are so many SF fans when I joined Ch'ŏllian's SF fan club (the name at the time was probably Brave New World), and the fact made me a blind follower of SF as I started to believe in the value of SF literature, even if I was unsure about it before. Among the names I learned at the time, the one that impacted me the most was an obscure university student named Yi Sŏngsu, not Asimov, Clark, or Heinlein. I thought that SF is naturally written by foreigners, more accurately, Americans. The fact that a Korean, moreover a Korean in my generation, wrote SF shocked me. Of course, there were other people who wrote SF at the time, but I think Yi was the first who actually got to publish a book. I still vividly remember the memory of coming home with *Atlantis Rhapsody*, which I bought

> after rummaging through all the bookstores in town. I did not think the novel was that great. Its rough structure, the lack of scientific reality, insipid romance…but I could easily forgive this genius (?) engineering student who recklessly jumped into this waste land (of Korean SF). The subsequent book, *The Rose Sonata* (*Woman Q*), made me excited too. And…today, I read Yi Sŏngsu's new novel *Curse of the Sphinx*. And now I am sitting in front of the computer feeling depressed, or possibly angry. I cannot forgive the author like I used to before.

This fan points out that *Curse of the Sphinx*'s poor structure and writing demonstrates how Yi's work hasn't really improved since his first work came out online five years earlier. The fan also criticizes the nationalistic fantasy dominating Yi's novels, where all women fall in love with the Korean (and genius) male protagonist at first sight as if they are in a James Bond film. The fan also points out that the future Korea in *Curse of the Sphinx* is described as the most developed country in the world, with high levels of technology and science, but without any convincing explanation for how this comes to be. Other fans similarly criticized the strong nationalistic ideology of Yi's novels, pointing out that Yi's praise of the *hangul* alphabet is factually wrong or that Yi's anti-Japanese sentiment significantly undermines the quality of his works. One fan (ID: ksesa) wrote in 1994 that *Curse of the Sphinx* simply is not SF. This fan also criticized Yi Manhŭi's *Myth of a Dragon* (1992), writing that, although it is full of great material (ideas), the ideas are just enumerated rather than well synthesized in order to craft a well-structured novel.

Also, to this fan, poorly written American SF novels from the early era of the "Golden Age" (the ones introduced to South Korea as SF for children since the early 1970s) cannot be good models for SF writing either. "Writers are very much mistaken if they think they can write like the cheesy works written in the 1930s, rather than reading and [modeling their work on]

great SF."[291] Of course, there were other voices that attempted to defend Yi's works. One fan (ID: overmind) argued in 1994 that in Korea, where people mostly do not even understand what SF is or denounce it as simply "daydream science fiction" for children, it is true that Yi and other early online writers pioneered the genre, even with their poor writing techniques that just enumerate facts and fail to construct a convincing reality.

In the face of such harsh criticism, Yi Sŏngsu himself responded in July 1994 by distinguishing "literature (*munhak*)" from "*iyagi*," the term that could be translated as story, fiction, or narrative. He writes that he just wanted to write *iyagi*, not "literature." Here, Yi's understanding of literature is specific, limiting the term to mean literature as that which possesses widely recognized aesthetic values with its refined prose or philosophical insights on human life. Stating that he does not think that "all SF should be literature," he claimed that he did not understand why fans refuse to give space to genres like space opera, or undermine Tanaka Yoshiki's novel *Legend of the Galactic Heroes* (1982-1987) or Im Junhong's *The Book of Nemesis* (1992). In the subsequent posting he further clarified his usage of terms. "[W]hen we evaluate science fiction, we mostly use the criteria of literature, or of pure literature to be more exact. The fan criticisms in The Brave New World [online community] try to judge whether a work of science fiction is good or bad using pure literature's standard no matter what." Yi also

[291] This kind of understanding of SF was related to the dismissal of SF graphic novels (*manhwa* and *manga*), anime, popular films, and TV shows, although some fans still found value in these texts, too. Again, for many fans, SF had to be something scientific, ingenious, and sufficiently philosophical. As we will see, what is interesting about the early online South Korean SF fandom is that, although it was indeed deeply related to the masculine culture of STEM major students, it also revealed progressive gender politics, as we can see from the above criticisms concerning Yi's female characters. This fan wrote that Yi should change his approach, for the sake of women's human rights. Most of all, possibly including Djuna, many SF writers, translators, and fans have been women.

claimed that if one uses the standard of "literature," even Hugo Gernsback's *Ralph 124C 41+* (1925) and various other SF classics would be considered bad writing. He hence proposed to distinguish SF literature and SF *iyagi*; if great literary pieces like *The Left Hand of Darkness* or "The Cold Equations" (1954) could be called good SF literature, *Legend of the Galactic Heroes* could be called good SF *iyagi*. To summarize, even SF with no impressive literary value could still be good SF.

Yi is not a structural thinker, and even these two short postings are not logistically consistent and become confusing with his arbitrary definitions of terms like science and literature. For example, he argues that Pok Kŏil's novels might be good literature but not really science fiction because science is not central in his novels. He further points out that Pok's *The Wayfarer of History* does not deal with the temporal paradox caused by space travel technology, or, even though *In Search of the Epitaph* belongs to the alternative history genre, this subgenre is not really a mainstream genre of SF. It is not clear why *Legend of the Galactic Heroes* is SF for him while Pok's novels are not, since science and technology are not central in the former work either (which is like *Romance of the Three Kingdoms* set in outer space, according to another fan's criticism). It is possible that Pok's close affiliation with mainstream literary institutions affected Yi's judgement, but Yi himself does not recognize or mention it here. The above postings demonstrate that Yi was still struggling to define SF himself, like many other fans at the time.

Another fan (ID: lazyfair) counters Yi's argument, pointing out that the problem is not the lack of high literary value of his works, but rather that his writing simply lacks the basic elements that even commercial literature must possess in order to be enjoyable to read.

> Mr. Sŏngsu keeps saying, "Why does everyone look for 'literary' SF? I think commercial SF should be respected, too." I also agree. I like the sophisticated SF of Ursula K. Le Guin or Roger Zelazny, but I also enjoyed and was deeply touched by David Brin's *Startide Rising* (1983). I also like Frederick Forsyth, or Tom Clancy's *The Hunt for Red October* (1984). But I cannot like your works. Why would that be? Is it because your works are not "literary" enough? Of course not. […] I like writings (*kŭl*) that are entertaining to read. But your writings are not that. What is entertaining writing like? It should combine various things like [a good enough] structure, prose style, character development, dialogue, [a good description of] romance and action. It is hard to see any of these things properly developed in your writings. Your writing structure is too simple. Subplots and allusions are not elaborate. Prose? It is not unseemly, but not great either. Character development? Dialogue? Your writing skill is really not good when it comes to these.

Some of these arguments including Yi's are difficult to understand because of their arbitrary definition of concepts (e.g., for the fan "gates," literature means all kinds of narrative literature, but not high literature as in Yi's usage of the term).

Here, I want to highlight two things. The first is Yi's distinction between *munhak* (literature) and *iyagi,* and the second is his distinction between science and literature. As one of the above fans (ID: gates) pointed out, Yi was trying to strictly distinguish science from what he calls *literature* as if they are antithetical, although that is not true. It is certainly clear that there has been a long held and widely spread understanding of science as something completely separate from literature, or even narrative writing (or rhetoric) at large, but this is a common misconception that is not limited to South Korea. But, as scholars of the history of science and

technology and the rhetoric of science illustrate, narrative writing, or what Steven Shapin calls "technologies of writing," plays a crucial role in the construction of science. For instance, there is considerable research concerning the role of pre-existing literary techniques and genres in Charles Darwin's theory of evolution, such as Gillian Beer's *Darwin's Plots* (1983) and Devin Griffiths's *The Age of Analogy: Science and Literature Between the Darwins* (2016). We will get back to this point later in this chapter.

"Science Here Doesn't Mean That Science"

As we can see, aesthetic standards of fans were quite high, as many fans understood SF as a serious genre that provides its own unique aesthetic experiences. Although not all of them directly cited Darko Suvin's name or his theory of science fiction, their understanding of SF was very similar to Suvin's definition of SF as a genre of "cognitive estrangement," a genre that estranges or distances its readers from common assumptions about reality and thus enables them to question these assumptions.[292]

Given this desire for both high aesthetic value and estrangement, what were the characteristics of Djuna's writing that satisfied both the mainstream literary establishment and SF fans? In the round table discussion between *Happy SF* editors (note that all of them had been active in the online SF fandom from early on), SF translator Kim Sanghun pointed out that one of the biggest problems is that too many authors attempt to write SF without *reading* enough SF.[293] "They try to write SF, but because the amount of SF they have read significantly falls

[292] Darko Suvin, *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*, (New Haven: Yale University Press, 1979).
[293] As the discussants themselves recognize, this is also related to the cultural landscape where even the major science fiction works aimed toward an adult readership had only just begun to be translated in the 1990s. The people who participated in the magazine's panel discussion are

short, their writings uploaded online straightforwardly reveal their shortcomings."[294] According to him, the commonality of Djuna and Pok Kŏil, the two writers that this SF magazine concedes as examples of rare success, is that both have read a good amount of SF genre fiction (it should be added that they can and have read English books just like Kim himself), which is a "necessary condition" for writing SF.[295]

Another crucial problem that the editors of *Happy SF* pointed out is the absence of "science" in these fictions. A "mainstream" novelist and genre fiction critic, Song Kyŏnga (she has also written and translated SF), contended that the majority of Korean people are not interested in science or feel that science is a high entrance barrier to the genre of SF. According to her, although readers might not really distinguish between SF and fantasy, such an entrance barrier has resulted in online authors who write less SF and prefer fantasy. Further, Song argues that a few SF writers who managed to pass that entrance barrier are not really interested in cognitive estrangement ("lifting and then putting down the world," or "turning the world upside down" that enables the necessary "cognitive paradigm change," according to Song's own expression), and instead employ trifling fictional scientific innovations to write things like space opera. These characteristics are entangled with, again, bad writing skills; these SF stories usually depict journalist or scientist protagonists who have ridiculous conversations, vapidly explaining the new science and technology that appears in the story.

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mostly SF writers or translators who can read non-translated SF works in their original language, just like Djuna who also used to translate English SF stories online.

[294] *Haep'i SF* [Happy SF] (Seoul, Haengbokhan ch'aegilgkki, 2004), 63. According to Kim, the lack of understanding about genre tradition is also related to the poor literary quality of these works. "They show too much of narcissism. They write because they want to write something, but as I said there are too many people who just start writing [without a careful understanding of the genre or of fiction writing itself], so there aren't many stories online that could even be called a rough draft."

[295] Ibid., 76.

Song also contends that Korean readers thinks science means technology. "The way of thinking about science as it is or as theory [rather than focusing on technology] is not installed in Korean readers' brains. They try to access it through the changes in our life, or by thinking about technology or about how to handle that technology."[296] According to her, this is related to the specific relationship between science and technology in the modern Korean context; unlike Western countries where science and technology have evolved together, in Korea, modern technology was introduced from the outside world and the public has been busy marveling at it as if it is magic, rather than understanding its scientific background or obtaining scientific thinking. She points out, for example, how the time machine in Pok Kŏil's novel is not distinguishable from a magical device in a fantasy novel. Song further elaborates her argument by stating that a kind of literature that does not simply use science or technology in the story but has scientific thinking as its paradigmatic base has not emerged in Korea. In a way, Song's argument is a variation of "Eastern spirit, Western techniques" (*tongdosŏgi*), a famous discourse possibly imported from Japan.[297] I will get back to this point later in the chapter.

Kim Sanghun points out that the Korea Foundation for the Advancement of Science and Culture[298] defines SF as "literature written by scientists, that deals with science, and features scientists." Kim finds the definition of SF as literature written by scientists particularly amusing (if not strange), and here Yi Suhyŏn, an SF writer and translator, concurs with Song's above assessment by pointing out that "science" here does not mean "science" as in hard science

[296] Ibid., 70.
[297] For the similar understanding on science and technology in Japan, see Thomas Lamarre, "Japan," in *The Routledge Companion to Literature and Science,* ed. Bruce Clarke and Manuela Rossini (New York: Routledge, 2011), 501.
[298] The foundation was built by the Ministry of Science and Information and Communications Technology in 1971.

fiction. According to her, it means a scientific way of thinking rather than natural science itself, and Song agrees with Yi's understanding of the term.[299] Therefore, SF does not have to be written by professional scientists (as the above governmental institution defines it) but must demonstrate a scientific mindset, with its elaborate writing techniques firmly rooted in SF genre traditions. Ahn Jinsu, the administrator of the HiTEL SF community at the time, adds that in Korea engineers are treated and seen like "manual laborers (*nogada*)" rather than respected as scientists or intellectuals.

But what is this "science" that is not the science of hard science fiction? It is difficult to know what Song, Yi, and others exactly mean by science, or a scientific way of thinking, in the transcript of this short roundtable discussion. Song's understanding of the relationship between technology and science is not further elaborated either. Still, I want to focus on the rough ideas and keywords shared by the editors (who are also genre fans), like science, technique of writing, and subjectivity (i.e., scientists as not laborer-technicians but as intellectuals who produce systemic knowledge of the world, and possibly the difference between actual scientists and fictional narrators in SF). Martin Heidegger's understanding of *science* (and technology) might provide a useful guide here. William Lovitt summarizes:[300]

> Modern science is for Heidegger a work of man as subject in this sense. Modern man as scientist, through the prescribed procedures of experiments, inquires of nature to learn more and more about it. […] For the scientist's "nature" is in fact, Heidegger says, a human construction. Science strikingly manifests the way in which modern man as

[299] *Haep'i SF*, 72.
[300] This is from the introduction to Martin Heidegger, *The Question Concerning Technology and Other Essays Essays*, trans. William Lovitt (New York: Harper & Row, 1977) that Lovitt translated.

> subject *represents* reality. The modern scientist does not let things presence as they are in themselves. He arrests them, objectifies them, sets them over against himself, precisely by representing them to himself in a particular way. Modern theory, Heidegger says, is an "entrapping and securing refining of the real" (SR (167) […] Here, science (*Wissenschaft*) means any discipline or branch of knowledge […] The intricate system of techniques and apparatus that we call modern technology belongs essentially to this same realm.[301]

To summarize, *science* is deeply related to the fundamental characteristics of modernity, especially the issue of modern subjectivity. Seen in this light, "scientist" could be any modern subject who represents, arrests, and objectifies the world like Robinson Crusoe or his various successors in the genre of SF. As Song and Yi acutely point out, such a subject with modern scientific rationality doesn't necessarily have to be a natural scientist. In fact, many of Djuna's protagonists, who are dominantly women, are not scientists at all. Instead they are history teachers, freelance writers, entrepreneurs of global corporations, and many more.

Here I want to focus on how the editorials' ultimate concern with the poor quality of SF writing is central to the above issues. Simply put, according to these SF fans, the failure of online amateur authors to write SF was related to their poor writing techniques, which in turn were related to not only their lack of knowledge of the SF genre tradition but also to their failure to

[301] Martin Heidegger, *The Question Concerning Technology and Other Essays* trans. William Lovitt (New York: Harper & Row, 1977), xxvi-xxvii. On the other hand, Trish Glazebrook offers a slightly different assessment on Heidegger's usage of the word "science": "Heidegger himself most often uses '*Wissenschaft*' throughout his writing in reference to physics, but also to biology in the late 1920s, In other places, he refers to theology, philosophy, archaeology, art history, and history as *Wissenschaften*. […] Nonetheless, Heidegger is focally concerned with physics, and physics is typically what he intends by 'science,' especially 'modern science.'" Trish Glazebrook, "Why Read Heidegger on Science?" in *Heidegger on Science* (Albany: State University of New York Press, 2012), 15.

create scientific, "modern" subjectivity. To test this assessment, in what follows, I analyze Djuna's conscious effort to closely mimic the writing style and techniques of various genre writers (dominantly American) such as Edgar Ellen Poe enabled her to successfully create a kind of subjectivity that is rarely found in other SF literature from this period (e.g., in Yi Sŏngsu's four SF novels), and to write noteworthy SF stories well recognized by genre fans.

As I already have mentioned, the technology of writing and modern science are in fact closely entangled with one another. For instance, for Lorraine Daston and Peter Galison, writing is important for modern science because it is crucial "in forging a sense of a self," a scientific self that is coherent and well-ordered, a subject who is capable of objective observation. The genre of writing that comes to the fore here is that of diary writing, and the line between personal diaries and "scientific diaries" often becomes blurry in Daston and Galison's discussion. "In the case of weather and natural-history diaries, the diurnal rhythms of the observer were intertwined with the observations, and the observation of the self was often inseparable from the observation of nature."[302] This genre of diary enables "routinely replicating observations," but most of all, creates a strong sense of a coherent self by safeguarding memory. "The integrity of the self, as well as that of scientific observations and the inferences drawn upon them, depended on the continuity, exactness, and amplitude of memory. […] Historians of eighteenth-century inner life have remarked upon the diary as an instrument of self-examination and self-consolidation, a thread connecting yesterday's self with that of today and tomorrow. (…) The self was conscious memory, and memory itself was organized like a diary."[303]

[302] Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2010), 236.
[303] Ibid., 235.

It is no coincidence that *Robinson Crusoe* and many other SF stories utilize the diary form of the travelogue. Michel de Certeau contends that the diary of Robinson Crusoe has been used as a model textbook for future technicians, and the same could be said about SF. Indeed, SF for children started to be translated and published in 1971 South Korea with that exact purpose and with words of encouragement from the Minister of Science and Technology. Certeau writes:

> This novel [Daniel Defoe's *Robinson Crusoe*] combines the three elements I distinguished above: the island that isolates a place of one's own, the production of a system of objects by a dominant subject, and the transformation of a "natural" world. It is the romance of writing. Moreover, in Defoe's work, the awakening of Robinson to the capitalist and conquering task of writing his island is inaugurated by the decision to write his diary, to give himself in that way a space in which he can master time and things, and to thus constitute for himself, along with the blank page, an initial island in which he can produce what he wants. It is not surprising that since Rousseau, who wanted his Emile to read only this book, Robinson Crusoe has been both the model recommended to the "modern" educators of future technicians without voices, and the dream of children that want to create a universe without a father.[304]

As we will see by observing Djuna's and Edgar Allen Poe's writings, "literature" like SF and other "literary" forms like scientific journals and reports in fact have a lot of commonality via shared writing techniques and conventions.

Djuna's Cliché Dictionary

[304] Michel de Certeau, *The Practice of Everyday Life* (Berkeley: University of California Press, 1988), 136.

As many South Korean SF fans concede, Djuna is a well-trained genre writer who very consciously writes within the genre tradition, whether that is science fiction or horror. And she has been very open about her literary and popular culture influences, sometimes straightforwardly stating that she has written "fan fiction." In her "Author's Note" included in *Transpacific Express* (2002), Djuna clarifies her literary precedents and inspirations, explaining how each work either reuses science fictional tropes or mimics certain writing styles and techniques:

> Author's Note
>
> "Transpacific Express" is much indebted to my old key-Pal Alvin Culler, who always cried out for Colosseum's superiority over Horace. "He's All That" exposes my unhealthy love for Hollywood high teen romance films. "Proxy Murder" and "Phantom Hunting" belong to a series of thought experiments on the ethics of revenge. Like "Pentagon" included in *Duty Free Area* (Kungmin sŏgwan, 2000), "Cello" is also written as part of an unfinished, and never going to be completed fix-up novel. If somebody provides "Parasite" as evidence that I am still fond of the metallic images from the old-fashioned 1950s SF, I can't do anything but agree. "Mugungdong" is not written to ethically criticize cloning (why should it be?). "Square Dance" is my first "haunted house" story. "The Puppets" does not have any hidden meaning. The basic settings of "The String" and "Frozen Life" originated from a discussion on time travel and free will that took place in an online chatroom in the mid-1990s. "The Crazy Sky" is an attempt to write a space opera set in a Ptolemaic universe. The content disappeared and only unnecessary explanations remained. It seems a bit more of an explanation on the

> precedents. "Transpacific Express" is a typical Brunellian[305] fantasy, and there's a lot of SF on global scale architecture. Many genre readers will probably think of Harry Harrison's *Tunnel Through the Deeps*. But the work of direct influence here is Erich Kästner's *The 35th of May, or Conrad's Ride to the South Seas*, which imagined the equator as an actually existing thin metal band. "Square Dance" is one of various attempts to mimic Edgar Allen Poe's "The Pit and the Pendulum." The influence of H.P. Lovecraft is inevitable but it is not intentional. The time traveling method in "Frozen Life" is a modification of what Richard Matheson used in *Bid Time Return*, the original novel of *Somewhere in Time*. But Matheson also borrowed the idea from Jack Finney's *Time and Again*. No matter who thought of it first, the idea is also the childhood nightmare I repeatedly had for quite a while. All characters are entirely fictional, except for the fully arrogant history teacher in "Parasite" and the fat tenor and his boyfriend in "The Crazy Sky." The small kingdom in "He's All That" has nothing to do with a particular country in that region.[306]

Let's take a look at "Square Dance," which is included in two of her anthologies, *Transpacific Express* (2002) and *Butterfly War* (1997). In this short story, the narrator (likely a woman as are many other protagonists in her stories) falls into a pit in a 2500 year old ancient ruin with her husband (who is called "captain" by others), a native guide, and an archaeologist. They realize that the hole on the ceiling they fell through has mysteriously disappeared, and when they throw a rock toward the ceiling, it just disappears. Electricity runs thorough the walls of the room they are confined in. The husband and the archeologist provide a hypothesis that the pit is a machine

[305] She is referring to Isambard Kingdom Brunel, a British civil engineer from the 19th century.
[306] Djuna, *T'aep'yŏngyang hoengdan t'ŭkkŭp* [Transpacific express] (Seoul: Munhakkwa chisŏngsa, 2002), 309-311.

created by the ancient civilization, but the narrator is not interested in that unproven theory since their knowledge about the ruin is not any more superior than hers. Soon they discover a very peculiar looking skull and skeleton in the room, and the anthropologist suggests that the pit must be an alien spaceship, adding: "It wasn't long ago that John Campbell Jr. was writing terrific fiction about this kind of thing. Lucky for us, it seems that all the monsters are long gone."

As they start to touch things in the room to find an escape, the ceiling suddenly brightens up from "a cylinder of soft light that covered 80 percent of the room. […] The boundary between that cylinder and the rest of the room was perfectly distinct. I felt as if an actual transparent object were occupying the room."[307] As they enter the cylinder of light, brighter light and strange sounds fill the room, and they feel sharp pain and are captivated by a strange power. "I felt like somebody had grabbed me and was snapping my arms and legs apart just for fun of it. Step by step, we plodded to the middle of the room." At this point, the narrator loses consciousness.

When she wakes up, she realizes that her husband is already dead and everyone's body is still captivated by the mysterious power, with their limbs strangely twisted and moving "like insects." The narrator thinks that it is as if her body has a mind of its own. She also finds herself speaking: "Suddenly I spoke. Not in my own voice, or in any human language, the voice seeming to rumble from somewhere deep in my throat, one moment crying and groaning, growling and singing the next." Soon enough she regains her cool and starts to observe the room and the mechanism of their forced movements in order to escape the pit. "Instantly my mind relaxed. The dread that we were being manipulated and the sadness of my husband's death had vanished. I gathered myself together, much like I used to, reading mysteries back in our study."

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[307] Djuna, "Square Dance." trans. Larissa McNeil, *Acta Koreana* Vol. 18, no 1 (Jan 2015): 270. Original text: Djuna, *T'aep'yŏngyang hoengdan t'ŭkkŭp* [Transpacific express] (Seoul: Munhakkwa chisŏngsa, 2002), 160.

The rest of the story is full of her close observation, calculation, and reasoning in detail. She is like a scientist who observes, keeps records, makes and tests a hypothesis, fails, and starts her observations and experiments all over again. Or she is like a fictional detective, possibly Auguste Dupin. She soon concludes that her and others' bodies (including the corpse of her husband) are enacting the last fight of the long gone aliens in the crashed spaceship, and the archaeologist is playing the role of the killer alien, already having stabbed her husband (against the archaeologist's own will) and soon about to stab her as well. She calls these movements a ballet.

> One. Two. Three. Four. Five. After five iterations, I felt I had gotten our group dance steps down. Each repetition was a ballet lasting some 15 minutes. The archeologist was partnered with the guide, and my husband with me. We growled at them, they growled at us, we puffed up our chests, they puffed up theirs, but after that, the inevitable next step was violence. The ballet climaxed with the archeologist brandishing his knife at me and my husband cutting in between us. At that point the ballet would end and again we would march back to the starting point. […]
>
> Since I could now predict our movements, my next step was to disentangle us.
>
> For starters, I tried to visualize the organisms we were mimicking. They must have been structurally different from us. I saw them as a kind of animate three-legged table, with two arms and a head coming out the top. From their point of view, we were missing a limb. That difference in features was essential. Unless our physical structures were identical, there had to be some part of us that was beyond the control of the mechanism. For example, I could suppose that my ability to move my eyelids meant they lacked an analogous organ.

> By compartmentalizing my body, I was able to determine which parts of myself I could control. As it turns out, I had use of all of my toes, both middle fingers, much of the musculature of my face, except for the area around my lips, some of my neck muscles, and a portion of my lower back. Most crucial was that I had use of those middle fingers. They had eight fingers—an even number—and perhaps that meant they likewise controlled an even number of ours and not the odd, fifth finger.
>
> Plan A was to beat the repetitions at their own game. Because our dance movements were simple and mechanical, if errors were to be made, then I could suppose they would continue to accumulate. If that were so, even amid the puppet-like iterations, there was a possibility that the relative locations of the dancers could be altered. […]
>
> I had to change my plan. If it was impossible to accumulate small errors, I had to set up a big one to get this over with. But under my present constraints—only my two middle fingers were capable of motion, and that barely—how could such a change be triggered?[308]

As Djuna already clarified in her Author's Note, this short story is a rewriting of Edgar Allen Poe's "The Pit and the Pendulum" (1842). The narrator of Poe's horror story is a prisoner of the Spanish Inquisition who wakes up in a pit with a razor-sharp pendulum swinging back and forth on its ceiling. The narrator discovers that the pendulum is slowly descending, obviously designed to kill him. Like "Square Dance," the story is also full of realistic, detailed descriptions of the pit and the mechanism of the fictional machine. Also, like the narrator in Djuna's story, the prisoner closely observes, calculates, and predicts each movement of the machine and devises ways to escape from his destined death. While Djuna's narrator uses other people's bodies to free herself

[308] Djuna, "Square Dance," 271-273. Original text: 163-166.

from the trap, Poe's prisoner uses rats in his pit. Compare Poe's writing techniques below with Djuna's cited above:

> Looking upward, I surveyed the ceiling of my prison. It was some thirty or forty feet overhead, and constructed much as the side walls. In one of its panels a very singular figure riveted my whole attention. It was the painted figure of Time as he is commonly represented, save that, in lieu of a scythe, he held what, at a casual glance, I supposed to be the pictured image of a huge pendulum such as we see on antique clocks. There was something, however, in the appearance of this machine which caused me to regard it more attentively. While I gazed directly upward at it (for its position was immediately over my own) I fancied that I saw it in motion. In an instant afterward the fancy was confirmed. Its sweep was brief, and of course slow. I watched it for some minutes, somewhat in fear, but more in wonder. Wearied at length with observing its dull movement, I turned my eyes upon the other objects in the cell. […]
>
> Observing that I remained without motion, one or two of the boldest [rats] leaped upon the frame-work, and smelt at the surcingle. This seemed the signal for a general rush. Forth from the well they hurried in fresh troops. They clung to the wood -- they overran it, and leaped in hundreds upon my person. The measured movement of the pendulum disturbed them not at all. Avoiding its strokes they busied themselves with the anointed bandage. They pressed -- they swarmed upon me in ever accumulating heaps. They writhed upon my throat; their cold lips sought my own; I was half stifled by their thronging pressure; disgust, for which the world has no name, swelled my bosom, and chilled, with a heavy clamminess, my heart. Yet one minute, and I felt that the struggle

would be over. Plainly I perceived the loosening of the bandage. I knew that in more than one place it must be already severed. With a more than human resolution I lay still.

Nor had I erred in my calculations -- nor had I endured in vain. I at length felt that I was free. The surcingle hung in ribands from my body. But the stroke of the pendulum already pressed upon my bosom. It had divided the serge of the robe. It had cut through the linen beneath. Twice again it swung, and a sharp sense of pain shot through every nerve. But the moment of escape had arrived. At a wave of my hand my deliverers hurried tumultuously away. With a steady movement -- cautious, sidelong, shrinking, and slow -- I slid from the embrace of the bandage and beyond the reach of the scimitar. For the moment, at least, I was free.

It is worth noting that Yi Sŏngsu and many other early online SF writers also used SF tropes of ancient civilizations or alien spaceships. Djuna's success here lies not in her choice of these science fictional *themes* and subjects, but in her efforts to adopt and adapt literary techniques of other genre writers (e.g., horror). Here, Djuna excellently adopts Poe's prose style that became a model of "scientifiction" or science fiction.[309] In fact, she largely shares Poe's interest in genres like SF, horror, and detective (mystery) fiction, although it would be anachronistic to say Poe, who is often considered as a pioneer of these modern genres, was interested in these later-invented genre categories. In Poe's fiction, the above genres share a similar characteristic: the creation of a modern subject who is a careful and rational observer

[309] Hugo Gernsback wrote in 1926: "Edgar Allan Poe may well be called the father of 'scientifiction.' It was he who really originated the romance, cleverly weaving into and around the story, a scientific thread." In the same essay he also wrote: "By 'scientifiction' I mean the Jules Verne, H. G. Wells, and Edgar Allan Poe type of story—a charming romance intermingled with scientific fact and prophetic vision. [2] For many years stories of this nature were published in the sister magazines of *Amazing Stories*—Science, Invention and Radio News." Hugo Gernsback, "A New Sort of Magazine," *Amazing Stories* 1, no.1 (April 1926): 3.

(whether they are a scientist, a doctor, an Argonaut, or a detective). Djuna's SF, horror, and detective stories (often these genres are intermingled together in one story) wonderfully capture this quality through her elaborate, often realistic writing techniques that create illusions of verisimilitude. As I argued above, these literary techniques are closely associated with the production of a certain subjectivity, that is, a subject who is a reliable and objective observer.[310] It is meaningful that the SF fans mentioned previously criticized Yi Sŏngsu's SF novels' strong nationalism entangled with inflated male ego (similar to James Bond movies, according to one of them). On the other hand, Djuna's dominantly female (and often queer) protagonists do not care for ego boosts and, instead, are very rational, calculating, and even cold observers and planners. Again, these fictional characters don't have to be scientists or engineers in order to make a convincing protagonist of SF, as the editorials of *Happy SF* rightfully point out.

But again, what do Poe's horror story and his literary techniques have to do with SF or with "science" itself? What can we infer from the literary techniques of the two pieces above (for example, simple sentences and detailed, minute description of reality)? Have these techniques exclusively been used in literary fiction?

In "Pump and Circumstance: Robert Boyle's Literary Technology," Steven Shapin examines the technology of "the virtual witnessing" that was employed by the early modern British natural philosophers in order to establish "experimental *matter of fact*."[311] In the face of rising empiricist thought which challenged the previously rigid distinction between "knowledge" and "science" from "opinion" around the mid-17th century, natural philosophers employed

[310] Both of the above protagonists are hardly "impartial" but are rather very much "interested parties," but because their own lives are at stake in the story, the reader is led to believe their assessments and observations of their environments are truthful.
[311] Steven Shapin, "Pump and Circumstance: Robert Boyle's Literary Technology," *Social Studies of Science* 14, no. 4. (Nov 1984): 481-520. Emphasis in original.

various *technologies* in order to produce a consensus among the community of experimental philosophers on what could be agreed upon as "matter of fact." Shapin explains that not only the material technologies of experiment devices, but also detailed pictorial representations of scientific experiments in experimental reports and essays, as well as literary technologies of writing, all played a crucial role in the production of such a consensus. He especially focuses on how the natural philosopher Robert Boyle struggled to devise "proper scientific prose," employing various literary techniques that could "convey circumstantial details" and "give the impression of verisimilitude."[312] Another important attribute of such elaborate scientific prose was convincing its readers that the narrator-experimenter was a "provider of reliable testimony," who would not distort facts and could contribute to establish trustworthy *matter of fact*. In order to do this, Boyle aimed to create the figure of the "modest man" in his writing (or "the author as a disinterested observer"), "a man whose narratives could be credited as mirrors of reality."[313] Shapin describes one of the literary techniques that created such a subject effect:

> Another technique for displaying modesty was Boyle's professedly "naked way of writing." He would eschew a "florid" style; his object was to write "rather in a philosophical than a rhetorical strain." This plain, puritanical, unadorned (yet convoluted) style was identified as functional. It served to exhibit, once more, the philosopher's dedication to community service rather than to his personal reputation. Moreover, the "florid" style to be avoided was a hindrance to the clear provision of virtual witness: it was, Boyle said, like painting "the eye-glasses of a telescope."[314]

[312] Ibid., 493.
[313] Ibid., 494.
[314] Ibid., 495.

In Chapter 2 we saw how "economical" prose whose rule is brevity and conciseness became the new norm of writing in the 19th century against the backdrop of the capitalist corporate environment. Here we see a different genealogy of such a "simpler" writing style in the context of the history of scientific writing in Europe. One might argue that there is indeed a close affinity between these genres of corporate memorandums and scientific reports in the sense that both are "informative genres" aimed at conveying information. Here I want to focus on the ways in which scientific writing is also interconnected with modern literary genres such as adventure fiction, horror fiction, and especially science fiction.

John Tresch's study on Edgar Allan Poe provides a useful account concerning the close affinity between scientific writing and fiction writing (and also journalistic writing): "Yet in Philadelphia, 'the Athens of America,' Poe perfected his use of the rhetoric and the styles of reasoning of the sciences to establish his own credentials and to provide criteria by which his genius would be recognized. Working as an editor for Philadelphia magazines with national readerships, he made a name through both fiction—first collected as *Tales of the Grotesque and Arabesque*—and scientific journalism." As Tresch reveals, these two different writing genres (fiction and scientific journalism) shared a particular set of writing styles and techniques. In "Extra! Extra! Poe Invents Science Fiction!" he claims that "[by] making facts of physical philosophy the basis and central concern of an adventure tale, Mr. Poe has invented science fiction."[315] Tresch connects Poe's activities as a scientific journalist, such as his false article on a fictional flying apparatus ("described in minute and technically plausible detail") that successfully deceived readers as an actual scientific report ("The Balloon Hoax"), with his

[315] John Tresch, "Extra! Extra! Poe Invents Science Fiction," in *Cambridge Companion to Edgar Allan Poe* (Cambridge: Cambridge University Press, 2002), 113.

fiction that later came to be understood as early science fiction.[316] Elsewhere Tresch writes: "Following all the conventions of the scientific report, with a detailed, exact journal of one of the voyagers, the article was (according to Poe, at least) widely believed, though it had never happened."[317] We can easily connect this assessment with Daston and Galison's above account regarding the importance of the scientific diary and the formation of a coherent self who is a reliable observer. Poe's short horror story, "The Facts in the Case of M. Valdemar" (1845), in fact takes "the form of a medical case report, transcribing an experiment (conducted by a "P") to keep a mesmerized man alive beyond the point of physical death."[318] According to Tresch, Elizabeth Barrett Browning wrote to tell Poe about the "credulous reception" that the fictional short story received in England,[319] similar to the American reception of "The Balloon Hoax" originally presented as a true story in *The Sun* newspaper.

Neoliberalism and the Figure of the Modern Subject

I have already briefly examined above South Korean SF fans' plural understandings of science. Here it should be noted that Poe's interest in "science" is different from what we would usually imagine today. Tresch's study on Poe largely relies on the scholarly work of Isabelle Stengers, Bruno Latour, and Stephen Toulmin concerning the empirical maelstrom of the19th century, where competing understandings of modernity and modes of knowledge were hashed out. It was during this period when "a recognizably modern notion of science and nature was

[316] "Countless unsuspecting readers were duped by Poe's report, which claimed the paper's front page with the large-type headline, 'Astounding News! By Express Via Norfolk! Signal Triumph!' The article described in minute and technically plausible detail the flying apparatus allegedly invented and flown by well-known aviator Mr. Monck Mason." Ibid., 113.
[317] John Tresch, "'Matter No More': Edgar Allan Poe and the Paradoxes of Materialism," *Critical Inquiry* 42, no.4 (Summer 2016): 887.
[318] Ibid. 887.
[319] Ibid., 887.

coalescing" (for instance, it was only 1833 when William Whewell first coined the term "scientist"). However, even after this particular understanding on modern science "reached hegemonic status by the middle of the twentieth century," it was constantly threatened both by its internal blind spots and by external challenges."[320] According to David Cahan, the Scientific Revolution of the early 18th century, although significant, still meant that "'science' was just beginning to assume its modern meaning and scope; this understanding emerged more definitely between the late Enlightenment and the early twentieth century."[321]

Cahan argues that the "natural philosophy" of the early 18th century (not yet a "science"), "by then shed its Aristotelian metaphysics, rejected occult qualities in explanation, [and] adapted new standards of evidence and experiment."[322] However, as the above scholars show, these changes were not consolidated even in Poe's era, when things like phrenology and mesmerism were still widely believed. Tresch connects Poe's hoaxes with the infamous publication of *Vestiges of the Natural History of Creation* (1844), a book on the popular history of the universe written by a then-unknown author. The book raised various controversies of a different nature. Among them were criticisms from "established scientists" like US botanist Asa Gray who regarded the book as "a scandal against both religion and the consensus of the wise," and which undermined "the professional establishment of science."[323] Note that even for these established

[320] Ibid., 870. Here Tresch is referring to: Latour's *We Have Never Been Modern* (Cambridge, Mass., 1993); Paul Forman, "On the Historical Forms of Knowledge Production and Curation: Modernity Entailed Disciplinarity, Postmodernity Entails Antidisciplinarity," *Osiris*, no. 1 (2012): 56-97; and Paul Erickson et al., *How Reason Almost Lost Its Mind: The Strange Career of Cold War Rationality* (Chicago: University of Chicago Press, 2013).
[321] David Cahan, *From Natural Philosophy to the Sciences: Writing the History of Nineteenth-Century Science* (Chicago: University of Chicago Press, 2003), 4.
[322] David Cahan, *From Natural Philosophy to the Sciences: Writing the History of Nineteenth-Century Science* (Chicago: University of Chicago Press, 2003), 4.
[323] Tresch, "'Matter No More': Edgar Allan Poe and the Paradoxes of Materialism," 888-889.

scientists at elite institutions, religious cosmology and science were not strictly demarcated from one another.

According to Tresch, Poe's essay "The Philosophy of Composition" (1846) keenly reflects upon the controversies surrounding *Vestiges,* especially its investment in scientific materialism. The famous writer and "skilled typesetter," here, plays upon "the double meaning of 'composition'—both the creation of new forms and the material assembly of type," conjuring up the "scientific" debates surrounding 19th century materialism in his discussion on literary writing:

> Does poetry arise from the divine spark of inspiration, or is it simply the material recombination of marks on a page, metal letters in a compositor's stick, following universal, mechanical rules? Yet the article reaches beyond poetry; its self-contradictions fuse multiple sides of the debate surrounding the *Bridgewater Treatises* and *The Vestiges of the Natural History of Creation*. Are mechanical law and material arrangements sufficient to explain the world, or is a supernatural, miraculous, and free creator required to direct its ongoing realization? Is matter dead, enlivened only by the will of God and the eternal soul, or does it contain its own powers of animation?[324]

Tresch describes how Poe, who was "drilled in mathematics, navigation, and military engineering along lines set by the École Polytechnique,"[325] and indeed keenly interested in science, also well represent the epistemological maelstrom of the era when modern science as we now know it was not entirely consolidated. In his "essay on the material and spiritual universe" dedicated to Alexander von Humboldt, Poe criticizes figures like William Whewell, William

[324] Ibid., 890.
[325] Ibid., 879.

Herschel, and Alexander Bache who "aimed to stabilize 'the scientific method' and the authority of institutional science," mocking "the singular fancy that there exist *but two practicable roads to Truth*," "either that of the ram 'Aries Tottle,' creeping along the '*a priori* path of axioms, or Hogg [Bacon], crawling through induction from facts and the Scotch snuff of detail.'"[326] Rather, Poe believed in the importance of "leaps." "What he called 'true Science' instead made its greatest advances through 'seemingly intuitive leaps.'"[327]

I am explaining this history at length in order to point out the *plurality* of what we often simply (and wrongly) understand as a *singular* modern science originating in the West. The conversation between the *Happy SF* editors, which argued that South Korea might have technology but not science, is one example of such a singular concept of science. Suggesting the need to pluralize terms like science and technology ("not science but sciences, not technology but technologies") Thomas Lamarre argues that such a singular view presumes, "in the West, unitary experience and linear development of both science and technology," and also "a unitary Eastern or Oriental worldview or cultural paradigm."[328] He points out that when Meiji Japan's intellectuals went to France and Britain to learn "science," they found out that science in Europe (and the US) was being dramatically transformed as we have examined so far.[329] For instance, the American physicist Alexander Bache, one of the figures Poe criticized above, "conducted 'science as a business.'"[330] Lamarre cites Nakayama Shigeru's account on this matter:

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[326] Ibid., 896.
[327] Ibid., 896. Emphasis in original.
[328] Thomas Lamarre, "Japan," in The Routledge Companion to Literature and Science, ed. Bruce Clarke and Manuela Rossini (New York: Routledge, 2011), 497.
[329] "[P]ragmatic applications, institutionalization, and disciplinization reinforced the sense of an underlying unity, in the form of a pragmatically mechanistic stance," Lamarre, 500.
[330] Tresch, "'Matter No More': Edgar Allan Poe and the Paradoxes of Materialism," 882.

> While science in 19th century Europe was still in the main a cultural activity, rather than a practical means of achieving economic growth (as is well illustrated by the issue of the theory of evolution), the Japanese in the late 19th century held perhaps the most modern image of science: it was exclusively utilitarian and pragmatic, planned to enhance the national interest if not purely for profit-making, specialized and compartmentalized.[331]

Lamarre points out that Heidegger's understanding of technology and science (which I briefly examined above) reflects this historical transformation.[332] But even Heidegger's theorization of science has been challenged due to the very plurality of the sciences. Writing that "[t]he sciences simply do not unify easily,"[333] Trish Glazebrook writes that Heidegger's understanding of science born out of his focal concern with physics may "seem outdated, given recent moves to displace the paradigmatic function of physics in favor of alternative conceptual models."[334]

The reason I am detailing the discussions concerning the plurality of the sciences at length here is to clarify the connection I argue for between Djuna's writing and Poe's writing. Although I am interested in how Djuna successfully created a "modern" and scientific subjectivity by reproducing the writing techniques of authors like Poe, Djuna's characters and Poe's characters live in very different worlds, with their "scientific" rationality situated in entirely different social contexts. For instance, it is only natural that, although Djuna shares

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[331] Shigeru Nakayama, *Academic and Scientific Traditions in China, Japan, and the West*, trans. J. Dusenbury, (Tokyo: University of Tokyo Press, 1984), 207, quoted in Lamarre, 500.
[332] "As Martin Heidegger would argue, the formulation of knowledge on the basis on problem and solution constitutes a metaphysical position, insofar as everything is evaluated on the basis of optimization. He called this 'merely technological behavior' (Heidegger 1954)." Lamarre, 501.
[333] Trish Glazebrook, "Why Read Heidegger on Science?" in Heidegger on Science (Albany: State University of New York Press, 2012), 14. "A totalizing conception of even natural science is inherently problematic, given diversity of method."
[334] Ibid., 15.

Poe's interest in new technologies that radically change the world, she is not really interested in creating *plausible* technical machines that could deceive the reader of her fiction. After all, Djuna is not living in an era where, for example, an idea such as mesmerism in "The Facts in the Case of M. Valdemar" (1845) is still widely believed by readers. More often it is straightforwardly clear that she is describing fictional technology in her stories, just like the alien spaceship trap in "Square Dance." In her stories, people suddenly lose the ability to see each other ("Disappearing People"), or a child patient with mysterious psychic powers transforms the world entirely with her drawings ("Crazy Sky"). Instead, I argue that Djuna's aesthetics are an aesthetics of absurdity; world-changing events in her stories feel absurd both to her protagonists and to her readers, abruptly imposed by ungraspable external forces (and, in this sense, Song Kyŏnga's above argument that Koreans had long experienced modern technology as magic may be correct!).

Nonetheless, the female protagonists of Djuna never give up and continue to navigate the changed world, not with a desire to systemically grasp the world but rather to survive in it. They keenly observe and navigate the given phenomena and their environment, make a hypothesis, fail, and finally succeed and therefore endure. The narrator in "Square Dance" who rather coldly uses her husband's dead body as a tool in order to escape the alien trap is a good example. In "Where is Your Dad?" (2007), two little girls kill their abusive father, only to find out that the father has turned into a zombie. These two smart girls tactically survive the cold adult world that does not really care for working class children without a legal guardian, and even endure the subsequent zombie apocalypse that their zombie father brings into being by biting other people. The protagonist of *Teeth of the Dragon* (2007), a novella about a psychic who has the body of a

young girl and crash lands in an uninhabited and eerie planet, can in fact be read as another Robinson Crusoe story, except with a gender flip.

What is interesting is that male characters in Djuna's fiction appear as mirror opposites of the female ones; often their deaths are related to their inflated male egos that distinguish them from their female counterparts. In "Transpacific Express," (2000, first published online) the first short story in Djuna's anthology with the same title (2002), a smart and calculating female successor of "the International Railway Company" or "the empire" rather ruthlessly crushes her opponents with her intelligence. Her husband is a former political prisoner from Manchukuo who is against her belief that her independent, "for-profit corporation" free from political intervention has demolished national barriers and therefore made the world into a more equal place.[335] At the end of the story, the female CEO reveals her human "weakness" by saving a little girl from religious fanatics, but that doesn't change the fact that she is a capitalist who mercilessly punished the Koryŏ people for their "foolish" attempt to nationalize their railway system. One can easily read the fictional nation of Koryŏ (the name of a Korean kingdom from which the name "Korea" was derived) and the narrator's former political prisoner husband (who loves to preach) as a representation of the nationalism and political activism of 1980s South Korea. Written from the viewpoint of the female multinational corporate mogul, the story is more sympathetic to her politics and ideas. But this story is rather exceptional among Djuna's stories

[335] Djuna, "Sŭk'weŏ taensŭ," in *Transpacific Express*, 12. Larrisa McNeil's translation for this is a mistranslation. She translates the original as below: "More specifically, about the international transport facilities that, owing to the influence of individual for-profit companies, political circles, and monopolization, had shattered the barriers to their relationships and transformed the world into a more equal place."

in the sense that many of her protagonists represent the weakest members of society or are just ordinary citizens.[336]

In Djuna's stories, rational and calculating subjectivity is not combined with the modern sciences that appeared in Poe's stories or other various early SF stories. Instead, the subjectivity of Djuna's characters is situated in the socio-economic context of South Korea since the 1990s, where discourses of globalization and the neoliberalization of society were closely enmeshed. Rather than natural philosophers or mid-19th century scientists and engineers, Djuna's "scientific" protagonists cleave much more closely to technocrats and highly educated minions of the new socio-economic regime who struggle to navigate and grasp their rapidly changing environment and strive for individual survival (although female solidarity is also often present). As for her stories set in contemporary South Korea, many of the protagonists are ordinary women with various jobs who seek to survive in the world they live in. Although they are intelligent and usually well educated, the discrimination they face as women workers is implied, if not explicitly described, in these stories.

Jesook Song's "Between Flexible Life and Flexible Labor: The Inadvertent Convergence of Socialism and Neoliberalism in South Korea" (2009) can provide a useful historical background to contextualize the kind of subjectivity that appears in Djuna's short stories since her online debut in the early to mid-1990s. Here, Song investigates "the historical emergence of

[336] At the same time, I believe this short story is representative of Djuna's politics shown in her early works, especially because of its stark and intentional contrast to the politics of realist national literature. Although Djuna has strictly distanced herself away from the recent rise of the neoliberal feminism online, there's some affinity between her early feminist politics (of the 1990s and the early 2000s) and neoliberal discourse gaining momentum during the same period. This story best showcases that affinity, and it is meaningful that the title of this story is chosen as the title of her anthology. I tried to focus more on the liberating side of her politics in this chapter, but this is an issue I would like to ponder upon more.

liberal socialism," that is, "socialism with a strong stance against the state and social power over individuals," by "observing experiences of three single independent women who embodied liberal socialism through the democratization movement towards neoliberalization (1987—2007)."[337] Song explains how these former leftist activist women learned to embody a new kind of subjectivity required in the "post-Fordist" system of capitalism and in a job market that is highly discriminatory against women and becoming increasingly precarious.[338] According to Song, this new subjectivity demands an "entrepreneurship of the self," which means viewing one's own self as an object of constant "self-management (*chagi kwalli*)" and cultivation.[339] Note that Daston and Galison's earlier account on diary writing focused on the production of the disciplined self, but in the context of modern science's consolidation. Here, such a strict discipline of the self is newly combined with the logics of neoliberalism and post-Fordism.

Writing Women: Feminization of Labor and Feminization of SF

Song's focus on female laborers helps to explain how the labor conditions of neoliberalism are significant, especially if we connect this idea to what various scholars call the "feminization of labor." Coined by economist Guy Standing (1989, 1999), the term is "used to describe the generally observed phenomenon of women's increased participation in labor markets worldwide since the 1980s" "as a result of the global regulatory environment put in place under the administrations of Margaret Thatcher and Ronald Reagan."[340] Zach Richer elaborates:

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[337] Jesook Song, "Between Flexible Life and Flexible Labor: The Inadvertent Convergence of Socialism and Neoliberalism in South Korea," *Critique of Anthropology* 29 no. 2 (2009): 139.
[338] Ibid., 149.
[339] Ibid., 150.
[340] Zach Richer, "Feminization of Labor," in *The Wiley-Blackwell Encyclopedia of Globalization,* ed. George Ritzer (Wiley, 2012), https://doi.org/10.1002/9780470670590.wbeog201

> Standing (1989: 1077) identified two broad changes to economic policy during this "decade of labor deregulation" that made labor markets more conducive to the participation of women. First, new restrictions on collective bargaining rights challenged the continued viability of the single-breadwinner model. The dual effects of rising job insecurity and depressed wages strained household budgets to the point where women not in the labor market were forced to search for employment. […]
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> Whereas increasing the level of women's employment is generally viewed as a major objective of gender empowerment, Standing acknowledged that deregulation placed many women in precarious positions. The promotion of labor market "flexibility" increased the global integration of formal and informal labor, with many manufacturing jobs being subcontracted to neighborhood-based ateliers in the developing world (Balakrishnan & Sayeed 2004). These positions targeted the most vulnerable laborers, often women, who could be hired for less than the prevailing wages to work under dubiously safe conditions.[341]

At least since the 1980s, South Korean women started to face a contradictory reality. More and more women started to go college and finish higher education degrees. Their majors, which previously concentrated on fields like literature, music, or home economics, started to

[341] Ibid. Zach continues: "Since Standing's formulation of the concept, the feminization of labor has come under a great deal of criticism by feminists. Elson (1999) pointed out that Standing's analysis betrays the assumption of a male standard in employment: rather than the labor market undergoing positive changes and favoring the employment of women over men as the name might imply, 'feminization' has arisen out of threats to some of the gendered structures that had previously ensured labor markets as male preserves. Furthermore, Standing has been criticized by Beneria (2003) and many others as attributing the employment gains of women exclusively to structural conditions of the macro economy rather than acknowledging decades of contributions by women's social movements to the empowerment of women worldwide."

diversify.[342] Hideyo, the protagonist of *In Search of the Epitaph* (1987), wants his middle school daughter to major in business or economics just like himself, against her own wish to study French literature like her mother. He is also keen to teach her good English. Hideyo thinks the world is changing with an increasing number of women getting good, white-collar jobs at places like banks. In 1989, Korean WomenLink (*han'guk yŏsŏng minuhoe*) published a book titled *The Reality and Activism of Office Worker Women*. The book explains the growing interest in female office workers among labor and feminist activists:

> The first is that the number of female office laborers has been rapidly increasing. The number of female office workers was only about 30,000 in 1963, but by 1987 the number became 696,000. Also, the ratio of women among the total number of white collar workers was around 31% in 1987 (according to the Second Special Research Report on the Employment Structure), and if we limit the statistics to the low-ranking white collar workers with manual duties, the ratio is even higher, with 55% of jobs filled by women workers in 1985 (Sŏ Kwanmo, *A Research on Class Structure of Korean Society*).[343]

It should be noted that there has been a hierarchy between the kind of office work jobs available to women with no higher education degree and with a higher education degree, and the above passage clearly demonstrates that the latter kind of job was still scarce. *In Search of the Epitaph* in fact describes that reality very well, with very few university-educated women (only two in the entire novel) and several female office workers who have only middle school or high school

[342] Cho Sŏnguk, the first woman professor at the Economics department at Seoul National University, recalls that there were only a handful of female students at her department in the 1980s. The gender ratio still remains unbalanced, especially for faculty members, but the situation has greatly changed since then with an increasing number of female students.
[343] Han'guk yŏsŏng minuhoe, *Samujik yŏsŏngŭi hyŏnsilgwa undong* [The reality and activism of office worker women] (Samujik yŏsŏngŭi hyŏnsilgwa undong) (Seoul: Sŏkt'ap, 1989), 11.

degrees. Still, Hideyo expects that the former kind of job will be increasingly available for his young daughter's generation, which is one of the reasons he decides to hire a bright female university graduate by persuading his colleague, directly stating that this is for their daughters' future. This new generation of educated women would "write" like their fathers, hopefully both in Korean and English, instead of manually copying and typing documents like the young female secretaries in the novel.

What Hideyo fails to grasp is that the nature of "white-collar" jobs that used to be almost exclusively available to men was also rapidly changing. It is true that more and more women started to get "white collar" jobs around this time, but as Standing and Song observe, the job market itself became more and more precarious. It is interesting that all the protagonists in Kim Dohyŏn's *Log In* (1996) are men, while the few female characters who appear in the novel are there only as love interests. The novel describes how one of the protagonists loses his beloved girlfriend because of his precarious economic status, and characters often complain about how women are not available to them because of their economic and social status. In a way, these male STEM major students lamenting over their diminishing social and economic status was also entangled with the slow advance of the "feminization of labor" described above. This term refers not only to the phenomenon where more women were obtaining white collar jobs (Kim Dohyŏn wrote that his female character in *Apple War* will eventually get a job at Samsung), but also to the process whereby the nature of white-collar jobs have been transformed; these positions are no longer exclusively for male workers who are the sole breadwinners of their households. In fact, nationalism is so important for Kim's male characters because it promises to restore their wounded masculinity. On the other hand, while Kim's protagonists *lament* over the changing reality that no longer promises them the kind of jobs and social status that used to be available to

men (to borrow from their own words in the story, they are becoming just another instance of the numerous "knowledge workers"), Djuna's female characters are largely far more interested in successfully *surviving* the given economic, social, and technological reality, although they are still very angry over the irrationality of a world that continues to discriminate against women and other minorities. Many characters of this online writer "without a face" represent the countless other faceless, white-collar women with brains but without proper or substantial economic and social status, like the three women in Song's research.

It is telling that, as *Axt* documents, Djuna has distanced herself from the norm of the literary "author" that used to dominate the South Korean literary scene in the 1970s and 1980s, a time when male authors used to be *the* representative figures of "Korean Literature." But that tendency began to radically change in the 1990s, as more and more talented women writers appeared and dominated the market. In December 1995, *JoongAng Ilbo* wrote: "The literary world of 1995 South Korea is characterized by feminization and globalization."[344] But this "feminization of Korean literature" has often been regarded as a serious "problem" by numerous critics and writers, as a phenomenon that signals the wavering importance of "literature."[345] In other words, as readers who criticized *Axt* acutely pointed out, the ideal figure of the literary "author" still remains masculine, contrary to the actual reality of literary writers.

Let's return to Djuna's open and deep concern with genre tradition, preexisting writing techniques, and themes like "fan fiction." Djuna often situated herself as a fan, a reader, *and* a

[344] "Sodŭk1manbul sidaeŭimunhwa: 2.munhak-mundanŭi yŏsŏnghwa·segyehwa tturyŏt [The culture in the era of 10,000 dollar per capital income: The clear feminization and globalization of literature]," *JoongAng Ilbo*, December 16, 1995.
[345] There have been numerous discussions on this issue of feminization of Korean literature, especially of writers. For example, see: So Yŏnghyŏn, *Olppaemiŭi sup': sahoebip'yŏng sŏnŏn* [The forest of owls: A manifesto of social criticism], (Seoul, Munhakkwa chisŏngsa, 2017).

consumer, rather than as simply an "author," without really distinguishing high and low art forms. It should be noted that Djuna is also a renowned film critic who has been active online and offline, running her famous personal website, "Djuna's Film Scribbling Board." The submenus of the website include "The Cliché Dictionary," whose introduction states: "This section collects miscellaneous clichés in films or related to films. Huh? What is cliché you ask? (Sigh) Read the below essay." In the essay Djuna writes:

> Etymology. Yes, let's start with the origin of this word. Cliché was originally the 19th century typesetter's term. Cliché meant a typeset premade by typesetters at the time so they can easily insert them into the letterpress. By the end of the 19th century, the word started to be used to signify its [current] universal meaning, in other words, hackneyed phrases, thoughts, or ideas. […] For many great genre writers clichés are appealing too. They freely alter these lovingly banal formulas or faithfully stick to them to the extreme. The playground is big enough!"[346]

But while the "skilled typesetter" (according to John Tresch) Edgar Allan Poe well understood the importance of preexisting rules and conventions (or clichés) yet was more concerned with an author's (in fact, his own) "originality" in the way he "combined" the preexisting material,[347] Djuna is more interested in identifying these clichés as a genre writer, as a critic, and as a fan.

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[346] http://www.djuna.kr/movies/cliches_0000.html

[347] "Admitting that there is little possibility of variety in mere rhythm, it is still clear that the possible varieties of metre and stanza are absolutely infinite, and yet, for centuries, no man, in verse, has ever done, or ever seemed to think of doing, an original thing. The fact is that originality (unless in minds of very unusual force) is by no means a matter, as some suppose, of impulse or intuition. In general, to be found, it must be elaborately sought, and although a positive merit of the highest class, demands in its attainment less of invention than negation. […] Now, each of these lines taken individually has been employed before, and what originality the "Raven" has, is in their combination into stanza; nothing even remotely approaching this has ever been attempted. The effect of this originality of combination is aided by other unusual and some altogether novel effects, arising from an extension of the application of the principles of

This might explain her keen interest in introducing various SF works to the fandom from early on. She has introduced various women SF writers online, including: Charlotte Perkins Gilman, Octavia E. Butler, Marge Piercy, Joanna Russ, Anne McCaffrey, Marion Zimmer Bradley, and C. J. Cherryh. In fact, fans (a significant number of whom were women) began to translate various female New Wave science fiction writers like Joanna Russ, Ursula K. Le Guin and Alice Bradley Sheldon (James Tiptree, Jr.) at the same time that the major male SF writers like The Big Three started to be first introduced for adult readership. In 1994, the HiTEL fan translation group The Brave New World translated and published *The Masterpieces of World Women's Literature I and II* (1994, Yŏsŏngsa), a collection of feminist SF literature. The collection included short SF stories written by Connie Willis, Suzy McKee Charnas, Suzette Haden Elgin, Pat Murphy, Karen Joy Fowler, Joanna Russ, Lisa Tuttle, James Tiptree, Jr., and Ursula K. Le Guin, with one exceptional male writer John Varley (his piece "Options," which describes a society where gender is a flexible concept). The collections also included an essay titled "SF and Feminism." Exactly because the SF fandom in South Korea was newly blossoming, the characteristics of the South Korean SF fandom has been quite different from the American SF fandom, with talented female fan-translator-writers like Song Kyŏnga, Yi Suhyŏn, and Chŏng Soyŏn actively participating in and out of online fandoms from early on, introducing and translating various SF works without gender bias. As the debate surrounding *Axt* reveals, this is why SF as a genre has been associated with progressive gender politics in South Korea, although the influence of its masculine origin remained. Such was possible in the new social condition in which an increasing number of women began to attend university and actively

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rhyme and alliteration." Edgar Allen Poe, "The Philosophy of Composition," *Graham's Magazine*, April 1846.

started to write around this period, especially in the "*hangulized*" digital writing space where one could also conceal his or her gender like Djuna did. Cultivating their writing techniques with various activities like reading, translating, and everyday online writing, these women started to form their unique subjectivity as rational, self-governing knowledge workers in the rapidly changing socio-economic and techno-cultural environment of contemporary South Korea. These female "knowledge workers" would include various technocrats like Chŏng Ŭn'gyŏng, the current head of the Korean CDC, and also numerous faceless and underpaid female operators and technicians who support the techno-economic foundations of the country and the globe at large.

CONCLUSION

"Life and Death of a Science Kid (*Saiŏnsŭ k'idŭŭi saengae*)" is an online essay that first appeared on Seoul National University's online BBS board in 1994 and then circulated widely among STEM students throughout the 1990s.[348] It is written from the point of view of a boy, born in 1968 (similarly to Yi Sŏngsu and many other early online SF fans), who dreams of becoming a scientist and engineer (*kwahakkisulja*) as a youth, and is fostered as a source of brainpower under the new science and technology policies of the Chun Doo-hwan government. The boy grows up to face a reality where he is just one of many precarious laborers exploited by corporations, far different from the national hero scientists such as Lee Whisoh (Benjamin Whisoh Lee, 1935~1977), whom his young self aspired to take after. The "science kid" and his colleagues' girlfriends therefore dump them, and they have difficulties in the marriage market, as prospective brides' parents are also skeptical of their future careers. The narrator compares himself to the protagonist of the South Korean film *Life and Death of the Hollywood Kid* (1994), as both have lived in a total fantasy world.

In this dissertation on Korean techno-fiction I have constructed a media archeology of Korean information technology in the 1980s and 1990s, the time period when numerous "science kids" were mobilized for the state project of informatization, as the above essay testifies. My focus has been on the issue of writing technology, a kind of information technology, and one of the major symbolic activities said to constitute the human. I started my study with the "postmodern" scene, in which South Korean society was facing a neoliberal turn, in anticipation of the coming information society. However, I also have shown how the project of improving

[348] Landau, "A Life and Death of a Science Kid (*Saiŏnsŭ k'idŭŭi saengae*)" https://kldp.org/node/67733 Retrieved May 4, 2020.

communication tools such as writing technology, which was a crucial part of the informatization process of this era, remains very much a *modern* dream, inseparable from the idea that scientists, linguists, engineers, and also *the nation* can control and master their technologies and tools. The first online writer Yi Sŏngsu's SF novels well capture that modern and also masculine fantasy, just like the various technolinguistic enterprises I have examined, such as Kong Pyŏngu's dream to "modernize" the Korean writing system (or, to use his own favorite expression, make it "scientific") with his *hangul* typewriter or his young successors' endeavor to develop a *hangul* word processor. At the same time, I've also shown how Yi's generation of young male scientists and engineers felt despair in the face of a new reality where they were increasingly becoming cogs in the global capitalist machine as "knowledge workers," unlike the older generation of technocrats who proudly led the industrialization of their nation. In contrast to this male-centered lament, Chapter 4 told the story of the emergence of a rational, scientific, and feminine subjectivity in SF and neoliberal South Korean society at large, during the period when South Korea democratized (post-1987), following the definitive end of the long decades of authoritarian rule under Park Chung Hee and Chun Doo-hwan. This period also saw the hypermasculine culture of the Cold War military regimes (where men were mobilized to be "martial and productive"[349]) and the old model of state-led industrialization weakened, against the backdrop of globalization and neoliberalization.[350] In fact, one of the implicit threads of this dissertation is the issue of changing gender norms and power dynamics, which are entangled with the neoliberal, postmodern "turn" with which I started my discussion.

[349] Seungsook Moon, *Militarized Modernity and Gendered Citizenship in South Korea* (Duke University Press, 2005)
[350] Samuel S. Kim, "Korea's Globalization (*Segyehwa*): A Framework for Analysis," in *Korea's Globalization*, ed. Samuel Kim (NY: Columbia University Press, 2000), 1-28.

Along with this summary, I want to discuss in this conclusion what this historical narrative that I have constructed so far can offer, to further our understanding of the contemporary techno-cultural scene and the philosophical questions related to it. Simply put, what happens when "information technology" or "communication technology" ceases to center on human's symbolic acts, especially language, unlike the historic scene I have examined? How do we continue the above discussions of gender, subjectivity, and modernity here? The online landscape of South Korea has significantly changed since the period I have examined in this dissertation. With the ever-improving capacity of the PC, smartphones, and network technology, the written communication that once dominated early online space has become somewhat less significant in the new media landscape, where, for example, image-centered media forms proliferate. Moreover, as Mark B. Hansen shows in *Feed-Forward*, new information technologies such as micro-computational sensing, which gather information outside of human perception, are becoming increasingly important. For example, think of how Facebook "micro-temporally" gathers astronomical amounts of user behavior data from its 1.79 billion users every micro-second. No human can perceive such a large volume of data, much less with such speed. Hansen therefore argues that what he calls "twenty-first-century media" demands the redefinition of philosophical notions like "sense" and "experience," consequently challenging "the subject-centered account of modern philosophy."[351] In other words, micro-computational sensing technology, which characterizes the contemporary and near future media, disputes yet again the model of human as master subject and technology as his tool to control. There is also the emerging challenge of AI.

[351] Mark B. N. Hansen, *Feed-forward: On the Future of Twenty-First-Century Media* (Chicago; London: University of Chicago Press, 2015), 61.

Changes in theories of communication can give us more insights here. In *The Meaning of Meaning: A Study of the Influence of Language upon Thought and of the Science of Symbolism* (1923), C. K. Ogden and I. A. Richards used the term communication interchangeably with "a language transaction." Ogden, the linguist and the inventor of BASIC English, and Richards, the famous literature scholar who mentored Marshall McLuhan and coined the term *Feedforward* at the Eighth Macy Conference on cybernetics, wrote: "A language transaction or a communication may be defined as a use of symbols in such a way that acts of reference occur in a hearer which are similar in all relevant respects to those which are symbolized by them in the speaker."[352] But after the invention of "information theory" by Claude Shannon in the 1940s, against the backdrop of World War II and the early Cold War, communication theory faced its "grandest moment"[353] and subsequent turn. In 1949, Warren Weaver expanded the meaning of the term:

> The word communication will be used here in a very broad sense to include all of the procedures by which one mind may affect another. This, of course, involves not only written and oral speech, but also music, the pictorial arts, the theatre, the ballet, and in fact all human behavior. In some connections it may be desirable to use a still broader definition of communication, namely, one which would include the procedures by means of which one mechanism (say automatic equipment to track an airplane and to compute

[352] John Durham Peters, *Speaking into the Air: A History of the Idea of Communication* (Chicago: University of Chicago Press, 1999), 14. BASIC is the acronym for British American Scientific International Commercial. John Durham Peters wittily writes that each word "represents an empire."
[353] Ibid., 22.

its probable future positions) affects another mechanism (say a guided missile chasing this airplane).[354]

John Durham Peters comments: "Weaver takes us from the preferred communication situation of the semanticists (one mind affecting another) through language and the fine arts to human behavior (the ride is getting bumpy). Then he 'broadens' his definition to include Korean War-vintage military technology."[355] Here I want to go back to the current landscape of information technology in South Korea, where indeed all kinds of *human behaviors* are a significant part of the information circulating between various technological devices. In *Beautiful Data: A History of Vision and Reason Since 1945* (2014), Orit Halpern starts her discussion on "the impact of cybernetics and the communication sciences after World War II" with the new "commodity city" of Songdo located in the Incheon Free Economic Zone, South Korea. In Songdo, which is in fact a "massive infrastructure of conduits containing fiber optic cables," there are installed numerous "interfaces" that sense the movements of its human residents everywhere, gathering massive amounts of data that will turn into another commodity to be transacted in the global market. It should be noted that the Incheon Free Economic Zone is a global project created as a result of the collaboration between the South Korean government, "a Boston-based real estate development company" Gale, and Cisco Systems.[356] Halpern writes:

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[354] Warren Weaver, "Recent Contributions to the Mathematical Theory of Communication," in *The Mathematical Theory of Communication*, by Claude E. Shannon and Warren Weaver, (1949; Urbana: The University of Illinois Press: 1964), 1.

[355] Peters, *Speaking into the Air*, 25. Note that Kong Pyŏngu started to develop his *hangul* typewriter in when Weaver was writing above essay (1949), and the US military was waiting for its completion during of Korean War. The official document that declared the armistice was typed with his typewriter in 1953.

[356] Orit Halpern, *Beautiful Data: A History of Vision and Reason Since 1945* (Durham: Duke University Press, 2014), 2.

> Cisco's planners envision the word as interface, an entire sensory environment where human actions and reactions, from eye movements to body movements, can be traced, tracked, and responded to in the name of consumer satisfaction and work efficiency. (whatever these terms may denote, and they are always ill defined and malleable, as are, perhaps not incidentally, "intelligence" or "smartness").

According to Halpern, these engineers even spoke "candidly of transforming the laws of South Korea to allow the construction of medical grade networks to allow genetic and other data to flow from labs in the home to medical sites in order to facilitate the proliferation of home-health care services."

In May 2020, as the entire globe is struggling with the COVID-19 pandemic, the scene Halpern describes should ring with more familiarity in Western society, as the South Korean government's successful disease control measures have been widely reported by the media. Many have praised the preventative control methods employed by the South Korean government, which include the effective national distribution of face masks, an efficient virus testing system, and the tracking system that traces the recent movements of coronavirus patients and distributes this information to every citizen residing in that area. Using technologies such as surveillance-cameras, smartphone location data, and credit card purchase records, the Korea Centers for Disease Control and Prevention (hereafter KCDC), in collaboration with various tech companies and other technocratic institutions, have effectively traced Covid-19 patients. Unsurprisingly, criticism and even sour assessment of these measures followed, as instantiated in the *New York Times* article "As Coronavirus Surveillance Escalates, Personal Privacy Plummets."[357] In one

[357] Natasha Singer and Choe Sang-Hun, "As Coronavirus Surveillance Escalates, Personal Privacy Plummets," *New York Times,* March 23, 2020.

Washington Post article, historian Gregg A. Brazinsky claims that there are "faint echoes of South Korea's authoritarian past" in South Korea's surveillance measures, an argument echoed in other commentary.[358] Brazinsky also associates South Korean pharmaceutical companies' swift response to the government's request to develop COVID-19 test kits with "a pattern of state-private sector partnership in the service of the nation that was pioneered by South Korea's authoritarian ruler Park Chung Hee during the 1960s." Branzinsky contrasts South Korea's "state-led economic development" with the "American style of free-market capitalism," although I think he is being anachronistic here, as Park Chung Hee's modernization was modeled after the US, before the rise of neoliberalism. At any rate, Brazinsky is still more careful and nuanced than many other shallow observations that also employ culturalist arguments (i.e. Asians wear masks and embrace surveillance measures not just because of their authoritarian political system but also because of their traditionally obedient culture). The article continues: "But Moon [the current South Korean president Moon Jae-in], who was imprisoned during the 1970s for protesting Park Chung Hee's authoritarian rule, has been careful to keep his policies within the confines of democratic accountability."

Brazinsky also points out that there has been a separate process of government-led medical interventions in South Korea. Referring to John P. DiMoia's *Reconstructing Bodies: Biomedicine, Health, and Nation-Building in South Korea Since 1945* (2013), he points out the different understandings of the relationship between the state, medicine, and bodies that have developed in South Korea compared to the US. In South Korea, where a universal health care system is well established and various kinds of medical services are easily accessible even to the

[358] Gregg A. Brazinsky, "South Korea is Winning the Fight Against Covid-19. The U.S. is Failing," *The Washington Post*, April 10, 2020.

vast majority of the working class, there is a culture where citizens feel comfortable with health measures that could have been regarded as "invasive" in a different time and society. For instance, in *Bodily Matters: The Anti-Vaccination Movement in England, 1853–1907* (2005), Nadja Durbach demonstrates how the state's modern public health measures, including compulsory vaccination, were strongly resisted by the working class in 19th century England, as these health measures were seen as the state's "intervention in the private lives of its citizens" as well as an infringement of the values of a liberal society.[359] Michel Foucault would argue that citizens living in the modern welfare state with a well-established medical system have internalized what he calls the "medical gaze," self-governing their bodies and fully embracing these modern medical measures.[360] Similarly, many residents of Songdo seem fine with the micro sensor technologies installed even at home, understanding them to be devices aiming to improve their health and welfare (as these technologies monitor their heart rates, etc.), rather than invasive surveillance technology. In other words, these interfaces were understood as a "positive" feature of the commodity they chose to purchase. Note that Songdo's technologies are designed by none other than Cisco, a tech company located in the US. In fact, Songdo's infrastructure should seem familiar to many middle-class Americans who wear Apple watches or Fitbits around everywhere.

Let us return to the philosophical questions surrounding the issue of technology, human subjectivity, and ultimately politics. In the Introduction, I pointed out that Michel de Certeau's work, which came out in 1980, was also a political reaction to the ascendancy of cybernetics

[359] Nadja Durbach, *Bodily Matters: The Anti-Vaccination Movement in England*, 1853–1907 (Durham, Duke University Press, 2005), 6.
[360] Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, trans., Alan Sheridan (New York: Vintage Books, 1994)

theory, which also challenges the traditional notion of human subjectivity. In fact, Hansen's above observation on 21st century media as technology that undermines human subjectivity is not a new one. I also showed that de Certeau appropriated the dichotomy between "the powerful" and "the weak" in order to problematize Foucault's theorization of "technology of power," where Foucault understands power as "opaque power that has no possessor, no privileged place, no superiors or inferiors."[361] According to Foucault's theory, no human (doctors, technocrats, capitalists, etc.) can be a true master subject in charge of the given system or technology.

If we look at contemporary South Korea, under the "democratic" Moon Jae-in administration, it seems that the majority of citizens well embraces the COVID-19 control measures, maybe as a necessary-evil but not as something invasive, "authoritarian," or "anti-democratic." In fact, many South Korean citizens see these measures, which effectively saved many lives, positively, even with national pride. Foucault would see what he defines as "power" fully at work in this scene; another uniqueness of his definition of power is that he understands it as positive and "productive," in contrast to a "wholly negative, narrow, skeleton conception of power" that is purely repressive. According to Foucault "there was a veritable technological take-off in the productivity of power" during the 17th and 18th century, and now power can be "good," inducing "pleasures" and the proliferation of "knowledges."[362] To summarize, the above South Korean scenes of Covid-19 control and Songdo are nothing traditionally or culturally *Asian*, but are very much modern, even futuristic, in the sense that such technological regimes are likely to become more pervasive around the globe.

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[361] Michel de Certeau, *The Practice of Everyday Life*, trans. Steven Rendall (Berkeley: University of California Press, 1984), 61.
[362] Michel Foucault and Colin Gordon, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977* (New York: Pantheon Books, 1980), 119.

Let us move to another media assessment of the "successful" governmental responses to COVID-19. In a *Forbes* "Editor's Pick" article titled "What Do Countries with The Best Coronavirus Responses Have in Common? Women Leaders," Avivah Wittenberg-Cox, the "CEO of 20-first, a global gender-balance consultancy," numerates various successful COVID-19 control measures taken by women leaders around the world, such as the Prime Minister of Iceland Katrín Jakobsdóttir's policy to provide free coronavirus testing to all its citizens.[363] She also instituted a "thorough tracking system that means they haven't had to lock down or shut schools." According to this article, this is a prime example of a woman leader making good use of "tech." And after the subheading "Tech," another subheading "Love" follows:

> Generally, the empathy and care which all of these female leaders have communicated seems to come from an alternate universe than the one we have gotten used to. It's like their arms are coming out of their videos to hold you close in a heart-felt and loving embrace. Who knew leaders could sound like this? Now we do.

Interestingly, here the state's tracking system and medical intervention into citizens' bodies are associated with so-called feminine values, such as love, empathy, and care, and described as "beneficial." If some still see the oppressive, even authoritarian power (associated with the legacies of male dictators such as Park Chung Hee) at work in the same disease control measures, this *Forbes* contributor sees a positive value represented by feminine, even maternal care. Indeed, the Foucauldian sense of "productive" power is also at work here. Although the fact that the leaders discussed here are from the West (Germany, Finland, Iceland, Denmark, Norway, and New Zealand), with the exception of Tsai Ing-wen of Taiwan, may have influenced

[363] Avivah Wittenberg-CoxC, "What Do Countries with The Best Coronavirus Responses Have in Common? Women Leaders," *Forbes*, Apr 13, 2020.

this fully positive assessment, I want to focus on the different mechanisms of *power* entangled with the issue of gender in our era. Something to ponder is that Hillary Rodham Clinton employed the notion of "*smart* power," which describes a "form of statecraft" that "transcend the simple-minded distinction between 'hard' and 'soft'," along with feminism, as her major political doctrine.[364] What does this historic scene where female liberal politicians, female CEOs, or magazines such as *Forbes* talk about the caring and soft characteristics of female leadership and "statecraft" tell us?

In fact, the current director of the KCDC Jung Eun-kyeong (1965~) is also a woman. She is the official who makes the most important briefings on COVID-19 for the nation, and the current voice of the South Korean technocrats, scientists, and engineers who are fighting the pandemic. Some might say this female technocrat is the face of the state when it comes to COVID-19 control. When a little boy at the current COVID-19 Q&A session for children asked the head of the KCDC how he could grow up to become like her, Jung modestly answered with a kind and smiling face that her work is done in collaboration with a lot of people, including doctors, nurses, biologists, statisticians, and administration experts. In a way, she in fact fulfilled the dream of the "science kid" (they are peers, born in 1965 and 1968, respectively), although what we see here is not the old fantasy of a genius individual scientist as the hero of the nation and humanity. Jung and her colleagues' (as she emphasizes) method of science and governmentality is situated in a different historical context from that of the authoritarian male dictators of the previous era.

Let's go back to the issue of communication. The *Forbes* article claims that women leaders have "communicated" empathy and care. But how? The "communication" methods that

[364] James Traub, "The Hillary Clinton Doctrine," *Foreign Policy*, November 6, 2015.

have been implemented by the KCDC are many. For one, they send text messages containing information about patients via smartphones. The vast amount of written information (factual and false) on COVID-19 is accessible online, from the KCDC website to Twitter to chat apps like Kakao Talk. All of these are possible because of the very technology whose media archaeology this dissertation has constructed, that is, the technology of *hangul* digitization and informatization. This scene is also possible because the majority of citizens, men and women, have acquired basic digital literacy along the course of industrialization. At the same time, the *information* circulating in this communication channel is not all open to nor controlled by citizens themselves. As we have seen, what is being circulated is not just information *written* by people, but also the information sensed and collected by various technological devices such as smartphones, credit cards, and surveillance cameras, outside of people's perception. In other words, what is at work here is not the *communication* defined by Ogden and Richards (as "a language transaction" between human subjects), but *communication,* as newly defined by Warren Weaver, as something that involves human behaviors and even machinic interactions. In this new concept of communication, humans are in fact indistinguishable from animals and machines.[365] If we follow Foucault's theory, what is being governed in the above scene is bodies, rather than citizens as rational, master subjects. But again, bodily control measures, combined with such new technologies of communication, are also positive, productive, and beneficial. As I have noted, the KCDC's measures have saved many lives, just like South Korea's national healthcare system. South Koreans welcome these interventions, as shown in the recent high approval rating of the president and his party.

[365] Peters, *Speaking into the Air*, 24.

One might argue that this scene is nothing new, as the modern state has always gathered information about "bodies" based on census accounting. Throughout this dissertation I indeed have constantly moved back and forth between a sense of rupture (say, of the postmodern) and ongoing modern genealogies. Yes, the juridical model of power still matters. The nation-state still matters, as we have witnessed in the recent political upheavals in Europe and the US, as well as at this moment of the pandemic. I have also showed how the state played a crucial role in the informatization of South Korea. And yes, Mark B. Hansen's observation on "21st century media" is in fact an old refrain. And although it has been widely agreed that South Korean society took its own "neoliberal turn" as recently as the 1990s, it would be an exaggeration to say that it shed the legacies of the authoritarian period entirely. Throughout my research, I have struggled with the curious fact that Kim Jae-ik (1938~1983), the monetarist, "neoliberal" technocrat who is widely referred to as the person who actively initiated the national informatization project, also played an important role in the introduction of the universal healthcare system in South Korea under the authoritarian Chun Doo-hwan regime.[366] This figure, who was very close to Reagan administration technocrats and adored by foreign banks for his ideas that were influenced by American neoliberal economists (such as the Chicago School), is also known as a representative technocrat, full of love for his nation, and that claim is not entirely groundless. What do we make of this seemingly contradictory scene? For now, I would say that South Korea's current pandemic control measures can be analyzed in many different ways: one might say they show that the welfare-state in South Korea (which had been ironically consolidated also throughout the dictatorial regimes) is alive and well, but they could also be understood as a sign of the

[366] Kang Kyŏngsik, *Kukkaga haeya hal il, haji maraya hal il* [The things that the state should do, and should not do] (Seoul: Kimyŏngsa, 2010)

ascendance of a neoliberal technological regime that requires "smart," willing, effectively self-governing subjects equipped with high and low technologies such as smartphones and masks.[367] I would like to focus more here on the latter aspect, with a worry over the ongoing conversations on the privatization of medical care in South Korea. For instance, Samsung Economic Research Institute has consistently lobbied the government with reports that undervalue the efficiency of the state medical care system in favor of a private insurance system. Nevertheless, the global stock market is now witnessing that properly managing public health indeed matters for the market too.

Let's go back to my argument on the birth of a feminized scientific subjectivity that I discussed in Chapter 4. Although I used the term *subjectivity*, I also emphasized that there is a significant difference between this feminine subjectivity and the masculine subjectivity of the previous era. I also showed that SF fans felt that this masculine subjectivity is not "rational" partially because it is preoccupied with nationalist fantasy or nationalist "ideology" as an "imaginary relationship of individuals to their real conditions of existence."[368] Of course, that fantasy has a "material existence:" Louis Althusser writes that "an ideology always exists in an apparatus, and its practice, or practices," and South Korean techno-nationalism was indeed manifested through concrete, material projects like informatization led by the state apparatus. On the other hand, Namhee Lee shows how anti-government intellectuals of the 1970s and 1980s devised a new national subjectivity called "*minjung* (the common people)" in the face of what

[367] In fact, many South Korean are watching what is currently going on in the US with horror and even disdain, for example, people who are protesting with guns for their "right" not to wear masks. Criticizing the kind of understanding that associates masks with obedience, they associate it with voluntary, rational, and scientific care of their bodies and others.
[368] Louis Althusser, *Lenin and Philosophy and Other Essays*, trans. Ben Brewster (New York: Monthly Review Press, 2001), 109.

she calls "the crisis of historical subjectivity" in post-colonial, authoritarian South Korea.[369] These intellectuals included dominantly male, national realist "authors," who fought against the authoritarian state (perceived as a puppet of "American imperialism") and capital with their tools of writing and literature. But, as I have argued, Paik Nakch'ŏng and these literary authors' nationalist politics (represented by terms such as *minjung* literature and national literature) ironically share numerous affinities with the state ideology of gendered nationalism, when viewed in hindsight. Many women have pointed out that this old political subjectivity is no longer valid, and the recent Me Too movement has exposed yet again the toxic masculinity of former *minjung* activist politicians and authors, such as Ahn Hŭijŏng and Ko Un.

The feminine subjectivity that I discuss in Chapter 4 emerged in post-democratic, neoliberal South Korea, where there are no longer clear enemies or an oppressive (dictatorial) father figure to fight against, as the mechanisms of power have been *democratized* and maybe even *feminized*.[370] Following Foucault's theorization, it is not possible for humans for step outside the given technology of power (that is productive, positive, and according to *Forbes*, even beneficial and maternal), and therefore there can be no subject in the Cartesian sense. What do we make then of the fact that the new technology of power is not just oppressive but produces positive "pleasures", as the three single women in Jesook Song's research experienced in

[369] According to Namhee Lee, the *minjung* (the "common people") politics of the 1970s and 1980s, which can be characterized as "the articulation and projection of minjung as endowed with a coherent and unifying political identity" who "constitutes a true historical subjectivity," was the result of what she calls the "crisis of historical subjectivity" that post-colonial South Korean intellectuals felt. Namhee Lee, *The Making of Minjung Democracy and the Politics of Representation in South Korea* (Ithaca N.Y.: Cornell University Press, 2007), 3-10.
[370] Here I am borrowing this expression from the "feminization of labor" I discussed in Chapter 4.

neoliberal South Korea?[371] Song argues that the "flexibility" of the labor market also brought these women a certain sense of freedom and pleasure, just as the "feminization of labor" in the neoliberal era has given more women white-collar jobs and expanded economic opportunities, albeit highly precarious ones. But then, as de Certeau asked, how is resistance possible in such conditions? If a "smart city" such as Songdo or Facebook's algorithm can predict our every move (from physical to political), what can we do to resist? Like "the weak" of the cybernetic society that de Certeau theorizes, these new subjects situated in the technological environments of the neoliberal era seem to be "making do (*bricolage*)" with what is given to them.

It should be noted that *writing* is still their important tool of political expression. But ever more imbedded in the global media environment molded by corporations such as Samsung, LG, Apple, Microsoft, Neflix, Twitter, and Facebook (instantiated by Hansen's example of Facebook gathering astronomical amounts of user *behavior* data), it seems that the ontology of writing and literature has significantly changed since the era of national and *minjung* literature. How can we read the political and historical significance of women writers' inclination towards the genre of speculative fiction (including science fiction), given this changing ontology of writing?[372] This is

[371] Jesook Song, "Between Flexible Life and Flexible Labor: The Inadvertent Convergence of Socialism and Neoliberalism in South Korea," *Critique of Anthropology* 29 no. 2 (2009).
[372] Simply to cite the definition of Dictionary.com whose proprietary source is the Random House Unabridged Dictionary, speculative fiction is "a broad literary genre encompassing any fiction with supernatural, fantastical, or futuristic elements." Historically in the US, the term speculative fiction used by science fiction avant-gardists to contrast their politically and aesthetically "serious" science fiction to the tradition of the "pulpy" SF. According to Jameson it is particularly associated with Samuel Delany's works, but there it is also closely associated with American feminist SF writers of the 60s, 70s, and 80s that Djuna and many South Korean SF writers have taken a particular interest. See also Natalie M. Rosinsky, *Feminist Futures--Contemporary Women's Speculative Fiction. Studies in Speculative Fiction* (Ann Arbor, Mich.: UMI Research Press, 1984); Marleen S. Barr, *Alien to Femininity: Speculative Fiction and Feminist Theory. Contributions to the Study of Science Fiction and Fantasy* (New York: Greenwood Press, 1987)

a crucial question that my project opens up, that I seek to answer in future work. The beginnings of a tentative answer might be found in the way that Djuna often creates mutant characters (especially female and children), who perpetually evolve and mutate in the changing environment, while challenging the notion of the human itself vis-à-vis machines and animals (i.e. pigs in Djuna's *Not Gods Yet*). de Certeau writes that the weak have "every chance of surviving this apparatus too, and, in any case, they are also part of social life, and all the more resistant because they are more flexible and adjusted to perpetual mutation."[373]

I will close here with de Certeau's suggestion to move from a linguistic, semiotic frame of reference to a "polemological one," in his theory of tactics.[374] "The practice of everyday life" of "the weak" that he famously theorized was not focused on "the act of speaking" or "the practice of language" such as writing, but "other practices (walking, residing, etc.) entertain with non-linguistic system."[375] When he was talking about the "making do" tactics of the weak, he was talking about "movement" rather than writing or speaking. In other words, de Certeau was trying to overcome a politics of the "*I*" created as the subject effect of writing and speaking, although these moves are still "enunciation," according to de Certeau. I believe that our discussion might be more productive if we also view these women's *writing* through a "polemological" lens. This model might also make us more aware of and vigilant toward our present reality, where our every movement and tactic, including feminism and other progressive politics of emancipation, are immediately sensed and captured by "the powerful" (de Certeau), or by the positive and productive machinery of "power" (Foucault). *Writing* then, must become a *movement.*

[373] de Certeau, The Practice of Everyday Life, 41
[374] de Certeau, *The Practice of Everyday Life*, 34.
[375] de Certeau, *The Practice of Everyday Life*, 33.

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