Playing the City: Contemporary Shibuya and its Digital Worlds

by

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English Abstract

This dissertation aims to offer an account of the spaces inherent to digital networks by analyzing how they are produced within local urban centres. Focusing on the neighbourhood of Shibuya at the beginning of the twenty-first century, which is characterized by dense flows of pedestrians, digital infrastructure, and a massive urban renewal project, I expose local "worlds" that are not fully absorbed into the operations of a homogenous network logic and, in fact, challenge the normative dimensions of movement yoked to commerce, retail consumption, and transit. Following the insistence of the philosopher Henri Lefebvre that space is primarily a social production constructed through the movements, perceptions, and imaginings of different societies and cultures, I examine these worlds as spatial pluralities produced by subcultural groups, creative communities, and local governing bodies. Strangely, it is digital games that are particularly well-suited to help us think about locally produced worlds. Spatially comprised of algorithms and player responses, games lead us to think about worlds produced as a tension between the digital and the analog, between procedural operations and improvised actions. By studying video game worlds set in digital recreations of Shibuya, such as *Jet Set Radio*, *428: Shibuya Scramble*, and *Persona 5*, this dissertation exposes new kinds of space emerging within the acts of transgression, disruption, and appropriation that characterize the navigation of digitally mediated cities.

French Abstract

La présente thèse vise à offrir une description de l'espaces inhérent aux réseaux numériques à travers une analyse de la manière dont ils sont produits au sein des centres urbains locaux. Prêtant une attention particulière au quartier de Shibuya au début du vingt-et-unième siècle, caractérisé par un dense flux de piétons, une infrastructure numérique et un projet de renouvèlement urbain majeur, j'expose les mondes "locaux" n'ayant pas été complètement absorbés par le fonctionnement de la logique d'un réseau homogène et défiant de ce fait les dimensions normatives de mouvement liées au commerce, à la consommation au détail et au transit. Donnant suite au philosophe Henri Lefebvre, qui insiste qu'un espace est principalement une production sociale construite à travers le mouvement, la perception et l'imaginaire de différentes sociétés et cultures, j'examine ces mondes en tant que pluralités spatiales produites par des groupes de sous-cultures, des communautés créatives et des organes dirigeants locaux. Étrangement, ce sont les jeux numériques qui se retrouvent particulièrement bien placés pour nous aider à réfléchir aux mondes produits localement. Spatialement composés d'algorithmes et de réponses de joueurs, les jeux nous poussent à penser aux mondes produits en termes de tensions entre le numérique et l'analogique, entre les opérations procédurales et les actions improvisées. En étudiant les mondes présentés au sein des jeux vidéo recréant Shibuya, tels que *Jet Set Radio*, *428: Shibuya Scramble*, et *Persona 5,* la présente thèse expose de nouveaux types d'espaces émergeant au sein d'actes de transgression, de perturbation et d'appropriation caractérisant la navigation de cités arbitrées numériquement.

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Author's Note

Following the convention of Japanese cultural studies, all Japanese names cited in this dissertation are provided with the surname preceding the given name, except in cases where the individual publishes and resides primarily outside of Japan. For consistency, I have also followed this convention with the names of fictional characters, even in cases where I am dealing with a translation of the original Japanese publication. Unless otherwise cited, I have used published English translations of Japanese texts when available. All other translations are my own. Japanese texts are transliterated in conformity with the conventions of modified Hepburn romanization.

Introduction

This dissertation is about space. It is about the space of cities and the space of video games. It is about the algorithmic, procedural, analog, and improvisational processes that run within the boundaries of both and those that flow across physical and digital enclosures, creating hybridized spaces: gameic cities and city games alike. It is about the actional forces that human players bring to bear on digital spaces and the machinic operations that shape and are shaped by those actions. It is also a dissertation about youth. More concretely, this dissertation uses digital games to analyze what was happening within Tokyo's youth culture at the turn of the millennium and the dense urban neighborhood of Shibuya in which much of it was centralized.

This approach may not seem like an intuitive one. Several scholarly and journalistic studies of Tokyo and Japan during the 1990s have already given a thorough account of the city's youth culture without recourse to game-centred analysis, and the picture that emerges out of such histories is typically a bleak one. From the early 1990s onwards, Japan became mired in a prolonged period of slow economic growth, which followed the burst of the economic bubble that had buoyed real estate and stock market prices from 1986 to 1991. The Japanese recession did not signal a sea change in governance nor, contrary to popular belief, did it constitute the collapse of the Japanese economy[i]. Nevertheless, relative economic turmoil produced a great deal of rhetoric surrounding the "lost generation" and the disillusionment of Japan's underemployed youth (Rowley and Hall 2007). As the centre of youth culture at the time, Shibuya became enmeshed in this rhetoric. As formations like *gyaru* culture (described in the first chapter) or graffiti gangs (detailed in the second chapter) attracted attention in the press, Shibuya began to be condemned for the excesses of contemporary youth culture and the delinquency it supposedly invited (Ishī 2017: 99). Criticism of youth formations was nothing new, but this time, the stakes seemed greater. A

new term for Japanese society emerged at this time: "*muen shakai*" or "society without bonds," (Hommerich 2015: 48). The rhetoric of a relation-less society reflected a growing economic and generational gap that began in the early 1990s, and Shibuya's youth were on the hook for much of it.

The prospects of youth in such accounts are stark. Caught between the pressures of a failing economy and social rhetoric of delinquency, an almost uniformly negative picture emerges. Youth are either victim or offender, helplessly shaped by the socio-economic conditions they were born into or willfully failing to conform to the social norms that had transformed the nation into an economic powerhouse following the devastation of the Second World War. Absent in this picture is any possibility of agency, of a subject acting upon the world and affecting positive change. Youth were either failing to act or they were being acted upon, and much of the rhetorized fear and anxiety that surrounded this perceived collective failure would not change after nearly two decades, when an entirely new generation of young people had come to stand in for the collective sense of precarity in contemporary Japanese society.

However, accounts of youthful misconduct and alienation often occlude the kind of technological changes occurring at the same time, which were turning urban neighborhoods like Shibuya into digitally and algorithmically mediated spaces. As Robert Stuart Yodler details in his 2011 account *Deviance and Inequality in Japan: Japanese Youth and Foreign Migrants*, the generational changes occurring societally were also playing out in a media landscape:

> Youth are more in tune with the present than adults and the past and tradition has far less meaning to them. This is particularly so in today's information and high technology society, where personal computers, mobile phones and instant global

> information are as familiar to youth as letter writing, public telephone booths and libraries were to the older generation. (20)

It was not simply the case that Japanese youth were failing to act. Rather, the technosocial spaces in which many of their actions were playing out were not legible within modernist histories that are used to finding discrete, undigitally mediated subjects acting within easily defined national or urban borders. However, in the 21st century, it has become obvious that the navigation of digital technologies such as mobile phones and the internet is in no way separate from the navigation of physical spaces like that of the city. The same technologies in which youth were increasingly proficient would come to dominate urban environments, both technically and procedurally, and just as these technologies are obscuring certain kinds of subjective formation, they are making other kinds of subjective formation legible at the networked intersection of global and local spaces.

Digital technologies are now baked into the city through the algorithmic procedures underpinning the commercial screens of the Shibuya Scramble (as detailed in the third chapter) or the mobilization of security protocols through mobile phone networks (as detailed in the fourth chapter). These technologies can imply a space of complicity with governmental and corporate power, in which bodies and their movements conform to and proceed in accordance with strategies to direct commercial consumption or the circulation of commuters, but in the examples detailed in this dissertation (such as social media enabled festivals) they also come to imply the possibility of divergence from normativized flows of movement. It is for this reason that this dissertation aims to track the changes occurring within city-based Japanese youth cultures at the turn of the millennium, not through the deterioration of the Japanese economy or faltering social norms but within the emergence of a new kind of digitally mediated city space and a new kind of subject capable of acting within

it. As I will explain in the following section, game spaces are particularly well-suited to expose what these two formations look like.

City Games and Gameic Cities

At the same time that city spaces were beginning to implement digital technologies at an infrastructural level, Japanese game developers were beginning to incorporate city settings into their gameic worlds. Prior to the burst of the economic bubble these spaces were often American ones. For example, the release of the arcade game *Final Fight*[ii] in 1989 had players beating a path through the fictional Metro City, which has been overrun by colourfully dressed criminals. The player chooses from one of three vigilantes determined to wrest control of the city from the gangs that have taken control of it. Two years later, the Sega game *Streets of Rage*[iii] portrayed another fictionalized American city that has been overtaken by a crime syndicate. The player takes control of one of three police officers, who are seeking to restore order to the city. These games revolve around crumbling urban centres and roving gangs that must be brought to heel through brute force. While the depiction of primarily fictionalized American cities as crime-ridden dystopias is no doubt significant in the context of the economic competition between Japan and America at the end of the 1980s, what is even more significant for the present research is how these games position the player within digital recreations of city spaces. Players are aligned with forces of law and order, either playing as vigilantes or police officers, and in the case of *Final Fight*, the muscle-bound mayor of Metro City himself. This lawful violence is characteristic of multiple games released for the arcade, as well as home consoles such as Nintendo's Famicom (NES or Nintendo Entertainment System in North America) and Super Famicom (SNES or Super-Nintendo Entertainment System in North America) in the late 1980s and early 1990s. Games like *Double Dragon* (1987), *Vice: Project Doom* (1991), and *Undercover Cops* (1992)

feature similar settings and plots. These games, belonging primarily to the beat-em-up genre, are predicated on defeating swarms of opponents with timed button pushes and progressing laterally through the game world. They typically position players against criminal gangs while traversing a pixelated urban environment on the way to a final confrontation with a primary antagonist who has seized control of the city. Through the exertion of violence, order is restored[iv].

Yet, in the post-bubble era, something begins to change in the gameic depiction of cities. As Rachael Hutchinson argues in *Japanese Culture Through Videogames*, post-bubble games in Japan, like other artistic works, tend to be much darker in tone (123). However, it is not only the tone of games that begins to change it is also the forces with which players find themselves aligned. This is most prominently evidenced by release of the massively successful PlayStation game *Final Fantasy VII*[v] in 1997. Players here are no longer set on the side of law and order, instead players take control of Cloud Strife and a gang of eco-terrorists seeking to topple the malevolent Shinra corporation who has been exploiting the planet's lifeforce to use as fuel. On top of positioning the player in the role of group of resistance fighters, the game also begins in an expansive city-environment: the game's central industrialized capital of Midgar. As players explore the city, they learn of the alliance between corporate and governmental power within Midgar and discover a vast conspiracy that provides them with the motivation to move out into the larger game world and tackle an impending environmental crisis, which ultimately explodes out into a complex existential and spiritual quest full of genetically modified soldiers, extraterrestrial beings, and ancient societies.

In the 2000 game *Persona 2: Eternal Punishment*[vi] also released for the first PlayStation console, players find themselves similarly aligned against corporate and governmental forces. This time, the player takes control of journalist Maya Amano within the

fictional Japanese city of Sumaru. By investigating rumours of a supernatural curse, a conspiracy linking Sumaru's government, media, and businesses is revealed, one that seeks to destroy both the city and Earth itself. The player must work against authorities to save the city and prevent the apocalypse. As with *Final Fantasy VII,* the problem with the city in this game is not the result of rampant street gangs or other external threats seizing power, it is the legally sanctioned exercise of authority itself. Only by operating against these governmental and corporate forces can the diegetic conflict be resolved[vii].

Both of these games belong to the Japanese roleplaying game or JRPG genre, which will be discussed at greater length in the third chapter of this dissertation. As such they tend to feature longer and more detailed narratives than the more actional beat-em-up genre detailed at the beginning of this section. However, genre differences alone do not account for a shift in the depiction of game cities. Because of the technological developments of game rendering systems and more technically complex game hardware such as the PlayStation console itself, the complexity of the game's narrative seemed to go hand in hand with technological developments such as the projected illusion of depth characteristic of so-called "three-dimensional" games[viii]. While early games such as those in the *Final Fight* series transpire in a single kind of flattened space, *Final Fantasy VII* and *Persona 2: Eternal Punishment* feature more detailed cities that can be thoroughly explored through the traversal of shops, restaurants, businesses, and public areas. Furthermore, they assemble their worlds through pre-rendered spaces, polygonal battle scenes, multiple layers of menu, cinematic cut-scenes, and large, navigable overworlds. In short, the player finds themselves in a complex world that must be read and navigated across multiple spatial enclosures. In learning how to act across these enclosures, new pathways open up that reveal a much larger world than the narrow one in which the protagonists begin.

I juxtapose these two moments in game history not to suggest some form of straightforward developmental history that equates narrative depth with technological complexity, such as the shift to perspectival depth in video games. Instead, I am seeking to highlight a transformation happening in game worlds in the late 90s that made them more commensurable with the transgressive and counter-cultural movements that were happening in city-spaces like Shibuya. It suddenly becomes possible to create gameic cities, like that of *Final Fantasy VII*'s Midgar where transgressive movements resolve the game's diegetic tension and reveal a more complex world in the process. Moreover, as with *Persona 2: Eternal Punishment*, many of these games, including all four of the games I address in this dissertation, set these worlds in more distinctly Japanese cities such as the urban locality of Shibuya, signalling a shift from dystopian American settings to more local urban crises. The four games I analyze in this dissertation, *Jet Set Radio*, *The World Ends with You*, *428: Shibuya Scramble*, and *Persona 5*, do not follow in the footsteps of *Final Fantasy VII* or (with the obvious exception of *Persona* 5) *Persona 2: Eternal Punishment* in any coherent way. They all belong to different gameplay genres, feature very different narrative tropes, and depict cities that do not bear any obviously discernable relationship to Midgar or Sumaru. However, I raise the examples of *Final Fantasy VII* and *Persona 2: Eternal Punishment* because they are prominent examples of a shift in gameic forms to a kind of space where certain kinds of non-normative and transgressive action are revealing a new kind of world. It is this world and its transformation between the late 20th and early 21st century that is the subject of this dissertation.

The World-Form

In this dissertation I examine game spaces from the perspective of the world they create. This approach is not entirely without precedent. Edward Castronova's *Synthetic*

Worlds productively complicates the relationship between real and digital, approaching video games as performances that frequently leap between the gameic and actual worlds thereby disrupting preexisting spatial boundaries between play and reality (69). Similarly, Timothy Rowlands analyzes game worlds through a sociological lens in *Video Game Worlds*, providing a more encompassing account of how these worlds craft "designer realities" through the production of alternative "norms, language, social organization, and power relations" (16). Both Castronova and Rowlands offer a more hybridized model of game worlds that complicates the notion of the non-digital as having a greater claim on reality, but their approaches tend toward hybridized models of space rather than the basis for an alternative mode of world-making, which is what I am working to expose. I suggest the transformation in digital games and Shibuya's youth culture at the end of the 20th century points to the historical emergence of a new spatial reality in both. It is the emergence of what I am calling the *world-form* and exploring its dimensions that is the primary goal of my research.

In the spaces of games, player movement typically triggers events and conflicts that must be overcome in order to reach an outcome or overall conclusion. The operations of the software and hardware aid this process by delimiting and ordering the possibilities of movement. In gameic terms, this interaction between human players and digital algorithmics operating through electronic hardware is the point at which worlds, players, and characters are assembled as actors and learn to read, feel, and think one another. A world appears as a unity only after moving through multiple connections and between the levels of code, software, platform, and televisual signal. Each of these are actors in their own right, reading, interpreting, and activating each other. In turn, the resulting game space is embedded with its own semiotic flows at the levels of control, interface, menu, and architecture. The platform renders game-space by reading the code provided by software, but this doesn't become a

game world until it has been interpreted and activated by other actors. While all fictional texts present a world (instantiated through a sequential chain of events), games also provide a *world-form* (a collection of the possible trajectories actualized by player actions). In assembling the multiple levels of software and hardware and selecting movements and actions, the world reveals itself, but this is only one of many possible worlds within the game's world-form. In other words, within video and computer games, actions and operations constitute a potential world that becomes actual through traversal. This is why games are of greater significance to a study of city space than a more rigidly sequential literary or filmic narrative[ix], as they are not only indicative of the digital and analog structures of the city they help us think about how potentialities get actualized and what other potentialities are embedded within those spaces.

My game-based methodology of world analysis centres my exploration of the world-form between the twin modalities of reading and navigation. The parameters of both fields change from game to game. In other words, different world-forms afford different means of movement and reading, thereby creating different potential for actualizing worlds. These can take place at multiple levels of the gameic assemblage. Game genres such as platforming games like *Super Mario Bros.* define a world-form in terms of vertical and lateral movement. Controls in a game like *Pacman* limit navigation to the cardinal directionality afforded by the joystick and game mazes. Similarly, reading processes shift how the world-form is interpreted not only diegetically but also formally. Game narratives are typically non-linear, sequentially flexible, and changeable, and even the less obviously diegetic markers that are part of a game's field of legibility (spatial landmarks, visual cues, game sounds) are often responsive to a player's movements. The way that reading processes are constructed around and through movement discloses the realities of that world.

The emergence of the world-form and its actional and operational processes also casts light on movement within contemporary cities such as Shibuya. The corridors of a building or the streets of a city are not neutral containers for action, they are experienced temporally and sequentially, and this experience configures a positionality and directionality for the self along an axis of navigation and legibility. This was true even in the experience of the pre-digital city, but it is further highlighted by the responsive surfaces, interfaces, and digital infrastructures of contemporary ones. It is similarly evinced by the dense flows of bodies through a transportation hub like Shibuya and the attempts to regulate their movements. Similarities between cities and game space, however, go beyond the congruence of spatio-temporal structures. Games provide alternative world-forms where reading and navigation have sometimes very different stakes, connotations, and social possibilities. Moreover, games frequently stage within these world-forms actual cities spaces like Shibuya, as is the case with the four games discussed in this dissertation. These games, therefore, can help us re-think what worlds might be possible in our cities. For example, my analysis of the world-form of the Dreamcast game *Jet Set Radio* in the second chapter of this dissertation, read against the history of graffiti in Shibuya and surrounding areas exposes the alternative spatio-temporal orientation on which such practices rely. Graffiti in Shibuya is recast from a criminal transgression of bylaws and social norms and instead instantiates an alternative space-time within the city, which becomes actualized into a world. This approach evinces both how different methods of reading and navigating have challenged the normative dimensions of corporate and governmentally regulated city space, and it helps us consider other alternatives for imagining, perceiving, and acting within the city. My analysis attempts to move the discourse on contemporary cities away from a model of uniform space, which tends towards globalized, automated network formations (as detailed in the first chapter), and

toward a series of competing and overlapping world-forms where space is constituted between human actions and digital operations.

This thesis takes a synchronic, rather than a diachronic approach, examining specific moments in the city's history, but there is a historical movement emerging in my thesis highlighted by the world-form as a new spatial modality that makes sense of Shibuya at the turn of the millennium. The world-form is a new kind of space produced in the algorithmic and digital processes that run across digital games and cities alike. By embedding themselves in these processes, individuals are able to affect changes to the city aesthetically, symbolically, and affectively. Within the world-form, youth can be recast from victims and offenders to more active subjects within their own lived environment.

Subjects and Positions

Accounts of subjectivity within the field of game studies tend to begin with a theory of the player and their relationship with the avatar and subsequently extend out to an exploration of the world and its limits. This is typically regarded as a suture in the Lacanian sense and the mirror-like experience of controlling an avatar affords an opportunity for addressing theories of selfhood. Laurie Taylor provides an example of such analysis in the essay "When Seams Fall Apart." Pointing to games in genres such as first-person shooters, where the player is called on to identify with a subject position rather than an avatar-image, she sees the shared action of player and avatar as cementing a bond between the two, unifying the positionality of the subject in such a way that they are able to progress within game space. As Taylor points out, the particular place of the player and avatar dissolve into a more general shared space that underpins both the plane of action and the particular positionality of actor and actant (1-2). This identification, however, is not innate. It requires activation, and while Lacanian psychoanalysis can tell us a great deal about the effects of

avatar identification, examining game-space can tell us about the processes that seem to make both player and avatar seem to cohere across multiple spatial regimes. Since these processes precede subjectivation, it makes little sense to adhere to psychoanalytic analysis until the conditions of space itself have been properly addressed.

To this end, my project employs a number of theoretical conceptualizations from European theorists such as Gilles Deleuze, and most frequently Henri Lefebvre. These theoretical concepts help reframe questions of spatialization and subjectivation in terms of the relational and social production of flows of bodies, objects, and information. Of course, this approach brings with it the baggage of a lineage of Western analytic approaches that have tried to force East Asian cultural objects into the formal logic of European philosophy, thereby perpetuating the notion that East Asia and Japan have no theory of their own (Steinberg and Zahlten 2017: 2-3). It is my hope that my approach does not repeat this problem. Instead, I put the media objects in dialogue with theoretical concepts such as Bahktin's chronotope (in chapter four) or Deleuze's notion of smooth and striated spaces (in chapter two) in order to think about the theorizations that these games are themselves developing. Formal theory here functions as a kind of prism through which I pass media texts, one that provides a departure point to think about what the games are doing and saying themselves. Furthermore, my use of these formalist thinkers is an acknowledgment that writers like Lefebvre and the problems they posed have never really disappeared. Writers like Lefebvre are still regularly cited and addressed in contemporary theoretical writings about space like that of Peter Wynn Kirby and even game analysis like that of Michael Nitsche, as discussed in the following chapter.

Moreover, my use of these theorists puts my work in dialogue with a lineage of scholarship that emerged in Japan in the 1980s called the New Academism movement. This movement, which consisted of media theorists such as Asada Akira engaged with French

high theory like that of Gilles Deleuze to engage with pop culture and, as Alexander Zahlten details in his article "1980s Nyū Aka: (Non)Media Theory as Romantic Performance," create a mode of theoretical practice that transformed theory into a kind of pop culture performance itself (205). While New Academism did not present a coherent theory of media through its engagement with French high theorists, they did use this theory to redefine the terrain of popular culture and Japanese theory alike, blurring the distinction between the two (202). Importantly, this movement was not isolated. New Academism was itself building off the theoretical engagements of Japanese New Left theorists from the 1960s, such as Yoshimoto Takaaki, and would be followed by the *Zeronendai* theorists, such as Azuma Hiroki and Ōtsuka Eiji who will be addressed more directly later in on this dissertation. This latter group of theorists would take the performative, pop-cultural theory of the New Academism movement and reframe it within questions about fandom and *otaku* culture, including those of digital play (217). My dissertation, therefore, is less of an attempt to slot Japanese cultural objects into the categories and classifications of Western theory than an attempt to situate video games within a transnational circuit of theoretical conversations that continues to engage with the technological and spatial questions posed by writers like Deleuze and Lefebvre.

I am aware that my use of formal analysis may also seem at times to imply a universal male subject, and this is a particularly important concern in relation to the field of game studies where formal analysis has often come at the expense of contributions by scholars who are not writing from heteronormative, white, or male positionalities. I am not seeking to ignore or challenge important recent work on the embodied experience that players already bring to games. Recent game theory from writers such as Amanda Phillips, Jennifer Malkowski, and TreaAndrea M. Russworm have discussed the importance of feminist, genderqueer, and racialized subjectivities in game analysis, highlighting the kinds of bodies

and experiences that are frequently elided by the hegemonic connotations of some ludological scholarship. In works such as *Gamer Trouble*: *Feminist Confrontations in Digital Culture*, for example, Phillips considers the problems of subjective embodiment in games such as *Bayonetta*, suggesting that the embodied feminine performances of game characters such as the titular Bayonetta as well as the kind of gazes they produce have the power to disrupt "heteronormative and patriarchal power" (99) by creating a subjective perspective that implies a "copresence" between digital and physical bodies (135). Similarly, Malkowski and Russworm in the introduction to *Gaming Representation: Race, Gender, and Sexuality in Video Games* question whether the ubiquitous focus on codes and platforms in game studies from the 2000s onwards have marginalized questions of representation and the importance of player and character identity alike (1).

As a white male scholar at a North American institute, I recognize that I bring my own implicit and explicit biases to a study of games and Japanese cities. Nevertheless, without claiming objectivity, my approach to questions of embodiment and identity seeks to follow the games themselves. Just as I use formal theory to consider what kind of theory the games themselves are producing, I look to the subjectifying processes of the four games in this dissertation rather than assume that all players come to games with a preassembled subjectivity and have it either confirmed or negated. My research is interested in the channels in which subjectivity is being renegotiated, and the processes that are circulating within them. These processes may open up new kinds of embodied experience, just as local city spaces are producing their own identities and norms that do not always sit easily within more transnational or global formations. The channels I follow are particular to youth culture, and by following them, I hope to expose new kinds of urban subject emerging in contemporary city spaces like Shibuya. At the same time, this approach will hint at the kind of subjectivizing processes inherent to video games, without firmly defining and delimiting

them, so as to not foreclose alternative perspectives on what these games are and who they are for.

In sum, I decontextualize the games under consideration in order to recontextualize them within the geo-historical conditions of Shibuya at the turn of the millennium. Games are thinking through the tensions of space, and the four games at the centre of my analysis are thinking through tensions that go beyond the games themselves and even the players of that game and extend to sites in the city. In centreing my analysis in this way, new processes of aesthetic reterritorialization (in chapter two), active modulation (in chapter three), narrative spatialization (in chapter four), and digital gathering (in chapter five) emerge at as the focus of my analysis. These processes suggest an alternative set of conditions for readings space and acting within it. Ultimately, I argue that these processes suggest the proliferation of new worlds within local city spaces.

Outline

The first chapter of this dissertation begins with an account of the historical development of Shibuya. It addresses the conditions of Shibuya's space at the turn of the millennium and why this space is the centre of my research into contemporary cities and the space of digital games. Within the first chapter I also consider some problems of contemporary urban studies, particularly the notion of a globalized network society as articulated by sociologist Manuel Castells. Outlining my theoretical approach to space, as derived from the work of Henri Lefebvre, I consider how digital games help reconcile local city spaces and the alterity of experience they imply within more totalizing globalized spaces. In this chapter, I also consider existing scholarship on space and worlds in order to situate my research within theoretical writings about the production space, narrative, cities, and games alike.

Each subsequent chapter of this dissertation focuses on a single video game and analyzes its spatial production in light of historical changes in Shibuya at the time. Similarly, chapters two through five are centred on an approach to navigating and reading the city and highlights the dominant flows of symbols and bodies that produce Shibuya as a world. Moving through the city means correctly positioning oneself between the seemingly overflowing channels of navigation (acting and exchanging) and legibility (thinking and feeling). Accordingly, I look to the physical and virtual corridors in which these assemblages are delimited and directed, the codes and signals in which they are configured, and the digital games which not only inform the directionality of navigation but increasingly overlap with it.

The second chapter of this dissertation will look at the period between 2000 and 2004, when Shibuya was only just beginning to transform into a more tourist and corporate-centred landscape. This is illustrated in the 2000 Sega Dreamcast game *Jet Set Radio*. Developed by the company Smilebit, the game casts players as any one of several graffiti artists who must set out to spray paint the surfaces of a cartoonish rendering of Shibuya and its surrounding areas. The player accomplishes this goal by acrobatically traversing the roads, walls, and railings of the city and dodging incoming assailants. Despite the presence of rival gangs, the true enemy in the game is the police, who repeatedly disrupt the character's attempt to spray paint the city and break up the seemingly utopian formation that the main characters have built. Using Deleuze and Guattari's concept of smooth and striated space, I examine how the game upsets the normative dimensions of these two forms of space by allowing for the high-speed traversal of vertical space and the overwriting of lateral space. Treating the game as a kind of coda of Shibuya in the later twentieth century, I examine how the game preserves Shibuya's street culture by handing it over to pirates and vandals.

In chapter three, I move to the year 2007 and the release of *The World Ends with You* for the Nintendo DS handheld console. Developed by Square Enix and the Jupiter

Corporation, the game takes advantage of the handheld consoles dual screens to offer parallel planes of action. Player-characters and enemies appear on both screens in battle, and the player must divide attention between both simultaneously to succeed. As both fields rely on different forms of input (buttons and touchscreen controls respectively), the player is tasked with holding together two planes of action that diverge without intervention. Modulation is key to holding the assemblage together, and I follow the lead of the game's diegesis, which insists on modulation as both synchronistic and divergent. The game insists that humans are not separate from acts of modulation, and subjectivity emerges within the management of the wave form that this modulation entails. While Deleuze pins modulation to the more passive machinations of societies of control, I find within modulation active possibilities that can reshape the city. In this chapter, I historicize active and passive modulation within the context of the Shibuya's digital screen field as it emerged at the end of the twenty-first century.

Crisis and the orchestration of movement are the focus of the fourth chapter of this dissertation, and I address Shibuya from 2008 onwards through an analysis of attempts to the manage and prevent violence, terror, and contagion by fixing fields of movement and reading within Shibuya. Read in the context of Mikhail Bakhtin's theory of the chronotope, I find new actional possibilities in the construction of time-space in visual novels like Chunsoft's *428: Shibuya Scramble* originally released for the Nintendo Wii console in 2008. 428: *Shibuya Scramble* complicates the narratively rigid visual novel genre with a deceptively complex system of searching out and clicking on keywords in order to synchronize events between five separate and co-occurring storylines These games bring questions of narrative to fore, but in an actional manner that calls for a reappraisal of the typical spatio-temporal structure of narratological approaches. Tracing similarities on how the affective parameters of movement are fixed across Shibuya's field of legibility, I look at Shibuya's everyday space as its own world-form, arising as a metanarrative formation binding together smaller

narrative worlds. As the question of regulating the dense flows of bodies became central after a number of violent incidents beginning in the 1990s, I look at how 428: *Shibuya Scramble* provides an alternative field of legibility predicated on identifying connections that abstract space would render anonymous.

In chapter five, I conclude my exploration of Shibuya by covering the gradual opening of the Shibuya Renaissance Project in the 2010s. This chapter is centred on the 2016 release of the roleplaying game *Persona 5.* Released by Atlus for the PlayStation 3 and PlayStation 4 consoles, the game's world is one of thieves and despots but also of routine student life. Players must lead characters into dungeons and engage in turn-based battles with archetypes from a Jungian collective unconscious while also navigating social connections in everyday life by seeking out interactions and tending to the protagonist's personal development. The game's insistence on leading a double life, appropriating desire, and overthrowing dominant authority figures suggests that Shibuya continues to serve as a site of possible resistance. In this chapter, I hope to re-conceptualize the possibilities of a more holistic absolute space, as described by Lefebvre, examining how media technologies such as augmented reality allow for a new kind of space of encounter.

Finally, in the conclusion, I summarize my research and assemble my analysis to consider what and who is emerging in the streets of Shibuya at the turn of the millennium. I consider possible future trajectories for game spaces as well as the city of Shibuya and conclude by thinking about whether the two modalities of space will further converge or begin to diverge.

Each work addressed in this dissertation is a negotiation of a different world-form, which is to say, a different set of possibilities for inhabiting the city space of Shibuya. These games run across a range of narrative and game genres but all point to different possibilities for inhabiting the space of the city. Shibuya serves as a site for imagining paint-drenched

rebellion, existential competition, mass contagion, and picaresque liberation. These games both reflect shifting norms underpinning the city and piece together alternative worlds within them.

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[i] Throughout the 1990s Japan maintained its position as the 2nd largest economy in the world, and as of October 2020, is currently in 3rd place, the same position it occupied in the 80s. ("Report for Selected Countries and Subjects: October 2020")

[ii] Final Fight, titled *Fainaru Faito*, in Japanese was developed by Okamoto Yoshiki and released by Capcom for the Super-Famicom in 1990 and the Super-Nintendo in North America a year later. Okamoto would go on to develop console games for Capcom and other developers for the next two decades, eventually transitioning to mobile game development with the popular *Monster Strike* puzzle game.

[iii] In Japan, the game and its subsequent sequels were released under the title of *Bea nakkuru* (Bare Knuckle). The games were released for a number of Sega consoles including the Sega Genesis. It was developed by Sega's in-house AM7 team and directed by Chino Hiroaki and Momota Hiroshi. It was their only directorial effort.

[iv] One prominent exception to these kind of American game cities is the 1989 game *River City Ransom* or *Dauntaunnekketsumonogatari* (*Hot-Blooded Downtown Story*) for the Famicom in Japan and the Nintendo Entertainment System in North America. This was third in the *Kunio-kun* series of games made by Technos and developed by directors Yoshida Mitsuhiro and Sekimoto Hiroyuki, who would make a series of other Famicom games, but none as popular *River City Ransom*. The game featured high school students battling members of rival teenage gangs. However, when this game was localized in North America, the Japanese city and high school was transformed into an American setting.

[v] Final Fantasy VII or Fainaru Fantaji VII in Japanese was developed by Square prior to its merger with Enix. The game was developed by Kitase Yoshimori, a veteran developer for the company would continue to produce and direct *Final Fantasy* games for the next two decades. It is worth noting that the *Final Fantasy* series is anthological with each entry telling a distinct story. Therefore, the game has no direct relation to the previous

six installments or future sequels, though the success of this particular game generated a few direct sequels and films.

[vi] *Persona 2: Eternal Punishment* is part of the *Persona* franchise that will be explained at length in fifth chapter of this dissertation. The game was published by Atlus and produced by Okada Koji, who has produced several games in the series. Although the game has a counterpart titled *Persona 2: Innocent Sin*, only *Eternal Punishment* was initially localized in North America.

[vii] Another significant, though slightly later, moment in the history of city-centred games featuring countercultural and criminal figures is the *Yakuza* or *Ryū ga gotoku* (*Like a Dragon*) series, which was first released in 2006 on the PlayStation 2. Sega's franchise of beat-em-up games has players take control of former and current members of organized crime groups, navigating a detailed facsimile of Shinjuku's red-light district Kabukichō. Given the Shibuya-centric focus of my analysis, I do not address these games, but their focus on criminality within Shinjuku suggests the possibility of a parallel but not unrelated gameic history of Tokyo, one that would be tied to the game's depictions of criminal violence, sex work, and the real estate market.

[viii] This concept is complicated in the second chapter of this dissertation in relation to *Jet Set Radio* and its cartoon-like visual rendering processes.

[ix] A number of theorists have undertaken spatial analysis of cities and even Tokyo through the lens of literature or film. Maeda Ai traced the development of modern Japanese literature through its relationship to the space of Tokyo. His writings were translated into English in the volume *Text and the City: Essays on Japanese Modernity*. More recently Barbara Thornbury has looked at the cartographic development of Tokyo through literature and film in *Mapping Tokyo in Fiction and Film*.

Chapter One: Shibuya and the Space of the City

In an interview conducted with Japanese urban sociologist Nango Yoshikazu in 2017, entitled "Shibuya no Harowin wa nan no yume wo mita ka? – sukuranburu kōsaten kara kangaeru" ("What is the Dream of Halloween in Shibuya: Thinking from the Shibuya Scramble Crossing"), Nango attempts to make sense of the recent appearance of Halloween celebrations in the Tokyo commuter hub known as Shibuya. While Shibuya was a popular gathering space for Tokyo's youth in the 1970s and 1980s, its popularity with young people had diminished greatly by the 2010s, leading Nango to question why it has recently once again become the site of mass youth gatherings. Nango traces the gradual decline of Shibuya's youth culture, starting in the 1990s when large retail chains began to push into Shibuya and the fashionable cafés and clothing stores that had once characterized the urban centre began to move out to the suburbs. He identifies this as the result of shifting consumer and residential habits that allowed for equally trendy consumer spaces outside of the urban core: "Shibuya no kōgaika to kōgai no Shibuyaka*"* ("the suburbanization of Shibuya and the Shibuya-fication of the suburbs"; 1). In the twenty-first century, however, social media platforms began to stage everyday life as a spectacle shared over mobile and networked technologies, and though these platforms seemed to go hand in hand with de-localized, online community spaces, they marked the return of mass groups of youth to the Shibuya River Valley. The social media performances were frequently collective ones, and the large open plaza and scramble crosswalk in front of Shibuya Station proved suitable, being both easily reachable by transit and able to accommodate larger numbers of people than other Tokyo neighborhoods (2).

In Nango's brief history, he relies on an implicit distinction between two types of space: local public space (characterized by centralization, embodied experience, and the circulation of crowds) and digital network space (characterized by the diffuse distribution of

bodies, commodities, and individuals into undifferentiated and geographically ambiguous flows). The Shibuya Nango discusses shifts between these two spatial tendencies. Shibuya's streets, stores, and open plazas functioned as a kind of public space in the 1970s and 1980s, producing a colourful and trendy aesthetic. However, a more generic retail landscape began to take over in the 1990s, chasing the aesthetic out to the suburbs where it found easy homes in other neighborhoods. This move seemed to go hand in hand with increased ubiquity of social media platforms and mobile phone cultures which did not seem to rely on a shared embodied experience of space, but as these technologies began to demand larger collective performances, the residual social possibilities of the area around Shibuya Station were once again revitalized, albeit only at certain times of the year.

What is significant about Nango's account of Shibuya, is that it runs counter to a prominent line of thought in urban studies that sees the globalizing tendencies of network space completely overwhelming the local and distinct characteristics of city-based communities. This is the approach taken by urban sociologist Manuel Castells in his introduction to *The Rise of The Network Society*, published in 2009, in which he argues that the "space of contiguity" is superseded by the "space of flows" in contemporary society(xxxi-xxxii): "The global process of urbanization that we are experiencing in the early twenty-first century is characterized by the formation of a new spatial architecture made up of global networks connecting major metropolitan regions and their areas of influence" (xxxiii). Cities begin to expand and lose their specificity, becoming undifferentiated urban space and finally what Castells calls "metropolitan regions" where social connections happen in the connective tissue of the network rather than a shared public space. For Nango, however, networks have a more complicated relationship with the city, augmenting how it is staged, occupied, and transmitted but not fully absorbing the need for a shared public space. As local topologies differ, people gather and circulate in distinct ways, necessitating an account of cities that is

distinct from (though often connected to) the processes of the network. In fact, Nango's insistence on the Shibuya-fication of neighborhoods connected by Tokyo's networked transit systems suggests that cities are also able to make claims on network space, territorializing small portions of the suburbs into what Nango calls "puchi Shibuya" ("Petit Shibuyas") (1).

The tension between local public space and global network space points towards a tension at the centre of contemporary cities between human and machine actors that, in written accounts such as that of Castells, seems weighted in favour of the latter. However, the digital operations of machines and analog actions of humans are not so easily separable, and it is the interactions between the two that configure the conditions of global and local spaces alike. For that reason, I would like to follow Nango's lead and rethink how cities distinguish themselves from one another in how they hold together human actions and machine operations at the local level of neighborhoods, communities, and centralities like Shibuya.

I believe there remains something to be said about local cities, which are not primarily experienced as interchangeable "nodes" processing flows of movement (Castells 2009: 432). It is true that a connective tissue contextualizes a city or locality in relation to others, but the everyday experience of living, working, and travelling its corridors is not reducible to movements between them. Cities continue to gather and hold together local histories, patterns of movement, and affective experiences, producing spaces that are qualitatively distinct. These cities are not merely relics of a pre-digital society either; they enfold digital technologies, constituting media assemblages that run across and within neighborhoods like Shibuya. Networks, therefore, do not inevitably lead us to think globally, they can also be interrogated locally, and I would argue that this local thinking is more indicative of how the investments of digital infrastructures and communications technologies actually play out. It is within localities that the supposedly frictionless space of flows is forced to contend with specific obstacles, such as human and non-human actors, challenging topographies, and

systematic failures. In other words, cities reveal how the abstract functioning of digital operations are forced to contend with the concrete and messy nature of everyday life in the city.

In order to avoid giving an account of contemporary cities that favours abstraction, a specific object of analysis is needed, and as Nango's example would suggest, the hyper-mediated area of Tokyo known as Shibuya—a particularly dense commuter and commercial hub—is indicative of the digital and analog tension inherent to cities in the twenty-first century. From the late twentieth century onwards, Shibuya was one of the primary centers of subculture, fashion, and delinquency in Tokyo, but for much of the last twenty years, Shibuya has been undergoing a massive renewal project that aims to transform the area into the primary destination for business and tourism. This renewal has led to an intensification of new construction, the redevelopment of the transit system, and a reorientation of pedestrian space. All of these measures are heavily tied to digital operations, but while the renewal has succeeded in reorienting much of Shibuya's cultural production, new spatial investments have displaced rather than erased the affective dimensions of Shibuya in ways that challenge the dichotomy between humans and machines altogether: the corridors of the streets become opportunities for graffiti, screen technologies present a new means of modulating subjectivity, and as Nango suggests, mass festivals grind traffic to a halt during Halloween and sporting events, as well as during demonstrations such as those against the Iraq war in 2003.

If we think about Shibuya not as a node within a wider network and treat it instead as an assemblage of actions (local, analog, and affective) and operations (global, digital, and algorithmic) tied to a specific geography within the area known as the Shibuya River Valley, cities come back into focus as an important object of analysis for urban studies. At the same time, the renewed importance of human actions has implications that extend out of the field

of urban studies and complicate a deterministic lineage of thought in media studies this is most prominently represented by the theorist Friedrich Kittler. Kittler's analysis of urban networks found in the mediated structures of urban communication, transportation, and commerce a systematized movement that transcended older hermeneutical structures. Long understood through semantic and cartographic models of centre and periphery, the space of the city comes to expel human operators from the processes of execution and interpretation altogether. In a 2013 collection of translated essays by Kittler entitled *Truth of the Technological World*, Kittler insists that cities are dominated by the movement of networks, which turn all flows of movement into information (139). Media, which exists to "calculate, store, and transmit numbers" takes its cues from the networked paths of the city, and both proceed from the momentum of their own operations, creating a density and complexity that exceeds the capabilities of even the engineers that are tasked with managing them (143). This approach tells part of the story, but it ignores the workarounds, breakdowns, and acts of innovation and appropriation that emerge from human interactions with digital networks.

In attempting to overcome the dead-end of globalized automation arrived at by Castells and Kittler, I propose a different model of the city derived from an analysis of digital games. Computer and video games create responsive spaces that contextualize actions within a set of procedural operations. Not fully autonomous or interactive, they invite us to think about space as a production that happens between digital systems and human players. While the autonomous nature of operations seem to cohere to the algorithmic nature of computer operations, they fail to function without variable, non-linear, and analog player actions. Space emerges as a relationality between analog player actions and computational machines. Computer and video games, which are all distinct in their rules, are also variable enough to provide the possibility of structural analysis without completely effacing particularity in the face of totalization. Like the city, they hold human and machine actors together in different

ways. For this reason, this dissertation aims to provide a gameic account of the city, one that is better suited for thinking about how humans and machines produce different kinds of space in the context of one another.

Shibuya: A Pre-History of the Gameic City

In order to provide an account of Shibuya through the analysis of fictional game worlds, it is important to first define Shibuya geographically and historically. Such an account will lay the groundwork for a more nuanced account of what game worlds look like in the city and how their processes come to claim city space. Furthermore, tracing the history of Shibuya from the early modern period through to the beginning of the twenty-first century, reveals that its present topology of enclosed spaces and regulated circulation of bodies is not so much a complete rupture with Shibuya's past but an intensification of certain tendencies and a withering of others. In particular Shibuya's history reveals two dominant patterns of movement: firstly, travel between urban centrality and rural or suburban periphery that occasionally suggests an external threat to the city and, secondly, patterns of capitalist consumption that transform the global circulation of commodities into localized, performative spectacles. These are the two threads I follow in this history.

When talking about Shibuya, a distinction is required between the ward, city, and station that all share that name. Although all of these classifications are important in a study of Shibuya, this dissertation (in an attempt to focus on the area of greatest population concentration) will treat Shibuya as the area within and around the Shibuya River Valley. This area ranges from the hills of Dogen-zaka to the west, Miyamasu-zaka to the east, and the area between them that includes the central shopping area, which is referred to interchangeably as the Central Gai and Basketball Street. I resist offering a firmer territorial limit partly because the exact boundaries of Shibuya have changed over time and also

because, as the final chapter of this dissertation brings into the focus, the legally recognized territorial distinctions are often at odds with shifting behavioral habits and affective attachments that have frequently situated Shibuya in different and even contradictory places. Instead, I attempt to look at some of the dominant patterns of circulation, consumption, and affiliation as they unfolded within the area around the Shibuya River Valley.

The history of Shibuya throughout the modern era is dominated by the area's relation to Tokyo's shifting centralities. Although archeological records show signs of settlements along the Musashino Plains as early as the paleolithic period, the distance of the Shibuya River Valley from the settlement that would become known as Tokyo prevented it from having much of a formal relationship with the city until the early nineteenth century when it first begins to appear in maps as the outskirts to Edo (Ayukawa 2010: 63-64). Yet, even in the early modern period when the area was far too remote and underpopulated to be considered a part of the city, Ayukawa Kei argues in her essay "Toshi no shuuen" ("The Fringes of the City") that Shibuya would have acted as a marker for travelers entering and exiting Edo, prompting those about to embark to brace themselves for a long journey and at the same time affording a degree of relief for those on their way home (58). This is not dissimilar from how Shibuya would function in the modern period: as a kind of gateway, regulating movement between the city's interior and exterior.

One of the most significant factors in Shibuya's gradual incorporation into the topography of Edo was the expansion that followed the Great Fire of Meireki in 1657. While the capital had initially been tightly centred around the quarters of the *daimyō* and their retainers, the fire prompted a restructuring of the city centre that saw greater distance placed between buildings and a general expansion of the city's boundaries outwards. The lush grounds along the Shibuya River made it ideal for new settlements, and by the beginning of the Meiji era, it was being used primarily for agriculture, helping to feed the growing

population of the city with its abundance of watermills and dairy farms (Ayukawa 2010: 69). Despite protests from residents, Shibuya Station was completed in 1885, and farm plots began to disappear. Although farmers would continue to reside in Shibuya into the Taishō era in the early twenty-first century, the pollution resulting from the arrival of the steam engine and rapid industrialization made farm work untenable (Ayukawa 2010: 70-71). One by one, farmers sold their land to businesses eager to profit from the traffic generated by more than 3,000,000 people that, even in the early days of Shibuya Station, passed through the area daily (Kamei 2010: 80).

The opening of Shibuya's train station corresponded with Shibuya's official incorporation into Tokyo and the area's transformation into a major traffic hub. This new inclusion into the growing urban centrality of Tokyo did not diminish its role as portal in to and out of the city. In fact, a rail connection to the international port of Yokohama connected Shibuya to ever further horizons, precipitated by Japan's participation in globalized systems of capitalist modernity. At the same time, Tokyo's more local periphery was itself expanding as the growth of train lines enabled commuters to live outside of the city centre while remaining connected to it. Yet, while the train line forged Shibuya into a vital hub between centre and periphery, it also began to channel a more local circulation of bodies through the streets that surrounded the station, turning Shibuya into a commercial and transit centre in its own right.

This formation of Shibuya as both gateway and centre was not an accident or an unintended consequence of urbanization. Several companies, the Tokyu corporation chief among them, actively crafted station-centred community projects in the early twentieth century that would help shape the city for over a century. In an essay published by *The Journal of Transport and Land Use*, John Calimente provides a history of Tokyu's attempt to reconfigure Tokyo's transit system from a typical "Transit Oriented Design" in which train

stations are developed primarily as hubs between secondary modes of transit, into interconnected communities—a formation which Calimente terms "Rail Integrated Communities" (20). In the latter model, public transit supplies all needed transportation within the city, and stations function both as transit hubs and as multi-use centralities in themselves. Although Calimente seems to view the development of such communities as the natural result of particularly Japanese capitalist processes that sought from the start to channel urban circulation into profit (23), it is worth noting that these communities also have roots in a utopian imaginary.

The first of these communities was Den-en Chōfu, connected to Shibuya by the Tokyo-Yokohama Railway line in 1920s. This community was constructed in accordance with the garden city movement initiated by British urban planner Ebenezer Howard, who believed that cities alienated human beings from nature (Oshima 1996: 140). He envisioned self-sustaining neighborhoods organized around the needs of localities. These communities would reduce the need for long-distance trade and integrate the function of towns into the landscape of the country, thereby eliminating a firm distinction between the two (Clarke 2003: 88). Howard regarded his city as part of an overall restructuring of society that would diminish modern industrial urban layouts based on capitalist exchange and replace them with low-density zones of mutual cooperation. However, the Japanese designer Shibusawa Eīchi, who implemented the Garden City plan in Den-en Chōfu, was one of the most prominent proponents of early Japanese capitalism and opted to settle for building a community that allowed residents to temporarily escape the problems of the industrialized city (Oshima 1996: 142). Den-en Chōfu became a residential neighborhood under Shibusawa's guidance, and it relied on its connection to Shibuya for commerce, education, and recreation. This led to a collapse of the utopian potential of communities such as Den-en Chōfu, as they came to resemble more typical suburban formations. However, the community-oriented nature of

Den-en Chōfu that was characterized by stores, restaurants, and leisure space within and orbiting around the station became an economically successful model, and this model allowed stations to become mini-centralities themselves, connected but distinct from other stations in the opportunities they provided for recreation and shopping[x].

While the Den-en Chōfu project provided a successful template for station-oriented communities, it did not become a successful suburb until after the 1923 Great Kanto Earthquake, the aftereffects of which once again pushed people out of the city and further into suburban communities far from the overcrowded city centre (Oshima 1996: 146). Shibuya, the primary terminal connecting Den-en Chōfu to more populous and commercial Tokyo neighbourhoods, was key to connecting the suburbs to the city, and the heavy circulation through Shibuya and other nearby hubs like Shinjuku transformed them into "sub-centres" in an increasingly "poly-centric city" (Calimente 2012: 24). By the end of the 1920s, Shibuya had become a major hub within an inter-connected landscape of centralities, but it would not begin to distinguish itself from these other areas until Tokyu opened its flagship department store on the site of Shibuya station in 1934.

Japanese urban studies scholar, Kamei Yukiko details Tokyu's strategy to further capture the economic potential of the dense circulation of commuters that had aided the development of its suburbs and railways in an essay entitled "Toshi no hōga" ("The Sprouts of the City"). According to Kamei, Tokyo's department stores in the early twentieth century, such as those found in the Ginza, were primarily retailers of luxury goods that catered to the wealthy. Tokyu, however, sought to attract young shoppers with an assortment of cheaper novelties and daily necessities alongside the more expensive items commonly found in department stores. The sale of luxury goods was still the primary goal, but this was aided by the perpetual movement of young shoppers in to and out of the store. The sale of expensive goods was particularly conspicuous to these large groups and demand for luxuries began to

increase (80). The process of conspicuous consumption in itself may not be particularly noteworthy, but the Tokyu department store was the first example of Shibuya's emergence as a centre of consumption in its own right, and it was predicated on channeling pre-existing pedestrian flows through enclosures in which the purchase of goods was rendered a visual spectacle.

Shibuya's position as a regulatory space between alternating circulations ensured movement, but companies sought to capture and control that movement, thus reorienting Shibuya's landscape. Tokyu in particular bought up large swaths of the real estate in the area, diverted flows of commuters through their properties, and redirected roads towards Shibuya Station (81) If the creation of railway communities such as Den-en Chōfu entailed the formation of Tokyo as an interconnected transportation network in the 1920s, Shibuya in the 1930s suggested that this model could be emulated within the hubs themselves. Tokyu's success in capturing bodies in movement stabilized Shibuya as a space of consumption until the beginning of World War II, when a combination of shortages and price control measures forced the department store to shorten its hours and finally close (81).

From 1944 until the end of World War II, Shibuya was bombed by Allied forces more than 100 times, and by the end of the war, much of the area around Shibuya station had been destroyed (Ishī 2017: 140). In the postwar era, Shibuya (like much of downtown Tokyo) would be reshaped by the American occupation, the repatriation of Japanese emigrants, and shortages of food and daily necessities. In the immediate aftermath, Shibuya's proximity to the American military housing complex Washington Heights meant that it was ideally situated to accommodate one of the many black markets springing up in Tokyo at the time (Ayukawa 2010: 70). According to John Dower in his 1999 account of postwar Japan, *Embracing Defeat,* the legally ambiguous nature of these markets led to violence between local gangs and the police (143). Though some vendors were officially registered, the

majority operated under the radar and were generally affiliated with Japanese *yakuza* factions or unrepatriated gangs of Korean or Formosan descent. During the summer of 1946, a series of skirmishes between a large Formosan gang and members of the *Matsuba-gumi* gang culminated in a week-long turf war outside of Shibuya station. This battle also drew in police who had tried to quell the violence by singularly targeting and rounding up Formosan street vendors, prompting gang members to launch an attack on the Shibuya police station. This clash, referred to as the *Shibuya Jiken* (Shibuya Incident) ended with seven Formosans and one police officer killed. Public blame overwhelmingly targeted the Formosan community, though the police were also ridiculed in the press and a few officers were convicted due to pressure from the occupation authorities (142-144). Shortly after the incident, the *Teitofukkōkeikaku* (Special City Planning Law) was passed in September of 1946, which set in motion a rebuilding project that would eventually re-instantiate the dominance of legitimized forms of consumption. By the 1950s, Shibuya was being promoted as a family neighborhood with bowling alleys, planetariums, and a cable car for children (Ishī 2017: 145).

For two decades Shibuya functioned as a family and leisure area within Tokyo and formed part of a larger circuit of leisure and consumption that also included areas such as Shinjuku and Ikebukuro. Amongst these localities, it was Shinjuku and not Shibuya that was most associated with youthful counterculture. Throughout the 1960s, Shinjuku, particularly the large West Exit Plaza had been a gathering space for antiwar groups, but after a violent encounter with police in the summer of 1969, pedestrian traffic in Shinjuku was rerouted and gatherings all but stopped (Sand 2013: 45). The dissolution of activism in Shinjuku necessitated a new communal space for Tokyo's youth who still resided primarily in suburban exodus. Shibuya, as the second largest transportation hub in Tokyo, was well-positioned to attract young commuters and shoppers. However, while Shinjuku had

channeled the activist potential of such groups, the consumptive space of Shibuya tended to afford a very different set of spatial possibilities for subcultural participation.

Kamei's historical account of Shibuya's retail space links the emergence of Shibuya's subcultures to the real-estate investments of the Tokyu corporation decades earlier and the culture of conspicuous shopping they had originated (78). Buoyed by its success in Ikebukuro, the department store chain Parco decided to open a new branch in Shibuya in 1973. Since Tokyu owned most of the large-scale real estate around the station, Parco was forced to open their business relatively far from the centre of the neighborhood. To dispel concerns over its distance from the dominant flows of consumption around the station, Parco set out to create a complex of multiple businesses including a popular theatre venue that hosted concerts and musicals. Shibuya was no longer tightly concentrated around the station, and as consumption moved further afield, the possibility of opening up smaller boutiques or business became more viable for the young people flocking to the area in increasingly larger numbers. While the station continued to be the centre of transportation within Shibuya, the Parco complex began to function as a secondary centrality for youth-driven leisure and consumption. As Kamei details, by 1978, the major Japanese newspaper *Mainichi Shinbun* reported that Shibuya was the number one youth hangout spot in Tokyo. A year later, Tokyu followed Parco's cue, opening the 109 department store in 1979. This store catered almost exclusively to young women in their teens and twenties, and the distinct, brightly coloured fashion adopted by its shoppers would play a role in the formation of several subcultures and aesthetic genres. (86-89). Key to participating in some of these subcultures was not only purchasing and wearing certain fashions but also the performance of travelling to Shibuya and hanging out in groups that such purchasing entailed.

The Japanese sociologist Yoshimi Shunya, who analyzes historically busy Tokyo neighborhoods as "*dekigoto*" (events; 32) akin to staged performances, distinguishes

contemporary Shibuya's youth culture from other performances by pointing to three characteristics all related to a regime of visibility and spectatorship. The first was what he terms "*buratsuku*" (wandering; 300). Unlike the performances of prior youth cultures in areas such as Shinjuku or Ginza, Shibuya was meant to be wandered, often for hours at a time and without purpose. The second was that this wandering did not take place alone but in pairs or what Yoshimi calls "*mure*" (groups or herds; 303). Being in Shibuya meant signaling your affiliation, whether in a youth gang, a group of shoppers, or even a musical band. According to Yoshimi, the final element was a regime of visibility tied to a quality of "*nau*" (nowness; 303). This entailed a process of seeing how other groups signaled their contemporaneousness and being seen maintaining one's own performance via the consumption of trendy clothing, entertainment, and food (322).

This cultural formation played out primarily in the areas of music and fashion. Shibuya's fashion landscape included large retail stores such as 109 as well as smaller boutiques in the alleys and streets between Shibuya Station and nearby Harajuku and began to create its own hybridized styles, which also played a role in the formation of several subcultural groups in Shibuya. Amongst these groups, the *gyaru* (gal) subculture, visible during the heyday of Shibuya's youth culture beginning in the late 1980s, best illustrates the changes to Shibuya at the end of the twentieth century. The term *gyaru* refers to female teenagers who typically hung around the Shibuya 109 store and roved the streets of Shibuya in groups. Bleached blonde hair, heavy makeup, and bright, flamboyant clothing characterizes their style (Kawamura 2012: 52). As Ronald Saladin explains in his survey of fashion magazines, this aesthetic was always provocative, but as the more general term *gyaru* was gradually replaced with *kōgyaru* (a contraction of *kōkōsei gyaru* or high school girl in English) and other splinter formations, practitioners became more strongly associated with counter-normative conduct (89-90). Yuniya Kawamura in her book *Fashioning Japanese*

Subcultures contextualizes *gyaru* groups within gang culture. Citing the work of writers such as Fredrick Thrasher and Richard Cloward, who attributed the formation of delinquent gangs to the "disorganization of the working-class communities" and a defense against "limited social opportunities" (60), Kawamura argues that *gyaru* gangs afforded an opportunity for recognition, one predicated on the signification of transgression: "Anything that is unconventional, abnormal, and deviant is a virtue and considered cool because it stands out from the crowd and attracts social attention" (62).

While Kawamura and Saladin conflate the gang formations of *gyaru* and their male counterparts *gyaru-o*, particularly in their overall aesthetic and relatively liberal attitude towards sexual norms, it is worthwhile to draw a distinction between the male performances of subculture in Shibuya and female performances. For one thing, *gyaru* culture reached prominence in the late twentieth century, while *gyaru-o* practitioners took their cues from the earlier formation and did not become a significant commercial phenomenon until the mid-2000s (Saladin 2019: 90). Furthermore, while the journalistic rhetoric surrounding both young men and women points to a frivolity that threatens a normative social order, *gyaru* participants bore the brunt of condemnation in the media. Magazines and papers, especially those targeted at men, linked the *kōgyaru* culture with sexual promiscuity, particularly the act of *enjo kōsai* (compensated dating) (Saladin 2019: 89). This practice was defined as teenage girls selling sex to older men for money or material goods, and as David Lehany suggests in his book *Think Global, Fear Local*, the media rhetoric surrounding *enjo kōsai* alternated between treating these young women as either victims or offenders (81). Lehany cites feminist scholar Ueno Chizuko who regards the practice instead as an inevitability resulting from the increased access and privacy mobile phones allowed. Yet, while Ueno suggests that this afforded greater agency within a market of sexuality in which young women's bodies had already been commodified (71, 79), it was rhetorized in the press as a symptom of the

moral disintegration of modern Japan (81). In this way, the spectacularized consumption that had dominated Shibuya's retail landscape was rendered a source of sexual and social anxiety in the press.

While the consumption of youth in Shibuya becomes a source of rhetorized anxiety in the 1990s, it also birthed its own eclectic transnational aesthetic in the form of the musical genre of *Shibuya-kei* which serves as example of how the cultural production of Shibuya at the end of the twentieth century held together the local and globalizing network tendencies I discussed at the beginning of this brief history. Shibuya-kei emerged as a distinct genre in the 1980s and 1990s with the success of bands such as Flipper's Guitar and Pizzicato Five. Though the genre was more of a loose affiliation of artists working in a coherent style than a unified movement, artists working in the *Shibuya-kei* genre, nevertheless, coalesced around musicians that performed a kind of upbeat campy pop music that drew on and sampled heavily from a wide range of genre influences. *Shibuya-kei* was preceded by a genre popular during the 1970s and 1980s known as City Pop, which was itself influenced by diverse group of genres such as funk, jazz, and soft rock, and frequently incorporated synthesized instrumentation. *Shibuya-kei* inherited the form's genre ambivalence, adding additional influences from popular 1960s musicians.

Shibuya's musical space emerged within a string of record retailers gathered in an area known as *Reco Mura* (Record Town) located northwest of the station, and also circulated through numerous musical clubs that popped up in the 1990s and 2000s such as Cave or Harlem (Condry 2006: 3-4). While local underground music clubs and smaller record stores played a larger role in the formation of local subcultures such as the hip hop and street culture addressed in the first chapter, it was larger chains like HMV and Tower Records that formalized the genre of *Shibuya-kei* (Makimura et al. 2017: 158). In the early 1990s, HMV and Tower Records opened flagship stores in the area around Shibuya Station.

While 109 and Parco served as consumptive centres for Shibuya's fashion, and are perhaps most identifiable as cultural centres in Shibuya, these two records stores were key to the formation of *Shibuya-kei*. The stores imported a wide range of music from outside of Japan, selling a kind of cosmopolitanism that had been characteristic of Shibuya's consumptive practices since the late nineteenth century. Collecting records and having a broad knowledge of music was key to being fashionable in Shibuya, but knowing how to combine these influences into a new form of local musical production that was insistent on its transnationalism contributed to the emergence of Shibuya-kei as a distinct genre:

> French pop, UK indies and psych, Brazilian jazz, American dance music, German Krautrock, and Japanese synthpop–all thrown together under a rubric of '60s retro-future Internationalism. If De Stijl was Internationalism through channeling the universal, *Shibuya-kei* was Internationalism through all-inclusive *bricolage*. (Marx 2004)

The "bricolage" of *Shibuya-kei* described here was tied to the local assemblage of global influences, or what writer Martin Roberts terms an "ostentatious internationalism" (Roberts 2013: 111). Internationalism in Shibuya was nothing new, but the processes of global exchange only continued to intensify during the late 1980s and early 1990s when the genre was taking shape.

Shibuya's HMV in particular, actively promoted local indie artists when it opened, seeking to differentiate itself from other record stores selling more mainstream Japanese pop music. It was also this HMV that is typically cited as the first instance of *Shibuya-kei* being used as a label to identify local indie musicians (Ōnishi 1998: 482). This had the effect of drawing together the diverse range of bands working in Shibuya from the late 1980s on and uniting them under a singular banner. Seeking to produce hybridized international music that reflected a diverse aesthetic knowledge (Reynolds 2011: 166), the genre was localized via the

consumptive requirements of Shibuya's commercial space. The city as well as genre, therefore, evinces the complex relationship between local and global patterns of production and consumption while also channeling both tendencies[xi].

Ultimately, however, the demands of *Shibuya-kei*'s globalism would come to dominate. As *Shibuya-kei* began to circulate through Europe and eventually America, it began to take on an afterlife:

> Over the subsequent decade *Shibuya-kei* developed a cult following among American and European youth. Pizzicato Five were the first to arrive, performing for three years at the New York New Music Seminar (1992–1994); in his new persona as Cornelius, Oyamada débuted his first domestic US album release, *Fantasma* (1998) at the South-by-Southwest Festival in 1998 as part of his first world tour. Distributed by Matador Records in the US, each artist has reportedly sold over 100,000 records for the label (Marx, 2004). Pizzicato Five's Happy Sad EP was featured in Robert Altman's documentary about Isaac Mizrahi, *Unzipped* (1995), and from the mid-1990s onwards their songs became increasingly popular sources for remixes by club DJs in Europe and the US. (Roberts 2013: 116)

Subsequently, a number of artists outside of Japan began to produce music inspired by *Shibuya-kei* that was predicated on a similar kind of retro-pop mixing, sometimes even collaborating directly with former *Shibuya-kei* artists. Roberts sees this globalization of *Shibuya-kei* as an intensification of the practices that rendered Shibuya a "transnational audiotopia" (117).

However, the globalization of an already trans-national mode of artistic production, left little to tether *Shibuya-kei* to the actual geography of Shibuya. Pizzicato Five disbanded in 2001 and the success of Cornelius (the solo project of former Flipper's Guitar member Oyamada Keigo) as an international artist signaled the dissolution of the genre as a local

production. At the same time, the prolonged recession and emergence of chain stores in Shibuya that, unlike HMV or Tower Records, had little to do with the creative community of Shibuya. This marked the end of the excessive consumption that had produced the genre in the first place. This is exemplary of the wider cultural production of Shibuya, which sees a shift at the end of the twentieth century from a local community of artists, musicians, and fashion designers consuming a range of international influences and reproducing them as a new locally specific form to a more fully globalized form where retail consumption and cultural production alike are absorbed into the homogenizing tendencies of a network of interchangeable big name retail stores.

By the twenty-first century, large transit projects and multiple new commercial spaces began to enclose the space of Shibuya and delimit the possibilities of movement through its space. Shibuya retained its circuitous orbit around the station, but the perpendicularity of Shibuya's horizontal and vertical space cut across Shibuya's patchwork and began to homogenize it into a more totalized conception. This was the result of the massive *Toshisaisei* (Urban Renaissance) redevelopment project that began in Shibuya in 2005 and became visible with the opening of the Shibuya Hikarie in 2012. As construction began on multiple new skyscrapers, much of Shibuya station was buried deeper underground and made accessible by a complex assemblage of interweaving tunnels that have been identified in Japanese scholarship as both *dunjon* ("dungeon"; Ishī 2017: 19) and *meikyū* ("labyrinth"; Tamura 2013: 231). The lateral circuitousness of Shibuya, which leant itself to the kind of exhibitionist wandering that had laid the groundwork for Shibuya's counterculture, began to give way to a verticality that enclosed much pedestrian space and the visibility of bodies within corridors. Accordingly, the social opportunities of Shibuya's open space began to decline. Some of the larger fashion outlets and music stores (such as the 109 or the Tower Records flagship store) remained a part of the retail landscape, but many of the smaller stores

were pushed out in favour of larger chain stores. At the same time, the need to see and be seen as described by Yoshimi was displaced to new mobile screen technologies creating individuated but networked regimes of visibility. The performances that were once staged primarily within the streets of Shibuya were increasingly transformed into digital images, soundscapes, signals, and code.

The history of modern Shibuya exposes the shifting nature of urban construction, transit, retail, and leisure in the twentieth century. This history is populated with familiar actors (corporations, subcultures, and individuals) and events that are legible diachronically. By the twenty-first century, however, the story changes. The speed of change, diffusion of agency, and interrelated movements of conduct and counter-conduct call for a new way of historicizing the city, and as I suggest in the beginning to this introduction, attributing these changes solely to the automated operations of network procedures risks overlooking sites of innovation, resistance, and disruption that are integral to defining a city like Shibuya. In the following section, I would like to look at a few possibilities for analyzing contemporary Shibuya derived from a diverse set of fields, including urban studies, media studies, and cultural studies, to gather clues for how we can better account for contemporary cities, their history, topology, and the conceptual models of space that underpin them.

This dissertation will proceed in roughly chronologic order focusing on the first two decades of the twenty-first century, as these decades best expose the emergence of a new techno-social logic that reshaped the city of Shibuya. At the same time, tracking the transition to a new mode of spatial production requires that I return to the countercultural investments of the 1990s, as I do in many of the chapters of this dissertation. The transition from the late twentieth to the early twenty-first century is rife with conflicting approaches to navigating space and networked and mobile technologies frequently allowed for a more diverse set of reading practices. At the same time, increasingly large flows of movement resulting from re-

centring commerce, transit, and tourism in Shibuya created a density of bodies that seemed at the time precarious. The parallel intensifications of reading and navigation within Shibuya are the two major changes that I follow in this dissertation, and, as I explain in the following section, they point to the need of a new theoretical model of space capable of dealing with both on their own terms and in relation to one another.

The Worlds Within the Network

My history of modern Shibuya has led me to more general theoretical questions that I now need to address: How can we define a city? How does it function? How does it function differently within an increasingly digital landscape? Answering these questions is not only necessary to situate my project within a body of literature about digital media and cities, it also helps explain why game worlds serve as the primary methodological model for my exploration of contemporary cities. While the above questions appear distinct, they all lead us to the same theoretical problems and conceptual models. More concretely, they necessitate a theory of the city as a kind of space, which is to say, an intangible conceptual apparatus that plays out topographically through various material, place-based investments. However, merely identifying cities as conceptual spaces is insufficient without a firmer theoretical understanding of space itself. Without a theory of space, the concept is too readily written off as an essential and ahistorical void. This is, in part, the legacy of Newtonian physics and the formulation of space as a static, non-relational, and unchanging condition of reality (Newton 1819: 6-7). Change can occur within this space, but reality becomes claimed by a kind of lack or absence that has an atomizing effect on human relations, as space ceases to bind individuals to one another.

My theory of space, therefore, takes cues from the Marxist theorist Henri Lefebvre who, in his 1974 text *The Production of Space*, reminds us that Newton's model of space,

along with other enlightenment models such as Cartesian coordinative space, were predicated on Western philosophical and religious tradition of abstracting bodies from nature and their social environments (204-205). Subsequently, space becomes an empty container for human beings and their actions, and while this "abstract space" may seem like a neutral invention, Lefebvre reminds us that it underpins free exchange within systems of state capital, thereby allowing political actors to violently "grind" down" and "crush" any differences that stand in the way of homogenization (285).

Instead, Lefebvre argues that space is essentially a social concept that takes different forms according to different social formations. These different concepts of space, however, share in common a three-fold production that takes place at the levels of human conception, perception, and imagination. On the one hand, *representations of space*, which is the coded realm of blueprints and maps, attempt to organize space into a common logic. On the other, *spatial practice* accounts for the embodied reality of those same spaces and how they are perceived in daily life. The lived experience of these two spaces, however, creates a third dimension, that of *representational space*. Frequently dream-like and imaginary, representational space reconciles and underpins representations and spatial practice, transforming them into non-verbal symbols and signs (38-39). The relationship between Lefebvre's threefold model is triadic with all three modes interpenetrating one another. Different social formations come to produce (and are produced by) different spatial representations, representational space, and spatial practice, with space in general emerging at the centre of the triangle (39, 86). In doing so, Lefebvre exposes space as an inherently heterogeneous production.

According to Lefebvre, the invention of abstract space took over all three spatial modalities by positing a pervasive, static, and graphable spatial plane underpinning every formation. Abstract space extends infinitely in both time and space, presenting itself as both

timeless and essential (49-51). Furthermore, the valueless nature of abstract space grounds a spatial practice predicated on exchange, which is in itself void-like. As the collective and ritualistic actions that once defined a given space are taken over by systems of exchange, space itself is evacuated of any greater significance, and systems of capital come to dominate (269). This predominates in cities, and once a city is given over to exchange, only breaks with the routine of everyday life, such as mass festivals, present the possibility of rehabilitating space (385).

However, it is worth considering whether or not the digital nature of contemporary cities and their infrastructures already disrupt the abstracting tendencies described by Lefebvre, as a speed and fluidity of movement has re-appeared within space that is potentially destabilizing. Lefebvre argues that time vanishes from modern space because builders attempt to create structures that will endure forever. Unlike in nature, where Lefebvre argues space is constantly in movement, he sees constructed environments as static. Consequently, space "loses its form and its social interest," as power seeks stability it expels signs of time, age, and change from its structures and affords only space for movement (95). Yet as infrastructures become digital, time and change become evident in everything from the responsive representations of GPS navigation software to the shifting electronic surfaces of advertisements lining buildings that themselves begin to signal change. Corporate and governmental power compensate by attempting to harness time and delimit movement. Bodies are driven ever faster through various spaces and intensifying density of signals and codes vie for attention. The speed and density of these flows require new regulatory techniques, which augment the production of space and time together. Bodies, commodities, and traffic become flows of movement and the structures and layout of the city must change quickly to keep pace.

The digital nature of contemporary cities productively complicates Lefebvre's model of space. As spatial representations seek to harness time and incorporate it into the design and function of space, spatial representations constitute a set of *operations.* While operations and representations both aim to rationalize space, operations increasingly rely on autonomous procedures that respond to human actions algorithmically. Operations maintain flows of bodies while requiring particular movements that are inscribed onto space at the level of interface, screen, and sign. To reiterate, the digital city can be said to require a greater volume of reading than the modern city. No longer limited to static signs, Lefebvre's spatial representations are experienced through various mediated surfaces, including cell phone screens, digital timetables, interactive maps (both public and private), and the interfaces of various digital networks used to monitor, regulate, and police crowds. In order to contain the density of flows, operational representations also tend toward enclosures such as corridors, barriers, and walls, as will be evident when I address the current revitalization plans underway in Shibuya in the final chapter.

Operations produce and hinge on a particular set of actions, and for this reason, Lefebvre's spatial practice might be better conceptualized in the context of human *actions*. Actions remain the most consistent with Lefebvre's formulations insofar as they remain yoked to a perceptual and lived space mastered through daily routine (38), but these actions frequently take place in the context of managed operations. A subject is constituted through how it navigates these operations, selecting trajectories, and actualizing them. In response, operations function by prescribing a set of actions. This will come to the fore in my discussion of modulation in the third chapter.

If these two spaces alone constituted the city, then we would have no choice but to fall back on something like a fully deterministic network model of cities enclosing the possibility of actions in automated operations. However, it is the third space of

representational space that suggests an escape from a closed circuit of prescribed movement. Representational space is the space of imaginings, dreams, and art produced by the direct experience of inhabitants living in a given space. It does not emerge on its own, rather it appropriates elements of spatial representations and spatial practice (39), and its tendency to reassemble the other two spaces leads us toward thinking of alternatives to space as it is conceived in the abstract sense, without needing to dismiss these imaginings as somehow separate from a non-representational "actual" or "real" space. Therefore, taking representational space as a starting point (as I do in my analysis of digital games) does not exclude the analysis of spatial representations or spatial practice, it invites it.

However, centring analysis primarily on representational space poses the problem of isolating it as an object of analysis, which Lefebvre explains is difficult due to the relatively small leeway it is given in capitalist society, where it is reduced to "works, images, and memories" (50). Even art and literature for Lefebvre, when conceived of as an abstracted category or practice, tends toward mere commodification (74), thereby effacing the symbolic dimensions that would otherwise lead to a possible divergence from the exchange-based repetitions of daily life (396). World-based narrative theory provides a possible way around this impasse by moving from the level of a text's commodity-form, which exists within a world of globalized capital, to the world as constituted by a text, where something like globalized capital may not exclusively dictate value. Accordingly, representational space shifts from fragmented bastions of a symbolic order of space to alternative worlds in which Lefebvre's triadic space is no longer dominated by abstraction; however, these alternate worlds are also not wholly separate from the "real" world as produced through representations or practice.

Marie-Laure Ryan along with narrative theorist Alice Bell explain the utility of this kind of approach in the introduction to the collection of essays *Possible World Theory and*

Contemporary Narratology, explaining that possible world theory, which posits truth as a kind of "calculus" determined by the logic of a textual world, provides an antidote to the kind of linguistically contingent approaches that dominated literary theory around the middle of the twentieth century (2). Philosophers like David Kellogg Lewis, posit that our world is simply one possibility amongst a plurality of others, and possible world theories of literature allow theorists to approach the reality of a text as a product "of all the propositions presented as true by the text" (3). The logic of these propositions is frequently tied to a modal logic wherein a calculus of truth or reality is worked out from how propositions relate to one another rather than their correspondence to actual events (Ryan 2012). Within a fictional text, a different logic of reality is at play, and it may make sense to talk about, for example, the existence of monsters in Tokyo despite their seeming absence within the city's physical corridors. In other words, fictional worlds provide a set of possibilities that constitute one world within a set of possible ones (8). What is of primary importance here is the notion that the appropriations of representational space along with representations and spatial practice constitute not a single actuality but a range of possible ones that all make claims on reality to varying extents. As theorist Mark J.P. Wolf suggests in his text *Building Imaginary Worlds: The Theory and History of Subcreation*, the mediatized nature of contemporary space means that imagined worlds are frequently informing the actual world, "tell[ing] us something about the way in which we form a mental image of the world we live in, and the way we experience it and see our own lives intersecting with it" (15).

The consequences of this manifold reality for Lefebvre's treatment of space allows us to think of the reality of space not as a totalized abstraction but as a pluralized ontology made up of competing and overlapping worlds that frequently mediate the same objects and events. For Lefevre, space is always simultaneously actual and potential, presenting a given set of actions alongside a "locus of possibilities" (191). Following this way of thinking, there is

then nothing incongruous about treating the space of Shibuya as a site of multiple possible worlds. Accordingly, fictionalized spaces, especially those that articulate a version of a given space, such as the digital approximations of Shibuya analyzed in this dissertation are analytically productive. They present another layer of space with an alternative set of possibilities for moving through the city, but one that is informed by and informs the embodied experience of spatial practice and the rigidly codified representations of maps, blueprints, and planning documents.

Spatial Interventions

In concluding this chapter, I want to examine some of the different ways space and worlds have been theorized across fields such as narrative studies, game studies, and media studies in order to situate my project within and across these disciplines. This will also help distinguish my methodology to space from other theoretical approaches, while also incorporating certain theoretical tools that will better explain why and how gameic processes are inherent to a space like contemporary Shibuya.

A World-based spatial analysis, especially the modal logic of possible worlds theory, has been used often in narrative analysis since its development in the 1970s and has been applied to everything from the literary semantics of the fantasy genre (Martin 2019) to the temporality of counterfactual statements in narrative fiction (Dannenberg 2008). More relevantly, narrative scholars looking to parse the digital and algorithmic nature of electronic media such as hyper-link texts or video games have found possible world theory generative in complicating the boundaries between fictional and actual worlds. Françoise Lavocat's "Possible Worlds, Virtual Worlds," for example, finds within the worlds of video and computer games distinct economic, juridical, and moral effects that leak from the world of the game out into the actual world (288). Similarly, Alice Bell in her essay "Digital

Fictionality" explores how hypertext narratives extend the boundaries of a fictional world, especially when hypertext links oscillate between fictional and non-fictional websites. Bell writes that this approach, flickering between different ontologies, aims at a more "emotionally" immersive textual experience by linking fictional worlds to familiar extratextual elements (249). My analysis of the hyper-linked novelistic game *428: Shibuya Scramble* in chapter four, which similarly co-embeds encyclopedic and fictional diegetic information within its links, finds a similar immersion, though one that takes place between the individuating function of the word and the generalizing function of the link. Ultimately, however, while possible worlds theory is useful for centring the ontology of fictional worlds, the logocentric nature of this analysis is not well-suited to my interest in the actional and operational (rather than logical) congruity between worlds. The Lefebvrian approach to representational space that I take in this dissertation finds the divergent possibilities of alternative worlds in their dream-like and partially coherent nature, rather than in a calculus which potentially leads us to think of worlds in terms of mathematical abstraction.

Peter Wynn Kirby in the introduction to the 2008 book *Boundless Worlds* suggests another possible media approach to analyzing worlds that is more commensurable with my approach. Kirby places Lefebvrian spatial practice at the centre of analysis by eschewing more static Cartesian connotations of space and place in favour of the social and historical connotations that shape localities through particular kinds of movement and change (1). Kirby wants to reinterpret space within a larger framework of worlds formed by "ceaseless marking, and remarking, of our environs, a circulating interplay between the trammeled routes and existing toponyms that accrete to 'places' through history-laden social contact with terrain and the daily embodied iterations and symbolic interchange that transpire in the simplest journey or sensory immersion in a social milieu" (3). The world-form I address is precisely this kind of dynamic interplay of movement assembled into topologies that feel

affectively coherent. A world-form emerges within the space of a video game and something like the community-based transit projects of Tokyu alike. Both attempt to pin a set of possible movements to an environment, creating worlds that emerge through their traversal.

Theories of media mix, particularly those from the field of Japan studies are well-suited to thinking about how certain kinds of movement produce a world. Japanese media theorists helped found this approach, which looks at media franchises and formations not through individual and media-specific iterations such as a book, film, or game but through the full range of media objects that depict the world of the franchise. This approach locates the world in acts of narrative consumption. Using the example of a popular Japanese line of collectable stickers which each contain fragments of a larger mythology, Ōtsuka sees a world emerging as a kind of meta-story cobbled together from fragments of smaller stories (111). This consumption, however, is typically not limited to a single media form. Ranging across print, screen, and material object alike, consumption begins to form a diffuse assemblage held together at the level of narrative worlds that simultaneously began to push outside the spatial limits of commodity forms (Steinberg 2012: x-xi). In other words, as media specificity gives way to a more diffuse formation that resembles a network model of space, media engagement becomes an act of assembling. Audiences are challenged to trace the connections between fragments of a narrative and, in doing so, gain a more complete understanding of a narrative world. Marc Steinberg develops the concept of the media mix in his book *Anime's Media Mix*, tracing its emergence to anime's history of transmedial convergence beginning in the 1960s (viii). In a separate essay published in 2015 entitled "8-Bit Manga: Kadokawa's Madara, or, The Gameic Media Mix," Steinberg examines the place of video games within media mixes. Looking at Ōtsuka's own fictional quest narrative of *Madara*, spread across manga, anime, and early Famicom RPG video games, Steinberg finds the game as the centre of the mix. He explains that the manga, for example, attempts to narrate something of the

operational structure of the game with descriptions of the attacks that correspond to possible actions within the Famicom game. Moreover, the manga also captures some of the visual aesthetic of the game's pixelated menus. Steinberg suggests this created a "hybrid narrative-game text," where the centre of the mix was the world itself (Steinberg 2015). This model continued to be dominant from the 1980s through to the present, and it is one in which the operations structures of games play an important structuring role of the overall mix.

While Kirby helps us think about possible worlds as constructed through movement rather than a series of logical delimitations, theories of the media mix yokes the continuity of this movement to acts of consumption. For this reason, game and media worlds are not limited to texts, they also frequently find their ways into the consumptive channels of the cities in which they are commodified. Media theorist Kaichirō Morikawa, for example, exposes how anime, manga, and game media created an "otaku city" out of the Tokyo electronic district Akihabara by dominating stores, arcades, and even the commercial surfaces of buildings, thereby challenging the more normative and less fantastical spatial productions of visible in other Tokyo neighborhoods (134). In the *Anime Ecology,* Lamarre reads this as an extension of the signaletic broadcast tendencies in which media mixes are embedded, transforming home spaces into something like individual "relay stations" for a media mix distributed across the private and public spaces of the city alike (201). In an essay entitled "Delivering Media," Steinberg adds the convenience stores proliferating around Tokyo train stations to the urban distribution of the media mix, locating them as delivery hubs for material components of the media mix such a books, magazines, and toys that feature popular animated characters (240). Here the community building projects of Tokyu along with Shibuya's stores and screen space (both the portable screens and the larger commercial screens of the Shibuya scramble) form the connective channels of the kind of worlds I discuss. A world like that belonging to *Persona 5*, discussed in the final chapter of this

dissertation is not apart from the actual world it is embedded within it, as evidenced by a pop-up store and exhibition that appeared in the Shibuya branch of the manga anime store Animate (Morissy 2018).

The nature of media-mixes, disclosing the world through acts of commodity consumption, may seem to lead us back to the notion of world's as fully enclosed within a network of capitalist-exchange expanding and intensifying within a void-like space, but just as Lamarre suggests the importance of separating the media mix as a business model from the "improvisational forces" inherent to digital networks (310), the worlds of computer and video games are not predicated on a single prescribed route through distributive channels. While the world disclosed through consumption is inherently capitalistic, the gameic functionality of digital media invites a degree of openness and flexibility that help us think about the possibility of divergence within the enclosed and operationally managed space of city. For this reason, while media mix formations are useful for tracing the movement of worlds across infrastructures and the positionality of an individual in relation to that world, the functionality of gameic worlds and their extension within cities requires a more media specific model of spatial production.

Some work has already been done specifically on game spaces and worlds. For example, Michael Nitsche's *Video Game Spaces* treats game spaces as a five-fold assemblage that combine to create a game world (15-16). Nitsche productively binds the experience of game worlds to the spatially narrativized navigation of a digital space (23, 43), but his insistence that these worlds are limited to "navigable 3D environments" (5) restricts the possibilities of his analysis to the game world as representation of a "real" world outside of the game (8).

Another approach to game space is rooted in analyzing the various technical apparatuses that instantiate game worlds. Writers following this approach, categorized

generally as platform studies, explore how video games are created between the interdependent processes of hardware and software. Some of these approaches, such as the work of Raiford Guins, in *Game After*, published in 2014, examines the afterlives of game consoles, computers, and arcade cabinets, tracing the physical components of video game systems including peripherals such as controllers, cables, and plugs within a "chain of nonhuman actors that are . . . part of a global system of raw materials, manufacturing, distribution, government standards for electrical devices and patent protection" (69). As in the case of the worlds of various media mixes, game space here is embedded in processes of consumption that leap between digital screen-based enclosures and physical infrastructures. Nick Montfort and Ian Bogost in *Racing the Beam* provide a different example of hardware analysis in their examination of the Atari Video Computer system. Montfort and Bogost examine how the limitations of game hardware affect the creative process of creating a game world, and while the hardware that they address was produced several decades earlier than those that enable the games I address, such as the Dreamcast or the PlayStation 4, their work is an important reminder that any analysis of a digital media should strive to be not only theoretically but also "technically rigorous" (3). For this reason, I strive to account for the technical processes that produce digital game worlds whenever possible.

While it is difficult to separate hardware from software in the field of platform studies, approaches that favour the latter tend to examine how machines interpret and process data computationally. This is the approach taken by Noah Wardrip-Fruin in *Expressive Processing*, in which he addressed how fictional worlds are constrained by "spatial logics" such as the mechanics of collision detection, which dictate the effects of two objects colliding in game space (380). Game worlds, therefore, are not just produced across Cartesian space or diegetic space, they rely on alternative physical mechanics that dictate what kind of movements are possible. Other computational approaches to space take place at the levels of

interface (Hookway 2014), code (Montfort 2008), and sound production (Goodman 2008). The significance of these approaches to the present research lies in how they translate various electronic, mechanical, and algorithmic procedures into something that is recognizable as a spatially extensive world. As Wendy Hui Kyong Chun explains in her text *Programmed Visions*, the significance of this translation is tied to the move from analog to digital procedures that effectively "translates time into space" (152). While Chun is specifically addressing the tension between ephemeral and eternal tendencies in computer software, the notion of translating time into space, or more concretely, the transformation of various temporalities (rendering-time, response-time, processing-time, etc.) into spatially navigable planes instantiated within and across the frames of visible displays, physical peripherals, and communications networks alike helps us frame the interventions of platform studies as a means of analyzing the non-diegetic temporality underpinning game worlds. These codes are similarly operational within the various digital structures of contemporary cities from computer train timetables to digital mapping applications displayed on the surface of a smartphone. It is these procedures that I analyze to unpack the navigational possibilities of spatial operations, and I begin with the level of visual rendering processes in the next chapter.

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[x] Within the more local formations of the city-suburb dynamic was an unrealized architectonic impulse that sought to re-territorialize circulation between public and private space into a more organic conception. As latter chapters in this dissertation suggest, later counter-cultural formations in Shibuya appear to tap into some of the social potential of the Garden City, constructing alternative territorialities and social formations predicated on the orbital trajectory of Ebenezer's circuitous vision.

[xi] The genre can also be read as exemplary of how Lamarre addresses Raymond Williams account of the "generative force of the gap between distribution and production," in *Anime Ecology* (125-126), as the genre is reified from a desire on the part of store owners in Shibuya to produce the area as an aesthetically distinct musical centre. By creating the label of *Shibuya-kei*, the genre gathered together disparate musical bands and

unified them. From the point of its adoption, the network continued to expand outwards, complicating the dimensions of an already cloudy transnational formation. In this sense, Shibuya-kei is a transnational assembling of already transnational forces.

Chapter Two: *Jet Set Radio* and Pirate Spaces

As this thesis is concerned with exploring how different perceptual, conceptual, and lived experiences constitute different world-like experiences, I begin this chapter by examining how Shibuya has been addressed as a spatial plurality in contemporary Japanese urban scholarship. The discrepancy between Shibuya's official geographic boundaries and the limits of its affective topology has been highlighted by several Japanese academics and writers that specialize in the study of Shibuya and its surrounding areas, such as urban historian Muramatsu Shin and cultural theorist Ishī Kenji. The jurisdictionally recognized territory of Shibuya includes a large swath of Tokyo, encompassing the culturally distinct districts of Harajuku, Shinjuku, and the area around Yoyogi Park. This is Shibuya as delimited by the representations of legal, architectural, and urban planning documents. Writers tend to use the Chinese logographic system of kanji to identify this space with its commonplace moniker 渋谷, literally translated as Bitter Valley. In contrast, the space of Shibuya's counterculture and creative production is identified with the phonetic シブヤ, using the katakana syllabary typically reserved for foreign names and words (Ishī 2017: 2-6; Muramatsu 2010: 11). 渋谷 overlaps and co-exists with シブヤ, but the former belongs to the totalizing processes of local and national governments as well as various corporations such as Tokyu. It is captured by the linearity of maps, subway lines, and blueprints. The space of シブヤ, however, is more difficult to pinpoint. Its dimensions shift with the location of individual and collective performances and receptions that seem to signal Shibuya aesthetically or affectively. As Ishī suggests in his study of Shibuya's history and culture entitled *Shibuyagaku*, this Shibuya is born from the dynamism of different unmanageable elements hitting up against one another (7).

Arriving at the end of the twentieth century, the game *Jet Set Radio*[xii] evokes both the authoritarian forces of 渋谷 and the pop-cultural dynamism of シブヤ in its game space. It

features a group of inline skaters and graffiti artists spray-painting buildings and evading police as they defend their home turf of Shibuya-chō from other gangs and corporate mercenaries. While constantly tuned into the pirate radio station from which the game takes its name, these artists grind across and spray paint their way through the corridors of the city, extending their territory and eventually liberating their home from authoritarian forces. Developed by Sega's first party developer Smilebit, originally known as the AM6 team, the game captured the aesthetic of Tokyo's popular culture in the 1990s. While the game was a major commercial release for the Dreamcast gaming console in 2000 and has been re-released several times on subsequent consoles such as the PlayStation 3 and Xbox 360 in 2013, the game was less mainstream in its subject matter. Developers opted to centre their game on the subcultural formation of 1990s Tokyo street culture, and its manga-inspired graphics, eclectic soundtrack, and graffiti designed by prominent street artists of the time assembles and reproduces everything that made Shibuya cool and trendy in the late twentieth century. The game serves as a coda to the cultural performances that had characterized it for close to thirty years, but in centering gameplay on the illegal and transgressive practice of graffiti vandalism, the game not only celebrates urban subcultural performances of hip-hop music, fashion, and DJ culture that are commercially and legally legitimate, it also insists on the importance of transgressive practices that directly challenge legal authorities and dominant urban semiotic channels. These are countercultural practices that emerge out of subcultural participation.

The distinction between subculture and counterculture is an important one in Japanese studies. While the two terms may be conflated in American and British writing, Japanese Studies scholars such as Anne McKnight in her 2010 essay, "Frenchness and Transformation in Japanese Subculture, 1972-2004," make the case that this conflation is not accurate in a Japanese context. In detailing the transformation of the French baroque aesthetic into a mode

of Japanese subculture, McKnight defines Japanese subcultures in terms different than those associated with British countercultural movements of the Thatcher era, which operated primarily against "cultural and class hegemony" by contesting dominant semiotic assemblages and reworking "objects and things" into a new assemblage in which cultural elements such as clothing signify opposition to authority (125). According to McKnight, the difference in Japanese subculture, is that subcultural differentiation takes place within the conventions of a community of media participation, such as those centred on anime or manga (125). While many of these subcultures were derided as "trivial" and nonserious by Japanese left-wing cultural authorities such as the novelist Etō Jun (126), writers such as Ōtsuka Eiji would go on to articulate subculture not as a marginalized refusal of dominant cultural practices but as distinctive identities and communities in their own right, constituting their own norms intelligible within a wider culture (126). Moreover, social norms are more than legible identities, they are also practices which instantiate and repeat the needs of the State and capitalism, and so Japanese subcultures, tethered as they are to media consumption and participation in the national economy, are not inherently non-normative, in the sense of contesting or refusing the dominant culture.

Following McKnight and Ōtsuka's formulation of subculture as a cultural norm, the emergence of graffiti and street art as a subcultural practice in Tokyo and Shibuya is located within the emergence of a wider street culture in Shibuya. The genealogy of graffiti frequently extends back to sources as diverse as cave paintings (Ross 2015: 11), wall-scrawlings in ancient Pompeii (Ross 2015: 18), or the shared language of travelling American vagrants (Ross 2015: 12). Yet, while it is true that communicative and identificatory acts of "tagging" are tied to a wider history of artistic production in public space, the history of graffiti in Tokyo is best situated in particular cultural practices and processes of transnational transmission and reception. During the early 1990s, the practice gradually gained recognition

as an art form through its appearance in hip hop music videos as well as fashion and style magazines such as *Fine* (Yamakoshi and Sekine 2015: 346). Graffiti was not isolated from other forms of cultural production. Its popularity was predicated on its compatibility with the wider subcultural milieu of the time. According to cultural anthropologist Ian Condry, Shibuya served as an incubator for the wider street culture of which graffiti was a part. As rap music, breakdancing, and DJ culture circulated through Shibuya music clubs such as Cave, it became enjoined with nearby fashion trends and even exploded out into nearby Yoyogi park for an annual hip-hop cultural festival, where street artists were also able to show off their skills (7). As Condry argues in *Hip-Hop Japan*, that this street culture was a transnational one that moved in parallel but interconnected globalized flows, both underground through music clubs and parks and more commercially through corporate entities such as major record labels (19).

However, the subcultural milieu of street culture also produced more overtly oppositional (and illegal) practices from which the game *Jet Set Radio* takes its inspiration. These practices function more in line with the subcultural theory of Hebdige cited by McKnight as operating in direct opposition to the dominant cultural semiotic systems (125), such as the advertisements, signs, and routine movements that signify Shibuya as a regulated space of retail consumption, commuter travel, and law enforcement. Graffiti vandalism signifies new perceptual spaces within a juridically dominant one, and these spaces are frequently predicated on practices such as trespassing or the destruction of property that are frequently prohibited by the law. The resistance to authority vandalism entails necessarily distinguishes it from the more socially acceptable subculture of Japanese street culture from which graffiti vandalism emerged. For this reason, graffiti vandalism is best defined as a counterculture, even though graffiti itself is part of a more general subculture.

The countercultural movements of *Jet Set Radio* and the game's adaptation of Shibuya's dual spatialities points to an antagonism between authorities and gangs of roving youth that is never fully resolved. While Japanese writing about 渋谷 and シブヤ does not on its own help to elucidate the relationship between power struggles in Shibuya's bifurcated space, the writing of Deleuze and Guattari, specifically their notion of smooth and striated space in *A Thousand Plateaus*, is better equipped to help us think about the tension between the movements and material investments that produce the officially recognized space of Shibuya and the counter-movements that seek to defend its subcultural space. For Deleuze and Guattari, striated space is perpendicular, hierarchal, and directional while smooth space is round, mutable, and meandering. Striated space is sedentary space, in which fixed topological points are dominant. It corresponds to a kind perpendicularity that creates and reinforces rigid and static boundaries. The verticality of striated space may exhibit mobile tendencies, but horizontality is fixed. It is a space of metric and dimensional limits and is evoked in lines and graphs especially within the constructed environment of the city (481). Smooth space, on the other hand, emphasizes paths over points (475). It is movable and shifting and appears as an intertwined "patchwork" (476). While striated space emphasizes perpendicularity (475), smooth space is best evoked by amorphous expanses like the ocean, taking the form of an entanglement that juxtaposes heterogeneous elements and "'represents' trajectories, becom[ing] inseparable from speed or movement in open space" (477). These two spatial modalities align with the hierarchal space of 渋谷 and the more open and geographically ambivalent space of シブヤ respectively. The striated space of 渋谷 as manifest in monitored and enclosed structures such as corporate skyrises, or the corridors of the transit system, while シブヤ is instantiated in smooth moments of artistic expression, such as that of street art in the open and circuitous streets, plazas, and alleys of the city. Within the Lefebvrian

framework I employ, these modalities could also be said to belong to representations and spatial practice respectively.

In capturing the movements that characterized Shibuya during this period, *Jet Set Radio* must reorient the potential for action in Shibuya's smooth and striated space, presenting a version of Shibuya and Tokyo where verticalized sedentary structures such as the side of buildings are made to lend themselves to smooth traversal and transgression by a small group of vandals. At the same time, the horizontal space of paths and streets become the realm of operational forces, namely the police and corporate mercenaries. Navigation in these spaces requires evasive strategies. In order to unify this space, the game must flatten the visual field of the city into a cartoon-like lineality that only reveals its dimensionality through movement. In doing so, the game suggests the possibility of upending the normative movements that characterize the relationship between 渋谷 and シブヤ as one of striations and smoothness respectively. In reorienting the smooth and striated space of Shibuya, *Jet Set Radio* is able to present a version of Shibuya and Tokyo that mobilizes the city's aesthetic modalities against incoming forces of corporate homogenization. In this chapter, I read Shibuya's cultural production through the lens of *Jet Set Radio*, arguing that its world-form is one that preserves the affective and aesthetic sensibilities of Shibuya's street subculture in the 1990s by mobilizing the countercultural movements of graffiti vandalism.

"Mischievous Boy" / "Magical Girl[xiii]"

In order to contextualize the countercultural movements of *Jet Set Radio*, I want to begin by historicizing the practice of graffiti vandalism in Tokyo, and that history begins not in Shibuya itself but a short distance from the transit hub in the trendy neighborhood of Shimo-Kitazawa. In Hidetsugu Yamakoshi and Yasumasa Sekine's "Graffiti/Street Art in Tokyo and Surrounding Districts," the two authors offer an account of the specific history of

street art in Tokyo and write that a store in Shimo-Kitazawa named Funk Shop provided artistic supplies and relevant information for would-be artists (346-347). This should not be taken to mean that graffiti was not a part of Shibuya's wider cultural landscape. According to Yamakoshi and Sekine, Shibuya was one of many neighborhoods including other transit hubs such as Ikebukuro and Shinjuku that served as sites for "raids," where groups of artists would gather together and "bomb" a neighborhood with graffiti late in the evening (347).

The practice of graffiti vandalism, as described by Yamakoshi and Sekine evinces its countercultural nature, as it operates by disrupting what Lefebvre identifies in *The Production of Space* as a general "spatial code" of objects such as "corners" or "rooms" (or more relevantly walls or streets) that come to signify a particular use, relationship, and meaning through spatial practice (16). The graffiti vandalism raids rely on alternative spatial practices such as trespassing, afterhours circulation, and overwriting commercial signs, thereby exposing opposing claims over permissible spatial practice and signifying this practice with tags or art rooted in the socially constructed aesthetic of 1990s street culture. As Richard Lachman suggests, writing in regard to graffiti culture in New York, graffiti entails an alternative spatial reality, and it is one that cannot be fully totalized because graffiti artists can "challenge hegemony by drawing on particular experiences and customs of their communities, ethnic groups, and age cohorts, thereby demonstrating that social life can be constructed in ways different from the dominant conceptions of reality (231-232). In sum, graffiti is both a means of contesting territory and redefining space. At the same time, the practice of graffiti entails a different way of moving through that space. It is not reducible to a particular aesthetic or cultural history; it is a process of challenging dominant spatial iconographies and inscribing alternatives within perceptual space. As a signifying act, it may also mark where one territory ends and another begins.

Graffiti in Tokyo did not start as a transgressive practice. Yamakoshi and Sekine describe the overall juridical attitude to graffiti in the 1990s as a fairly permissive one. Participation increased and practice was fairly open (346). Though graffiti as an act of vandalism was long punishable under articles 260 and 261 of the "Japan Penal Code": "Damage to Buildings" and "Damage to Property" respectively (54-55), police were likely to overlook these acts (Yamakoshi and Sekine 2015: 346) and the resulting intensification of the practice led to greater legitimization. From the late 1990s onward, Graffiti-centric magazines began to proliferate as did exhibitions celebrating the form (347). For Yamakoshi and Sekine, this marked the turning point that splintered graffiti artists into two camps: those who sought legitimization and those that insisted on the art form as a counter-normative and therefore necessarily illegal practice (345). While Condry insists that Japanese street culture is predicated on the interconnected nature of underground and mainstream performance (19), underground graffiti artists increasingly found themselves at odds with juridical and local authorities if they refused to produce their art in officially sanctioned venues. In other words, graffiti artists either found a home in the increasingly striated space of Shibuya, or they were forced underground. This bifurcation also seems to mark the moment suggested by Lefebvre in *The Production of Space* as characteristic of the deterioration of centralities (in this case, a subcultural one), when certain elements of the practice of graffiti are absorbed into the seemingly homogenous spatial production of Shibuya while practitioners who cannot or are not willing to conform are chased out (333). Graffiti as an art form becomes part of Shibuya's overall aesthetic, a part of a subculture much like the ones described by McKnight and Ōtsuka, but graffiti as an underground practice faced increasing juridical and public opposition (Yamakoshi and Sekine 2015: 351).

By the time *Jet Set Radio* was published in 2000, Shibuya had become one of the main targets of graffiti artists. In response, Shibuya enacted special anti-graffiti bylaw in

1998. According to police interviewed in an article from *The Japan Times* in the same year as the release of the game, the problem with enforcing the law was how elusive perpetrators proved to be, arriving on the last train and departing the next morning on the first. In this way, Shibuya's status as a major transportation hub facilitated the production of graffiti, allowing youth from suburban areas to infiltrate the area, paint it, and escape. The fugitive nature of this practice created tension between artists and local residents. One particularly frustrated local is quoted in the same article as the interview, stating that graffiti in Shibuya "brings home how far society has deteriorated" (Uranaka 2000).

Throughout the 2000s, a number of tactics were mobilized to crackdown on graffiti. In addition to bylaws, the Tokyo Metropolitan Government offered support in the form of advisors and equipment for the development of community groups to tackle graffiti. These community groups, made up primarily of local volunteers cooperating with hired professionals, kept a look out for acts of vandalism and took charge of cleanup efforts. The Metropolitan Government also released a brochure full of cleanup tips in 2010 encouraging locals to remove graffiti as soon as it is spotted (Yamakoshi and Sekine 2015: 351-352). Here, the weight of an ostensibly public response is added to the overall force of juridical, governmental, and corporate pressures. These conspire to offer a unified permissible spatial practice of Shibuya that expands outwards into representations that instantiate and bolster the legitimacy of that version of Shibuya. The treatment of transgressive movements of youth in Shibuya evinces the paradoxical attitudes of authorities, businesses, and experts. On the one hand, graffiti art is valorized for it aesthetic and the economic growth it entails. On the other, the counter-normative impulses of these practices demand an official response.

By the 2010s, much of the discourse shifted alongside Shibuya's move from a youth-centred formation to a tourist-oriented one. While Japanese youth had been solely on the hook for graffiti in Shibuya for the previous three decades, the prevalence of tourists in the

area saw news sources such as the *Nikkei* and the *Asahi Shinbun* newspapers attributing the practice to confused tourists. Articles with titles such as "*Rakugaki NO! [Shibuya wa OK] gaikokujinra gokai*" ("No Graffiti! Foreigners mistakenly think 'It's OK in Shibuya'"; *Nihon Keizai Shinbun* 2016) and "*Shibuya, rakugaki No! kanchigai gaikokujinmuke eigo postā*" ("No Graffiti in Shibuya! English Posters Target Confused Foreigners"; Ikeda, 2016) link the problem of graffiti in Shibuya to the increase in tourists and migrants in the area and detail new efforts by the municipal governments to display English-language posters explaining to supposedly hapless foreigners that the practice is in fact a crime.

Regardless of contemporary media scapegoats, for many of the practitioners who persist in their art, graffiti provides a means of signaling one's presence or the presence of one's collectivity to a crowd. Embedded in Shibuya's 1990s milieu, acts of graffiti turn back on the Shibuya River Valley to temporarily recreate it. Carried out by means of navigating and inscribing the corridors of Shibuya's infrastructure, the very practice instantiates a kind of negotiation of what is spatially permissible. As folklore scholar Nagano Takayuki suggests in his brief survey of graffiti messages appearing in Shibuya after the death of musician Ozaki Yutaka, messages often create opportunities for indirect communication, which can serve an important individuating function in densely populated spaces such as Shibuya (Nagano 2010: 105). Even as simple identificatory or communicatory act, graffiti instantiates a kind of shared world, a momentary repetition of シブヤ that mixes the smooth and striated space of the city into a name, message, or image that highjacks the otherwise homogenized surfaces of the city.

The crackdown on graffiti evinces the countervailing tendencies of both versions of Shibuya discussed in this chapter. Unlike other markers, which can easily be hidden or moved, graffiti must operate on a rhythm of attack and retreat. Similarly, by localizing counter-graffiti efforts, Shibuya is constituted as an oppositional space by inhabitants and

invading vandals with a dual formation that cannot be dialectically resolved. On the one hand is Shibuya as a sedentary and striated space (渋谷), patrolled and monitored by community groups and governmental authorities, circumscribed by corporate developments, and verticalized ever higher into the sky and ever deeper underground. On the other is the smooth version of Shibuya (シブヤ), constantly receding only to reappear, delimited by flexible and shifting boundaries and territorialized by groups moving in and out of the Shibuya River Valley and surrounding areas.

The agents of this oppositional space also fall into two camps. Striated space is produced and protected by a coalition of corporations and governmental authorities that function similarly to the State in Lefebvre's theory of power in *The Production of Space*, which state operates on space through accumulation of potential violence (both militaristic and bureaucratic) and the instantiation of a "unitary, logistical, operational, and quantifying rationality, which would make economic growth possible and draw strength from that growth for its own expansion to the point where it would take position of the whole planet" (280). The efforts of corporations such as Tokyu to reorganize and consolidate the commercial and public space of Shibuya combine with the governmental force of the police to chase off elements that do not fit into this conception, helping to centralize Shibuya within a striated global network of other urban centralities.

The agents of smooth space are smaller collectives, defined by the scholar Ueno Toshiya as *zoku* (tribe or family). For Ueno, these subcultural tribes differentiate themselves from other groups not in the individualist terms of the State and subject, upon which the modern nation of Japan relies, but in the terms of media affinity within a globalized community of media consumption (qtd. in McKnight 2010:127). Ueno defines some of these tribes in terms of piracy, which presents a more directly countercultural tack that helps to explain groups like those practicing graffiti vandalism. He regards marine pirates as tribal

bands that defined themselves in oppositions to the burgeoning operations of global capitalism in the seventeenth and eighteenth centuries. He also sees continuity between marine piracy and contemporary radio or data piracy, as both define themselves as temporary "chronotopes[xiv]" within the more encompassing global space that belongs to nation states. These chronotopic spaces do not emerge on their own, but by highjacking the networked space of trade erected by capitalism. In this sense, Ueno sees piracy as the flipside of capitalism and the streams of information upon which it relies (Ueno 1998). This formulation helps us to think of the actions of graffiti vandals as spatial piracy. By coopting the striated space of the city, they create an alternative time-space that functions as a haven for smaller countercultural collectives.

It is this conflict within Shibuya, between roving bands of piratical vandals who treat the city as a smooth space, and the efforts of police and corporations to striate the city that serves as the inspiration for *Jet Set Radio*. While a historical approach of this conflict in Shibuya that focuses the globalizing processes of abstract space exposes the predominance of striation at the expense of smoothness, an analysis of space in *Jet Set Radio* exposes a world-form that is more resistant to totalization.

"Humming the Bassline"

When I write that the world-form of *Jet Set Radio* is one of pirates and vandals, I refer to the central band of protagonists named the GGs—a collection of street artists hiding out in Shibuya and listening to the broadcasts of pirate radio DJ Professor K, similar in nature to the *zoku* communities described by Ueno. The group operates by spray painting and therefore highjacking and overwriting the city's billboards, street signs, and buildings. In doing so, they are engaged in a constant battle to retrace the boundaries of their home turf and defend it from rival gangs and the police. They create their own territory within the space of the city,

but this territory is set within a version of Tokyo that has already been remapped by the game's developers, and before discussing what the acts of territorialization perpetuated by the GGs has to tell us about the space of Shibuya, I first analyze the gameic version of the city created by the game's developers.

While *Jet Set Radio* takes inspiration from the history of street art in Shibuya, it reimagines the setting of the subcultural practice. The game takes place in a fictionalized and thinly veiled version of Tokyo called Tokyo-to, a city that the game's narrator, Professor K, insists "doesn't appear on any map" and is located vaguely "somewhere in Asia." This introduction dislocates the game's setting. While the suffix *to* in Japanese simply designates a municipality and is the acceptable way of referring to Tokyo outside of the game world, the Tokyo-to of *Jet Set Radio* is also spatially distinct. Similarly, the home base of the GGs is Shibuya-chō, a space recognizable as Shibuya but slightly dislocated by the suffix *chō,* which indicates a town or local administrative area. While the game's primary setting Shibuya-chō is recognizable as Shibuya, the surrounding areas of Benten-chō and Kogane-chō seem to signify locales in Osaka and Yokohama respectively. In other words, Tokyo-to both is and is not Tokyo. It adapts certain elements of Tokyo's geography but recontextualizes them into a new topographical formation.

This recontextualization is characteristic of the game as a whole. The game's narrative, for example, adopts and recombines elements of the conflict between youth gangs and authorities that frequently made headlines in journalistic discourse. The game focuses on gangs of graffiti artists (termed *rudies* from the Jamaican term for delinquents "rude boys"). Armed with spray cans and inline skates, they roam the streets of the city while remaining tuned-in to the pirate signal of DJ Professor K. Broadcasting from a secret location, Professor K provides regular updates between missions that create a general narrative structure to the game's events. When the game opens, a new resolution has been announced called "The

Twenty-First Century Project." The first phases of this project have already outlawed skating and graffiti art but ultimately aim to outlaw all forms of expression and increase productivity in Tokyo-to and the world as a whole. Professor K then pivots to introducing the games protagonists. The gang is founded by Beat, a teenage runaway wearing large headphones and green goggles. In the first tutorial level of the game, the player takes control of Beat as he first encounters Gum and Tab, two other potential player-characters. By mimicking a few of their acrobatic maneuvers, the player succeeds in recruiting them and together they form the GGs. Located in a warehouse somewhere in Shibuya-chō, they set out to tag parts of their neighborhood. After being threatened by rival gangs their territorialization begins to extend to surrounding neighborhoods[xv]. The gang's initial goal is to defend their territory from rivals. At the same time, they must evade the tightening grip of Tokyo-to's authoritarian police force led by the Dirty Harry-inspired Detective Onishima.

After this initial setup, further diegetic narrativization is sparse. Professor K's updates are brief, and they tend to be related to new gang developments and the intensifying police tactics. The bloodless inter-gang conflict takes up the first chapter of the game, but the arrival of two new members, Combo and Cube signal a shift. They announce that their friend Coin has been abducted by the corporate enterprise, the Rokkaku Group, whose leader Goji, along with this gang of mercenaries the Golden Rhinos, is seeking the "Devil's Contract," a record with the power to summon a powerful demon. Goji seeks to use the demon to further his Twenty-First Century Project and cement the growing stranglehold his corporation has over the area. As with the actual space of Shibuya, corporations here are bound up with the police as a kind of state power, both functioning as legally sanctioned agents of power that seeks to dispel the GGs and other gangs from Tokyo-to and their playful inter-gang conflicts. In the game's final conflict, which takes place on top of a giant turntable perched on a skyscraper, the player-character defeats Goji, and reveals that the Devil's Contract was a hoax all along.

The game's world-form is derived from an eclectic mix of musical, artistic, and cultural influences. In a documentary entitled "The Rude Awakening" released as bonus content for *Jet Set Radio*'s high-definition re-release in 2012, the developers are explicit about their references. Citing an overall desire to celebrate popular culture and music in Tokyo at the end of the 1990s[xvi], head artist Ueda Ryūta[xvii] explains his choice to avoid the cinematic tropes and conventions which were becoming the norm in games at the turn of the millennium. Instead of offering fleshed out characters with recognizable motives, Ueda wanted characters that were more "*aikon*" (icon) than "*ningen*" (human) (Caufield and Caufield 2012). Characters were simplified into distinct styles and types and little detail or background was provided for their actions. Even the sparse background account of Beat and his cohort I provided earlier in this section is gleaned primarily from supplementary materials such as the game's instruction manual. Experienced solely through playing game, Beat and the rest of the GGs, are for the most part game avatars that never fully coalesce into characters. According to an interview with Ueda also from the documentary, they are meant to be "*kigō*" (symbol[s]) or "*shōchō*" (representation[s]). Ueda's use of terms such as symbols, icons, and representations, points to a semiotic system, though it is not a wholly coherent one. Instead, characters serve as general signifiers in a network of pop-cultural and subcultural elements. In fact, characters themselves are composed of smaller signifying elements, such as Beat's permanently affixed headphones (suggesting the pirate signal), his inline skates (indicating both extreme sports and evasive movements), and bright yellow t-shirt (referencing Shibuya's eclectic fashion scene). Characters serve as anchoring points for these references and coalesce into avatars of Tokyo's 1990s fusion of rock, hip hop, and DJ culture for which Ueda had a personal affinity

What was important was not the privileging of a diegetic structure with recognizable and distinct narrative elements but the "*mikusuchā*" (mixture) of signifiers. Characters were a

means of conveying a part of the overall 1990s street culture aesthetic described by Condry. Different game areas emerged out of the relationship between aesthetic markers, and the world was the realization of the "*baransu*" (balance) between these elements (Caufield and Caufield 2012*)*. The combination of disparate elements into a new holistic conception also extended into other aspects of the game. In the same documentary, prominent graffiti artist and artistic consultant on *Jet Set Radio* Eric Haze states that the graffiti art used in the game wasn't created for the game so much as found, selected, and incorporated into something that fit the world. Similarly, the documentary also includes an interview with the game's composer, Naganuma Hideki[xviii] who produced music from looking at the characters and the environment of the game. Working with vocal phrases, he would chop them up and re-order them into nonsense statements that he found amusing, thereby creating a soundscape for the world. Naganuma's heavily sampled music includes original compositions along with selections by other artists and unites genres as diverse as hip-hop, jazz, rock, and J-pop. It is predicated on creating an audio experience that smooths a sampled polyphony into a heterogeneous mix.

Towards the end of the documentary, the game's developers and artists seem to agree that the game's aesthetic sensibilities preceded its ludic functionality. The director Masayoshi Kikuchi[xix] echoes Ueda when he states that the Jet Set Radio's conception revolved around highlighting the dynamism of late-1990s popular culture. In a sense, gameplay was secondary, and while the finished game ended up combining elements of action, extreme sports, and other genres, Kikuchi explains that it could have just as easily ended up being an adventure or roleplaying game. The game mechanics were arrived at from a desire for simplicity and, like other elements of the game, these started from a desire to signify the vibrancy inherent in Shibuya and other parts of Tokyo. In order to achieve simplicity and vibrancy, the production of the game's world-form could not be limited to adapting and

recombining diegetic and semiotic elements. The digital procedures that generated the gameic version of Tokyo were also leveraged to produce a space that lent itself to the kind of bright, eclectic style developers hoped to evoke. To explain how this was performed, it is necessary to first give a brief account of the technical limitations of digital games in the year 2000 and the methods *Jet Set Radio*'s developers used to overcome them.

Jet Set Radio's visual rendering system of a manga-inspired space is key to how the game upends the conventional striated movement through Shibuya's streets. At the time of *Jet Set Radio*'s release, the recent development of volumetric rendering techniques, led to a greater push on the part of developers towards photo-realistic techniques. Volumetric rendering generally refers to different techniques used to project a dimension of volume onto a two-dimensional display, thereby creating the illusion of depth. This illusion is used to distinguish so-called three-dimensional games from two-dimensional games characterized primarily by horizontal and lateral movement. With few exceptions, the hardware limitations of early video game consoles and computers meant that most games were limited to flat approximations of space (see Fig. 1). The smallest element of display is a pixel, an abbreviation of picture element (Möller Tomas, et al. 2018: 21). A pixel indicates a physical point of light on a display, and in order to avoid gaps in the image, displays render pixels through adjacent bundles of primary colours held together in grid-like arrangements of triangles or rectangles depending on the display. Rendering an image entails translating its contours into these displays with a process called *rasterization* (Möller Tomas, et al. 2018: 21). This presents no problem for vertical or horizontal lines, but when a diagonal or smooth image is required, the line can only move up and down the contours of the display, and visual data is inevitably lost. This is called *aliasing* and results in jagged stair-like patterns emerging on the outline of in-game objects (Möller Tomas, et al. 2018: 21130*)*. In other words, even

the smoothest rendered image betrays a logic of striation that abandons what cannot be totalized[xx].

Typically, games attempt to overcome visual data loss with various *anti-aliasing* techniques. As the fourth edition of the *Real-Time Rendering* textbook explains, "The process of rendering images is inherently a sampling task" (130), as the construction of a digital image involves capturing a portion of a continuous visual signal and interpreting it digitally (131). The more information that is able to be sampled, the smoother the image. As digital game space is rendered by this sampling process, the problem of Deleuze and Guattari's smooth and striated space becomes less a matter of finding smooth space amongst striation and more a matter of whether or not smooth space can even exist when produced by digital algorithms. The problem of smoothness was heightened in the mid-1990s when technological capacities allowed for pixels to contain an ostensible third dimension of data, becoming volumetric elements or voxels (578). In the terms of Cartesian space, games were no longer limited to X and Y axes. They could be structured along a Z axis as well. Of course, voxels cannot actually create depth on a two-dimensional surface. They are still limited by the dimensionality of the screen, but by indexing information within a three-dimensional grid and subsequently generating the appearance of the voxel-based objects in response to a visual perspective, movement through a world provides the illusion of three-dimensional space. The perspective itself is typically termed the game camera, and it constitutes its own set of movements both manual (via a button or control stick) and automatic that allow users to look at different sides of object. The dimensionality of objects is generated in response to the position of this camera.

Many of the early video games that attempted volumetric rendering remained limited by rasterization. The visual texture of characters, objects, and the world they inhabited were extremely jagged and simple by contemporary standards. At the time, these games were the

closest consoles and computers had come to producing photo-realistic imagery, and so the overall push in the game industry was toward greater visual fidelity. In order to hide the lost bits of signal that arose from these attempts, developers were forced to create "anti-aliasing" techniques to smooth the image, and the most common of these techniques was simply to blur the contours of lines so that jagged lines were less conspicuous (136). The result in most games from the late 1990s to the early 2000s, when sample and display limitations were more obvious, was a kind of blocky and overall muddy visuality (see Fig 2).

While many games attempted to hide the lines that comprised their visual space, *Jet Set Radio* decided to expose them. Ueda's stated desire to capture an overall street culture aesthetic rather than more naturalistic elements led the team to explore different rendering techniques, eventually settling on what is most commonly referred to as *cel shading* or *toon shading* (652). Both of these are general terms for a number of different techniques that all aim at an aesthetic similar to that of hand-drawn animation. While both cel and toon shading, tether the rendering technique to a lineage of celluloid animation and cartoons, *Jet Set Radio*'s developers, crafting the game at a time before a name for the technique had been standardized, labeled it *"mangadimenshon*" ("manga dimension"; 2013), suggesting Japanese comics and animation as more relevant visual lineages.

Capturing the manga aesthetic, embedded as it was in the pop culture milieu that the developers were hoping to convey, necessitated emphasizing thick and dark lines. When translated into the rendering capability of the Sega Dreamcast, these lines intensified striation. Predating most other cel-shaded games[xxi], *Jet Set Radio*'s mangadimensionality helped define the aesthetic technique of cel shading, presenting characters, game objects, and world alike as a mass of bright colors and contoured lines (see Fig 3). There are multiple ways of achieving this effect, but the details of individual rendering processes are less important here than the general technique, which aims to remove visual "clutter" and

simplify color gradients to solid and uniform hues grouped together in blocks and separated by solid lines (Möller Tomas, et al. 2018: 652).

The process of cel shading further complicates an already complicated discourse on depth and flatness in animation and digital games. The problem with the distinction between two-dimensional and three-dimensional games begins with the perspectival flatness of the game screen. Andrew Campana explains this problem in an essay entitled "Fold, Flip, Stick" in regard to the flattened characters that navigate a volumetric space in the game series *Paper Mario*:

> Our experience of the three-dimensional, for example, is *always* constituted by the combination of 'two-dimensional' images to create an effect of depth, and our experience of the two-dimensional must similarly always be within a 'three-dimensional' space. In our experience of these dimensions, within and outside of the realm of video games, the two are inextricable to the extent that it is often difficult and furthermore not useful to speak of them as two separate concepts.

For Campana, games like *Paper Mario,* which plays with visual flatness and dimensionality, productively complicates the materiality of game space and destabilizes distinctions of interiority and exteriority. The cel shading technique of *Jet Set Radio*, however, does not project flatness into a seemingly three-dimensional space as the *Paper Mario* series does. Rather, it flattens the entire visual field of game-space. In doing so, the game emphasizes the possibility of depth within flatness, creating new visual and navigational possibilities.

The game's visual style may appear similar to the *superflat* aesthetic most prominently exemplified by the artist Murakami Takashi, which aims at "flattening and dehierarchizing of the layers of the image" (Lamarre 2009: 111) but flattening here does not entirely dehierarchize the field of perception. The image is not decentered. The player-character remains the primary focus at the centre of the screen, and movement reveals that

depth continues to structure the world. Flatness and depth coexist, each dispelling the illusion of the other. The image in *Jet Set Radio* is one in which perspectivism is tied to a shifting hierarchy in which different lines become dominant at different moments. Optically, the game, like its bands of vandals, remains restless, shifting between Cartesian perspectivism and manga-like flatness without ever fully committing to either. It is an optically hybridized space.

The hybridized nature of *Jet Set Radio*'s visual landscape is the first insistence of how we might start to think about the nature of striation and smoothness in relation to the possible worlds imaginable in Shibuya. The emergence of Shibuya's retail chain landscape, the increased density of its transit lines, and the ubiquity of digital networked technologies in the area lead us to think of Shibuya as a space of striation, which is to say a wholly managed, monitored, and metricized space dominated by corporations and controlled by local governance. This is a result of what Deleuze and Guattari's term deterritorialization in *Anti-Oedipus.* Deterritorialization is the process of effacing the socially constructed values, symbols, and aesthetic formations of earlier territorial investments (33)—in this case, Shibuya's street culture. Deterritorialization is followed by reterritorialization, such as the corporate and government mandated incursions of Shibuya's reconstruction which attempts to recode Shibuya as a corporate and tourist space by introducing a number of new construction projects that further verticalize the city's landscape, as described in the final chapter. Yet, *Jet Set Radio* leverages its rendering processes to invest Shibuya's striation with the smooth movements of Shibuya's street culture, affecting a reterritorialization of its own and proving that even in a wholly digital and ostensibly striated computational space, Shibuya can be produced (perceptually, conceptually, and experientially) as something other than an abstracted and increasingly globalized space. Even before game play has begun, the

optical space of *Jet Set Radio* exposes that worlds are claimed and contested at the point where smoothness and striation are assembled.

The technique of cel shading, as employed by *Jet Set Radio,* provides both complement and contrast to the process of compositing detailed by Thomas Lamarre in *The Anime Machine*. In Lamarre's account of how animation, in particular the Japanese practice of anime thinks technology, he considers the movement of the multiplanar image as belonging primarily to two different tendencies "cinematism" and "animetism." While cinematism is predicated on an ever-increasing movement into depth that turns the world into a target (5), animetism entails a different perceptual logic. Animetism remains tethered to the conditions of the technologically mediated and mediatized world, but it is characterized by a lateral movement that moves across the layers of the multi-planar image. This perspective de-totalizes the unified field of vision, exposing the cracks in a supposedly unified space of technological mediation (146).

Jet Set Radio's incorporation of the anime aesthetic achieves a similar de-totalization, but it is not primarily predicated on lateral movement[xxii] or gaps in visual apparatus. By tracing the contours of objects in the game world, it becomes clear where each object starts and ends. The totality is broken up, and the patchwork nature of the assemblage becomes obvious. The game is an assemblage of different objects enjoined through flattening but also separated from one another by their contours. There is a unity of flatness, but it a nonnormative lineal one. Furthermore, there is a variability to the thickness of lines that highlights only certain elements of the visual field. It preserves striation but privileges an alternative, affective assemblage and finds a smoothness inherent to it. Nothing belongs in the world, except for the things that fit a general aesthetic sensibility that is bound to the historically and spatially dimensions of Shibuya's street culture in the 1990s. The game's world-form is predicated on exaggerating rather than photo-realistically capturing Shibuya,

and the game's visual rendering was integral to achieving this. It finds a new kind of smoothness in highlighting everything fashionable in Shibuya's street culture rather than in trying (and necessarily failing due to the limits of the rendering process) to reproduce its smoothness photo-realistically. One of the members of the development team touched on the importance of the game's visual style during a pre-release interview at the Tokyo Game Show in 1999: "In *Jet Set Radio*, we emphasized the parts that we wanted emphasized with dark, thicker lines, and used thinner lines for what we thought wasn't so important. So it's exaggerated like you would draw a picture" ("IGNDC Interviews the Creators of Jet Grind Radio").

By selectively adapting desired elements of Shibuya rather than attempting to faithfully capture the totality of its visual space, the developers of *Jet Set Radio* effectively perform an act of territorialization similar to that of the game's protagonists as they spray-paint their way through Tokyo-to. The lineality of the world makes it clear where the developers' version of Shibuya starts and ends. In short, the game is an instantiation of a particular world-form of Shibuya tethered to an alternative form of visual legibility. The game's overall style emphasizes certain aspects of Shibuya and lets the rest fade into the background. Cel shading, however, is not merely deployed as act of visual territorialization, the game's lineality also presents an alternative topology of movement, and it is at this point that the game's version of Tokyo becomes a pirate space, capable of highjacking the city's striations.

"**Sneakman**"

If the visual nature of *Jet Set Radio* perceptual space recreates Shibuya as a subcultural world, the movements of gameplay render it a countercultural one. The subcultural reading processes underpinning Shibuya during the 1990s were, like those of the

game's visual aesthetic, tied to delimiting a fashionable aesthetic within particular territorial boundaries. Yet when faced with the threat of legitimized violence, this requires navigational possibilities tied to evasion and a form of traversal that challenges the enclosed verticalization of the city. The navigation of space in *Jet Set Radio* pushes the player-character towards a fast and smooth traversal of the city, where the lineality of the world-form must be correctly read in order to determine which of the perpendicular surfaces can be traversed. The player-character must subsequently skate, jump, and grind around the city in search of surfaces to paint.

A typical play session begins in the GGs garage where players pick one of several avatars dancing around to the game's soundtrack. The roster of available characters grows as player's progress through the game, and each character has different tactical advantages and weaknesses. Characters are assigned numerical statistics in three separate categories: power (the amount of damage a character can take before the player loses), technique (the number of points characters earn when the player executes acrobatic maneuvers), and graffiti (the number of points earned for completing graffiti). While the player's affective connection with a character is tied to their aesthetic, these statistics aid player choice, providing benefits and deficits that complement ability and play style. Once a character is selected, the player chooses one of several available stages from a stylized map of Tokyo-to and sets out to paint the town. While different stages occasionally rely on different kinds of objective, such as chasing and tagging rival gang members, the most common mission is simply to seek out potential graffiti sites and cover them within the allotted time. Movement is pinned to the control stick, and spray-painting to the shoulder buttons at the top of the controller. A ticking clock at the top of the screen begins to count down immediately, and a player must move the avatar around the city until they find an opposing gang's graffiti or a suitable blank surface indicated by a large red arrow. Arriving at the arrow, the player is prompted by several

smaller green arrows that curve around to the right or left. The player must emulate the directionality of these arrows with the game console's control stick to gradually complete their artwork (see Fig 4). A play session is complete when all the required surfaces in a given area have been covered. Adding to the challenge of completing the work in a given timeframe, the police (and later corporate mercenaries) pursue the player across the stage, launching tear gas, shooting bullets, and tackling the player-character. If too much damage is incurred, the play session is terminated. For this reason, players are encouraged to be agile. It does not pay to stay in place too long. Occasionally, it is necessary to abandon art mid-way and return to it after escaping the antagonists. This is aided by the player's ability to traverse railings, grind off buildings, and perform flips, spins, and other tricks. Both performing tricks and completing graffiti increases the player's score, which allows the player to obtain one of several ranks. The game is complete when the player has repeated this process a number of times and conquered the game's final boss atop a Tokyo-to skyscraper.

Within *Jet Set Radio*, the open-world structure of the game, visually constructed through the variable lineality of cel shading, Shibuya-chō and other areas become dense collections of lines that exaggerate the perpendicular lines of the striated city. By moving forward and jumping onto the lines, the player-character increases their speed, tracing the contours of that particular surface. Walls also afford the possibility of traversal, but the character can only traverse these flat surfaces for a limited time before they are forced to jump to another surface. In some instances, it is possible to move from surface to surface without touching the ground for long stretches of time, and the ability to read which lines lend themselves to traversal aids these acrobatic acts. The navigation of the game world is predicated on searching out surfaces to tag, but between each actional site the game forces the player to search out new traversable surfaces, looking for the lines that grant faster and unimpeded movement. The player-character is pressed forward by the oppositional force of

the game's antagonists and the temporal pressure of the ever-ticking clock at the top of the screen, but the player learns to evade these pressures and find a freedom of movement, emphasized by repeated acts of vandalism in large open spaces. While authorities engage with the GGs through direct violence—shooting and beating the youth, the GGs respond through evasion and vandalism, even marking the antagonists directly on the back if they are quick enough.

The GGs acts of graffiti are less an act of dominance than a response to the totalizing tendencies of corporate and municipal authorities, who go to exaggerated lengths to deter the vandals. The GGs override and overwrite Shibuya. Normative spatial movement is upended. In one instance, the railings of an elephant-shaped slide become a means of upwards vertical conveyance. In another, a row of horizontal walls become a bridge over chasms. The player-character is always seeking out new grindable or traversable surfaces, and in doing so, transforms obstacles, barriers, and walls into navigable surfaces. In turning objects of hindrance into potential sites of traversal and composition, the same lines that reinforce the normative hierarchies the straited city are made to support a different form of territorialization.

Territorialization takes place on the modalities of legibility and navigation—the same modalities that produce a world-form—and *Jet Set Radio* reorganizes both. The cel shaded world flattens and reorients the space of Shibuya by drawing primarily on the visual aesthetic of its subcultural formations (シブヤ). At the same time, the game does not eliminate the striated space of the city (渋谷), but highlights it, so that it can be better read and subsequently traversed. By combining both Shibuyas into a new world-form, the game calls for players that are capable of navigating all of Shibuya-chō's space: vandals, who are proficient in finding new paths for movement while destroying dominant and rival semiotic codes, and pirates like those described by Ueno, who are able to highjack the networks in

which these codes circulate (the streets and structures of the city) in order to erect a new spatiality that belongs to their subcultural community. The GGs transgress not only because their actions are nonnormative but also because those actions take place in a nonnormative space and in doing so reveal a new world within the space of the city. Only vandals and pirates have access to the space, changing and re-inscribing its limits with each dimension. Corporate and legal authorities move in this space too but are limited to striated movement along predetermined paths. They are forced to lag behind.

"Grace and Glory"

The world-form of *Jet Set Radio* has much to tell us about how smooth and striated space function both on their own and in mixture. It provides us both with a stylized and exaggerated account of the forces allied with smoothness and striation in the contemporary city, and it exposes the practices that allow both forces to function collectively. Moreover, by privileging the aesthetic codes of Shibuya's 1990s street culture, it serves as a kind of bulwark against the governmental and corporate efforts to re-centre the more generic retail and transit landscape that began shortly after the game was published.

In Ueno's formulation of counterculture as piratical, we can see how smooth space becomes a kind of alternative communal space that is temporarily erected within a larger networked space like Shibuya. Moreover, by equating the inhabitants of these spaces with pirates, the importance of DJ Professor K and his pirate radio station come into focus. Pirates and vandals function together to re-territorialize the space of the city to force it to accommodate the street culture aesthetic from which both the pirate signal and graffiti art first emerged. The main character Beat himself assembles both piratical and vandalistic tendencies the latter actionally and the formal visually—permanently tuned into the pirate signal through his headphones, the signal's waveform itself seems to play out across his

green goggles, suggesting that his field of perception or perhaps even his brainwaves have been overwritten. Beat finds his home amongst a *zoku* of likeminded pirates and vandals that all share an affinity for street culture and a need to inscribe it wherever they find a chance. As Ueno suggests, their space is a necessarily temporary one, emerging out of the more static and enduring space of capitalism. It is a space instantiated wherever an opportunity for free movement arises, but there is "utopian" potential in this formation in how it appropriates and transforms the informational channels of the city (Ueno 1998).

The striated forces of *Jet Set Radio* consist of an assemblage of municipal authorities and corporate ones. These two sets of agents act interchangeably within the game, distinguishable only by the intensity of efficacy of their tactics—the corporate mercenaries of the Rokkaku group are much deadlier and faster than the police they replace mid-game. In either case, both groups operate under the auspices of the game's fictional Twenty-First Century Project, cartoonishly aiming to eliminate all forms of cultural expression from Japan and the earth. The goal is to eliminate what cannot be controlled and commercialized. In other words, striation in *Jet Set Radio* is a process of precluding smooth space by mobilizing violence in support of the spread of corporate and governmental power.

More interesting than the opposition of the game's governmental and counterculture agents, however, is how a discrepancy between smoothness and striation occurs when the two forces are assembled into the world-form of the game. The space of the digital game world should be a primarily striated one, reflecting the insistence of numerous contemporary Deleuzian scholars that while striation and smoothness always exist as a mixture, the binary algorithmic processes of digital media and technology and the network architecture upon which they rely increase the risk of striation and the forms of control they allow (Genosko and Bryx 2005: 110; Bayne 2004: 305; Çokay Nebioğlu 2020: 58). Yet when smoothness and striation are assembled within the digital rendering process of cel animation and then

navigated successfully by players in a game session of *Jet Set Radio*, not only does striation fail to dominate but the very characteristics of the two modalities of space are reversed. Perceptual striation become actional smoothness. Striation is called on to protect and produce the aesthetic of Shibuya's street culture, and movement along these lines allows them to be traversed smoothly. It is this reorientation of smooth and striated space in *Jet Set Radio* that helps us think about the movements of actions and operations in contemporary cities more generally. Regardless of the degree of control exercised over the highly metricized, delimited, and monitored space of cities, dense urban formations such as Shibuya inevitability afford opportunities for action that evades capture. The sheer scope and volume of movement within cities is not fully calculable and their density inevitably renders them at least somewhat opaque to operational metrics, surveillance, and control. Cities retain the possibility for what Deleuze and Guattari term "urban nomadism" in *A Thousand Plateaus* (482), a kind of free movement that can be understood to encapsulate the pirate-vandal collectives addressed in this chapter.

For Deleuze and Guattari, an urban nomad is someone who refuses the sedentary nature of striation through nonnormative movement that reveals the eclectic "patchwork" nature of the city (482). They de-territorialize a city by moving through it. This occurs because smoothness can always accommodate striation, as in the mapping and militarization of the sea (479), and striation can always give way to smoothness, as it does in the world of *Jet Set Radio*. While smooth space and striated space correspond roughly to the movements of collectives like the ones painting over Shibuya and the machinations of power respectively, they emphasize that free movement within striation is possible, as is the appropriation of smooth space in support of the State. Furthermore, while smooth space allows us to reorder or re-confront attempts to order space, Deleuze and Guattari caution against thinking that smooth space is in itself emancipatory. It is always in danger of being

captured or subordinated to striation (499). Approached in this way, the smooth space of シブヤ and the striated space of 渋谷 repeat and appropriate many of the same topological elements. The smooth movements of Shibuya's various cultural and subcultural formations select and activate the topological elements of striated space. Similarly, the counter-movements of authorities and business often attempt to regulate and structure the movements of subcultures, but they also simultaneously try to capture the aesthetic and affective investments of those same movements. For this reason, striated and smooth space cannot be approached independently as a space of normativity and resistance respectively. They must be analyzed as countervailing tendencies. What is important is which elements of smoothness and striation are taken up in a world-form and what kind of spatial possibilities become possible at the point when that world-form is parsed and navigated, emerging as an actual world.

The interconnected nature of the two Shibuyas, in which smooth and striated movements are reliant upon each other, forces the relationality of the two spaces to the foreground. A world-form emerges in the space where the conflict plays out. In addition to creating a world-form, the conflict between smooth and striated space emerging out of the transgressive segments of subcultures helps reorient discussions of spatial territorialization from a strictly dialectical relationship between power and transgression to a more relational perspective predicated on the affective connotations of how Shibuya's city space can be imagined. Rather than focusing on the dominance of capitalist and corporate interests and the gradual homogenization of difference within global systems of power, local differences such as Shibuya's street culture aesthetic emerge as space is constantly being re-combined, appropriated, and retraced. Abstract space participates in the world, but it cannot fully dominate the city. It is at the point of mixing that representational space emerges and creates something that feels like a whole. Thinking about the world-form in terms of smooth and

striated space also invites us to think in gameic terms, as the temporality and actionality of evasion and territorialization of practices such as graffiti art resembles a kind of contest between youth and police. This is what producers of the game *Jet Set Radio* keyed into, and what is most significant is how it reorients the possibilities of reading and navigating space. It invites us to think about Shibuya not at the level of official demarcations, delimitations, or regulations, nor even at how countercultures define themselves in opposition to these official formulations, but at moments of appropriation, reinterpretation, and traversal. This has consequences for how we conceptualize subcultural and countercultural formations in Shibuya, allowing us to find in acts like graffiti not the gradual dissolution of a subcultural movement but the production of smaller, intermittent worlds.

[xii] Due to trademark concerns, *Jet Set Radio* or *Jetto Setto Rajio* in Japanese was initially titled *Jet Grind Radio* upon its release in North America ("Jet Set Radio to Receive Name Change in America"). However, as later re-masters and re-releases reverted to the original Japanese name, the game will be referred to as *Jet Set Radio* throughout this chapter.

[xiii] All section titles in this chapter are titles or lyrics of songs in the game.

[xiv] The term chronotope is a literary one developed by Mikhail Bakhtin in "Forms of Time and of the Chronotope in the Novel" to discuss the overall texture of time and space that give a novel the characteristics of a given genre (84). Ueno makes use of the term to refer to the temporary spatial-temporal coordinates of outlaw territories like those of pirates. The full importance of the chronotope to the production of urban world-forms will be discussed in chapter four.

[xv] All three neighborhoods correspond to a different time of day: Shibuya-cho is always playable during the day, Benten-cho at sunset, and Kogane-cho at night. While the GGs make Shibuya-cho their home, Kogane-cho belongs to a group called Poison Jam, who are decked out in clothes that make them resemble movie monsters, while the high-tech Noise Tanks claim Benten-cho. The other major gang within the game are the all-female Love Shockers, who announce themselves at the beginning of the game by threatening to take over Shibuya-cho

from the GGs. The GGs gradually take over these other territories and part of their success is attributable to the flexibility of the GG's aesthetic and its ability to incorporate the individual aesthetic of other gangs.

[xvi] The game's director Kikuchi Masayoshi insists that the celebration of local and national culture was also tied to a wider cultural production at the time. In particular, the game's incorporation of inline skating and graffiti looked to American youth culture as a reference, and, spatially, the dense verticality of New York City was equally influential. ("The Rude Awakening" 2012)

[xvii] Ueda's work as head artist on *Jet Set Radio* was preceded by other work for Sega on the *Panzer Dragoon* series of shooter games and he would go on to work as Director on the first three installments of the immensely popular *Yakuza* series of action-adventure games

[xviii] Naganuma is a prominent composer for Sega and worked on many of Sega Corporations most popular franchises including *Sonic*, *Yakuza*, and *Sega Rally*.

[xix] *Jet Set Radio* and its sequel *Jet Set Radio: Future* are the only games mainstream games Kikuchi directed. He did, however, go on with Ueda to work on the *Yakuza series*, serving as producer for almost every installment of the series.

[xx] Television and monitor producers have typically dealt with this by burying the loss with greater and greater numbers of pixels, moving towards displays with a visual fidelity that prevents the human eye from recognizing the visual space of the television as one of striation.

[xxi] Although *Jet Set Radio* was the first cel shaded game to gain widespread attention for its style, a few other games such as the 3DO's *Doctor Hauzer* (1994) and the PlayStation game *Parappa the Rapper* (1996) featured similar visual styles. Another cel shaded PlayStation game, entitled *Fear Effect* predated *Jet Set Radio* by a few months but employed a slightly different version of rendering style that did not feature the black outlines that characterize *Jet Set Radio* and other cel shaded games.

[xxii] Lateral movement remains important to *Jet Set Radio*. Without it, it would be tempting to suggest that the game presents only a pseudo-flatness, a trick that obscures the cinematism inherent to a game predicated on the centred movement of the player-character. This, approach to the game, however, would ignore the primary goal of most missions: to spray-paint the surfaces of the world. The player-character hurls towards a point of contact, but at the last moment, repurposes their momentum into a lateral movement, with the camera and player-character moving across the building-surface as they tag it.

Chapter Three: *The World Ends with You* and Spaces of Modulation

In 2001, the Japanese Prime Minister's office announced what would be the first of several initiatives aimed at modernizing and digitizing Japanese infrastructure, governance, and education. The initiative, entitled the "e-Japan Strategy," was accompanied by a full English translation that outlined the philosophy and priorities of the strategy. Chief among the government's aims was utilizing IT technologies to establish a new national infrastructure, and in outlining the necessity for this infrastructure, the plan links the emergence of IT technologies to previous historical upheavals:

> In order for Japan to continue its economic prosperity and raise the quality of life for all people, it is vital to promptly establish a national infrastructure, including legal frameworks and information infrastructures, suitable for a new society where information and knowledge are the sources of added value. However, as is always the case with a revolution, transformation from an industrial society to a "knowledge-emergent society" will be discontinuous and we must prepare ourselves for the hardships that will accompany the process of realizing further prosperity. In the absence of a historical event that would trigger an end to a past era, such as the Meiji Restoration and the end of World War II, each Japanese person is urged to promptly carry out a drastic reform of the social structure on his or her own. ("e-Japan Strategy" 2001)

The last sentence of the paragraph, in which Japanese citizens are "urged to promptly carry out a drastic reform" individually, would seem to pin the emergence of network technologies to a kind of Foucauldian "disciplinary power," whereby the responsibility for Japan's technological progress is tied to prescriptive procedures that lead individuals to internalize the needs of the State (Foucault 2009: 46). Yet, when the actual mechanisms of the e-Japan Strategy are scrutinized, what comes to the fore are a set of measures such as the

establishment of digital authentication and signature systems, electronic payment technologies, and digital security networks that don't prescribe measures for the individual to undertake themselves so much as establish systems that process the individual without their conscious involvement.

These measures are illustrative of the kind of controls described by Deleuze in a brief essay he published at the end of his career entitled "Postscript on the Societies of Control." In this essay, Deleuze sees a transformation in the mechanism of control from an institutional practice as described in Foucault's histories of disciplinary structures such as the prison and the hospital, which relied on rigid rules organized in "vast space of enclosure" (3) and towards a kind of pervasive logic that structures the kind of globalized network society described in the introduction. Systems of control, like the use of passwords in computer networks, are pinned to the individual and follow them regardless of the physical corridors that surround them. For Deleuze, this is a move away from a society of discipline and towards "societies of control" (4). These societies provide the illusion of freedom since control is no longer as conspicuous, but control takes place through a set of seemingly immaterial procedures that turn individuals into "codes" that circulate in a globally diffuse computational network (5-6). For Deleuze these kinds of controls are what he terms "modulations" (4), that constantly act on the individual to confirm their actions to the need of society. To reiterate, modulation entails the manipulation of signals within transmissible patterns or waveforms, but Deleuze's take on modulation encourages us to think about how this modulation entails a subjectivizing process in which individuals are not called on to consciously submit to and internalize disciplinary procedures. In control societies, modulation binds individuals to algorithms that do not need conscious engagement. What Deleuze describes as modulation is a kind of subjectivizing process specific to the age of networks and computers, one that is more flexible and personal than disciplinary or

institutional controls. They function like a "cast" that follows and "deforms" the individual, capable of constant change in order to adapt to any situation, "transmut[ing] from point to point" (2). This is evidenced by everything from smart identification cards with embedded circuit chips that grant access to private facilities to the fingerprint scanners employed at many international airports.

In the previous chapter, I explored Shibuya through the lens of countercultural navigation practices that upended normative movements tied to retail consumption and police intervention. In this chapter, I want to examine the concept of modulation in Shibuya to account for how digital technologies reorganize the space of the city in the early twenty-first century. While the world-form of Shibuya at the time of *Jet Set Radio*'s release could be conceptualized in terms of the parallel and conflicting territorial investments of corporations and vandals, the increasingly digital space of Shibuya less than a decade later, divided among countless signals, codes, and screens, requires a more detailed account of the modulations that had begun to transform the city and its inhabitants.

Just as the "e-Japan Strategy" conflates the vision of a networked and digitized nation space with the actions of individuals, the title of the 2007 Nintendo DS game *The World Ends with You*[xxiii] ties the actions of the individual to the fate of a larger world. Self and world are bound together in a coterminous formation, and the failure of one entails a collapse of the other. If the protagonist Sakuraba Neku is defeated in combat, he (along with the urban locality of Shibuya) will be erased from existence. In order to avoid this interconnected fate, Sakuraba must win an otherworldly competition by partnering with other disaffected teenagers and defeating monstrous beings circulating unseen within the city. For the player, the world itself is a fragmentary and pluralized one. The game divides its world between the two screens of the Nintendo DS handheld console. In battle, each screen belongs to a different player-character who is able to act only within their own enclosure, requiring the

operation of two sets of controls simultaneously (the touch screen and buttons respectively). Furthermore, the fragmented space of the game's world outside of combat also enjoins maps, multiple fields of movement, battle screens, in-game cell phone screens, and non-diegetic menus. These spaces and screens do not cohere into a unity on their own. Without intervention the world begins to collapse, and the two screens each constituting separate sets of operations begin to diverge. Success, therefore, is a matter of reading and acting across screen enclosures. If a player can manage to hold together the disjunctions by attuning themselves to needs of each enclosure while paying attention to how parallel fields of action relate, the game is won, and the diegetic crisis that threatens to destroy Shibuya is overcome. The coterminous formation of the title becomes fully co-extensive in the game's parting statement: "The World Begins with You." In other words, the world is pinned to the self and their ability to internalize and unify a world through acts within and across media enclosures.

What emerges through an analysis of *The World Ends with You* is a new kind of subject capable of navigating the multiple planes of digital networks simultaneously. However, this complicates the theory of subjectivity in the spatial theory of Lefebvre that structures this dissertation. I follow Lefebvre's theory of space in this dissertation because it helps us avoid essentializing space as an ahistorical void, thereby opening up new possibilities for theorizing how, as in digital games, different kinds of world-like experiences are possible in contemporary cities. However, Lefebvre's theory of the subject seems to preclude the more active possibilities of media engagement. For Lefebvre, a subject position is not innate. Modern cities function through the distribution of movement, abstracted into flows of people, goods, and information that move primarily in accordance with the interconnected needs of the State and capital. The self needs to be placed at the centre of the assemblage, even as it occupies a movable position within it. Lefebvre distinguishes the self from the subject because he sees the latter emerging out of the former through a kind of

spatial conditioning. It is the result of modern space and its tendency to place a subjectivized individual at the centre of an objectivized space:

> From the social standpoint, space has a dual "nature" and (in any given society) a dual general 'existence'. In the one hand, one (i.e. each member of the society under consideration) relates oneself to space, situates oneself in space. One confronts both an immediacy and an objectivity of one's own. One places oneself at the centre, designates, oneself, measures oneself, and uses oneself as a measure. One is, in short, a 'subject'. A specific social status – assuming always a stable situation, and hence determination by and in a *state* – implies a role and a function: an individual and a public identity. It also implies a location, a place in society, a position. (Lefebvre 1974: 182-183)

My research takes cues from Lefebvre's theory of the subject here, which treats the self as a living body that comes to identify with a particular identity through an encounter with space, but mediated spaces like the formation of *The World Ends with You* pose a problem for Lefebvre's subject. Space is like a mirror for Lefevre (182), and by entering a given space, being regarded by others, and seeing how the world reacts to one's movements they come to identify with a subjective position that is permissible in that space. However, this is only part of the story for Lefebvre, as beyond the mirror-like nature of space, there is also a "transparent" quality that mediates the self with objects, allowing for an encounter with human and non-human others (183). This process of subjectivation is a negotiation of incoming flows of movement, whether those take the form of human bodies, digital signals, or other sensory information. According to Lefebvre, media spaces like those that belong to Shibuya's diverse assemblage of screens in the 2000s cannot perform this dual function because they "tend to efface dialogue. [They] make the other, the sensible, present, while the subject remains completely passive. The subject says nothing, has nothing to say" (Lefebvre

2004: 57). Yet, *The World Ends with You* suggests that the subject in the fragmentary mediascape of Shibuya in the 2000s is not a wholly passive one. In negotiating a plurality of incoming signals from a diverse set of screen media and negotiating their own movements in relation to these signals, a subject takes form that can be active or passive in how they hold a world together. Their movements can repeat the prescribed routines of incoming signals, like those aimed at bolstering retail consumption in Shibuya, or they find new possibilities like the opportunities for gathering and organization inherent to network technologies, such as the mobile phone.

In this chapter, I argue that title of *The World Ends with You* signifies the lived realities of urban life in the 2000s where subjectivity is pinned to the management of various incoming media signals. By examining Shibuya's diverse screen landscape in the 2000s, this chapter will look at how processes of modulation are transforming cityscapes while at the same time considering the kind of subjects that emerge from it. As a world-form enjoins the various planes of the media landscape, the movement that produces an actualized world must be continuously modulated to cohere across the differing operational structures of differing forms of mediation. In this way, the control-based modulation described by Deleuze is linked to the more general concept of modulation in musical and electronic discourse, which constitutes the manipulation of a signal from one pattern or waveform to another. Intuition suggests that we stand apart from acts of modulation. We are the receivers and the senders, but as Deleuze attests and *The World Ends with You* illustrates, we are part of what is being modulated, and as we are modulated, the city becomes legible and responsive to us. This entails a process of subject-formation different from the disciplinary procedures that preceded, and it is one that is capable of accounting for bodies and cities which are both constantly changing in relation to each other. In the media assemblage of Shibuya, as well as that of *The World Ends with You*, the unity of the self is repeatedly at risk of fragmentation.

Each spatial limit, screen frame, or narrative end is a potential rupture, which threatens the stability of a subject. In order to avoid such a fracture, certain behaviors must be internalized, which allow each disjunctive to be traversed. This may seem to doom the city's inhabitants to systems of control that entail strictly passive forms of modulation like those described by Deleuze, but by insisting on modulation as a two-fold process that takes place within and across screen enclosures, Sakuraba's journey also comes to suggest the possibility of active forms of modulation in which the individual transforms their relation to the city, thereby defining a relationship with a world that can both begin and end with you.

The Realground[xxiv]

Before addressing *The World Ends with You*, I want to begin by taking an account of the screen landscape in Shibuya in the first decade of the twentieth century and some of the theoretical writing that can help us make sense of it. While the kind of media diffusion I touched on in the introduction entails a range of media platforms, digital interfaces, and broadcasts signals, it is the surface of the screen in which these elements are assembled, and it is the plurality of digital and televisual screens in contemporary city spaces that is most relevant to how *The World Ends with You* stages Shibuya. Theories of the contemporary media in the city are challenged to contend with the problem of localizing an increasingly diffuse assemblage of screens technologies that in the 2000s included multiple telecommunication devices, portable computers, and handheld gaming consoles. Most importantly, movement through Shibuya becomes characterized by the large advertising screens of the Shibuya Scramble Crossing and the smaller personal screens of emergent mobile phone technologies. Together, this assemblage of screens constitutes the space of the city as what media theorist Nanna Verhoeff terms a "screen field," a space characterized by diverse forms of movement (the particular operations of each screen), "transience" (the short

lived nature of screen operations and the attention upon which they depend), and public anonymity (106), which positions the individual navigating the space of the city as both passive spectator and active user (104). This dual identity suggests a negotiation of signals, (which can be understood in this chapter in their broadest sense as any incoming or outgoing flow of information,) that is absent in Lefebvre's formulation of mediatization, and a short history of how the screen field of Shibuya was assembled around the turn of the millennium helps to address the spatial investments required to create such a negotiation.

When discussing technological development in Shibuya, its status as a hub of innovation has been frequently cited in PR documents and tech journalism since the late 1990s and as recently as 2020 when the *Mainichi* newspaper published an English translation of an article by Ishida Munehisa entitled "The Changing Face of Shibuya: Renewal Speeds up Shift from Cultural Center to IT Hub," suggesting that this reputation continues to be relevant. This is the supposed "Bit Valley" formation–a term which plays on both Silicon Valley, and "Bitter Valley," the literal English translation of the logographic characters used in Shibuya (渋谷). Beginning in the 1990s, a number of internet and tech companies began to spring up around Shibuya ward and nearby areas such as Minato ward, and at the end of 1999, the non-profit organization Bit Valley Association was formed to promote networking within the Japanese internet industry, thus hosting parities and publishing an industry newsletter (Yukawa 2003: 3). Yet the centrality of Shibuya to this formation and its relatively short lifespan raise the question of whether Bit Valley was more of a marketing ploy or rhetorical device aimed at bolstering the Japanese economy during a prolonged recession. While a corporate survey published by the Fujitsu Research Institute points to 88 internet companies emerging in Shibuya between 1994 and 1999 (Yukawa 2003: 4), a journalistic report aimed at locating Bit Valley just two years later in 2001 concluded that Bit Valley had become a victim of the dot-com burst. Moreover, during its relatively short lifespan, nearly as

many tech startups were found in nearby Minato and Shinjuku wards, raising questions about how central Shibuya actually was to technological innovation (Murphy 2001). Accordingly, Bruce Mitchel Kogut's text *The Global Internet Economy* suggests that Bit Valley should be regarded less as a stable geographic-corporate formation and more as a set of "institutions and social norms" that aimed to spur innovation within the area around Shibuya (309). The difficulty identified in locating Bit Valley just a few years after its supposed heyday suggests that the attempt to spur corporate development with Shibuya was largely a failure, and its recurrence in journalism over two decades is the result of corporate aspiration rather than reality.

Nevertheless, while the importance of Shibuya as a centre of technological production is minimal, the importance of new screen technologies in the production of Shibuya as a distinct urban centrality is undeniable. This is evidenced most iconically by the numerous commercial television screens lining the surfaces of buildings around the iconic Shibuya Scramble Crossing. These LCD screens pumping out a mix of commercial images and sounds are an extension of the area's more static commercial billboards and signs and began to appear following the debut of Sony's first Jumbotron screen at Expo '85 held in the Japanese city of Tsukuba. Outside of the exposition, the screens were displayed at Sony's headquarters in the shopping district of Ginza, but they gradually became a part of urban architecture around the globe (McQuire 2008: 130)[xxv]. According to an article published by *Shibuya Bunka Project*, a website dedicated to documenting Shibuya's culture, the first large screen in Shibuya appeared outside the 109-2 department store in 1987 and was followed by similar large screens throughout the late 1980s and 1990s, the most iconic being the Q'S EYE which began broadcasting in 1999 and was built directly into the surface of the Qfront building that dominates the Shibuya Scramble Crosswalk. As of 2020, Shibuya features 12 large-format television screens, which is double the second largest number in Akihabara's

Electric Town neighborhood. These screens broadcast a stream of advertisements at pedestrians and reach approximately 500,000 potential spectators a day ("Bijon Kōkoku no Kōkoku Kachi no Takasa" 2013).

While it would be tempting to disregard the importance of these signs as commercial noise, Brian Morris in his Latourian analysis of how screen media constitutes the spatial identity of Shibuya provides an analysis that highlights the importance of these screens:

> These large screens are now central to the experience of Shibuya because of their proximity to the railway station and their materiality produces a monumental media-architecture threshold that dwarves and supplants the existing traditional entrance arch marking the start of Centre Gai. Partly the screens function to affectively amplify a sense of excitement about the urban territory being entered and the sense of expectation that might accompany entry into the labyrinthine spaces of Shibuya in which one can easily become lost–a practice that itself might constitute a playful temporary unwrapping of the subjectivity of the visitor. Although the screens constantly attempt at one level to communicate advertising and other promotional information to the passerby, they just as often appear to be ignored or registered with a distracted level of interest. The scale and prominence of the screens does enable a degree of authority and insistence in their address–they are certainly at the more visible and foregrounded end of a continuum of what Anna McCarthy (2001) refers to as an increasingly pervasive phenomenon of "ambient television." Although not always successful in gaining the attention of distracted passerby, the screens do nevertheless interpellate the disparate crowds waiting at the crossing as a potential collective (at the very least they are a fundamental part of being in Shibuya as a distinct and nationally known urban place). (293)

Here, Morris sees the screens surrounding the Shibuya Scramble as an important signifying aspect of Shibuya's landscape, marking the entrance to the dense streets and paths that constitute the city's interior, and suggesting parallels with Ayukawa's formulation of Shibuya as a gateway into the interior of Edo and later Tokyo (58) as touched on the introduction. More significantly, however, is how Morris suggest the screens constitute a kind of collective out of the crowds circulating around the Shibuya crosswalk. This offers us the first clues as to how individuals are situated in relation to the pluralized screen technologies that come to dominate the space of Shibuya.

Morris implies that the screens around the crosswalk create potential spectators out of a crowd of otherwise unrelated individuals. In this sense, the screens reflect the transformation of public space detailed by media theorist Scott McQuire in his book *The Media City*. McQuire identifies the diffusion of large-scale television screens in public space as a phenomenon tied to the transformation of public space. These screens entailed a shift towards a hybridized media city that combines urban space with media space, challenging not only how we think about spatial boundaries but also how we think of the unity of the subject moving through them (132). McQuire touches on the notion raised by Paul Virillo that screen space takes the place of a public space that had previously been constituent of a subjectivizing relationship between the self and other centred on home (137). This screen space, centred on the television and the home media centre seemed to privatize the relationship to a wider social reality (138), but its emergence back onto the streets reintroduces the possibility of public spectating and more collectively mediated identities, albeit ones that in our present capitalist context are primarily tied to consumption (154).

However, as Morris points out, the possibility of spectatorship presented by the screens surrounding the Shibuya crosswalk are only part of the story, and the increased ubiquity of portable screens, in particular mobile phones, is even more indicative of the

changes to Shibuya's media landscape in the early twentieth century. The year of 2007, the release of *The World Ends with You*, was a significant one for mobile technologies. The iPhone was first released in Japan the following year in 2008, and smartphone platforms quickly became ubiquitous. The year 2007, therefore, is significantly the last year where it is relatively simple to disentangle Japanese *keitai* or mobile phone culture from the more globalized operations of the smartphone, and as Morris insists, the everyday space of Shibuya in the early twenty-first century, even in seemingly straightforward acts such as texting a friend to meet at the iconic Hachiko statue, becomes inextricably enmeshed with Japanese mobile technologies in the twenty-first century (295).

Mizuko Itō's introduction to a collection of essays about Japanese mobile phone culture published in 2005 offers a more detailed account of the *keitai* landscape when *The World Ends with You* was released. Ito regards the mobile phone as a distinct "socio-cultural," produced across the imagined axes of "personal, portable, and pedestrian" concepts, which are constructed locally but sit in tension with transnational operations of network communications (1). As such, the mobile media landscape of the early 2000s is ideally positioned to help us think about the central problem of this dissertation: how local worlds simultaneously produce and disrupt the more totalizing process of digitization and globalization. As Ito, and other mobile platform theorists such as Marc Steinberg, suggest, the i-mode Japanese telecom company NTT DoCoMo's i-mode mobile internet platform is most indicative of local differences in the mobile phone landscape in Japan (Itō 2005: 1-2; Steinberg 2019: 10), but the i-mode is itself embedded in a specific history of the mobile phone that I want to briefly historicize.

In Kenji Kohiyama's essay "A Decade in the Development of Mobile Communications in Japan (1993-2002)", Kohiyama offers a short history of the technological and social developments that allowed for the emergence of platforms like i-mode and the

specific operations of mobile technologies in a neighborhood such as Shibuya. Kohiyama begins his history in the mid-1980s when the Japanese telecommunications industry was run by a public corporation known as NTT (Nippon Telegraph and Telephone), but in 1985, the industry was privatized and technological developments, infrastructural changes, and the emergence of new carriers in the 1990s allowed wireless and mobile technologies to transition from a "minor player" in the communications industry to an ascendant one (61-63). Amidst the pressure of new competitors NTT introduced a branch of their company dedicated to mobile technologies known as NTT DoCoMo (Do Communications on the Mobile) but was initially overwhelmed by carriers that offered subscriptions to mobile networks that spanned all of Japan (63).

In the 1990s, the privatization of the mobile market also led to more variance in the personal devices used to access the national mobile network. While NTT's handsets were standardized and incompatible with other national standards for mobile technologies (63), new *keitai* handsets quickly proliferated in the 1990s and vied for marketplace dominance with pagers, and Personal Handyphone Systems (PHS), which functioned similar to mobile phones but operated more like cordless phones with larger range (64). High school students were quick to adopt these technologies in the mid-1990s and competition between them drove prices down, allowing for widespread adoption (64). This was the same time at which Shibuya was the predominant youth centre in Tokyo, and these technologies gradually became an indispensable part of moving through the area, calling, texting, and eventually photographing one's friends, as well as providing a means of signifying one's contemporaneity, which Yoshimi points out was essential to the practice of Shibuya's youth culture (303). In the mid-1990s, e-mail was particularly prevalent among high school students, and though limited to transmitting messages to users of the same mobile service, Kohiyama suggests that this networked transmission of personal messages served as a

precursor for NTT DoCoMo's i-mode mobile internet, which would allow messaging regardless of the service to which users subscribed (68).

In addition to allowing e-mails, the i-mode service also had modular services that offered weather forecasts, games, and shopping services tailored to the interface of mobile phones. The i-mode was quickly adopted and shifted the Japanese media landscape to a platform oriented one that, as Marc Steinberg argues in *The Platform Economy*, served as a progenitor for the "app-based" platforms associated with contemporary smartphone technologies (10). According to Steinberg, this transition gradually led digital media theorists away from the concept of the network as the dominant paradigm of digital technologies from the 1990s to the 2000s and toward theories of more integrated platforms and the contents upon which they rely (7,19). Steinberg points out that the platform media model not only captures the integrated nature of digital media systems like the i-mode mobile platform but serves as a rhetorical device and dominant business model for media technologies beginning in Japan in the 1990s through to the late 2000s when it user base began to decline. Most importantly, i-mode cemented the *keitai* as the centre of a diverse media assemblage of screen technologies that included not only mobile phones, pagers and PHS but also Personal Digital Assistants (PDAs), laptops, and digital cameras, which were all increasingly affordable, capable, and portable (Kohiyama 2005: 72). To this assemblage, we could also productively and relevantly add personal gaming devices which moved gaming out of the exclusive domain of home media centres. These devices include Nintendo's lineage of Gameboy devices and eventually the platform of *The World Ends with You*, the Nintendo DS, which released in 2004.

While the move towards networked mobile platforms is an important moment in the history of technologies it does not fully account for what was holding the media landscape of Shibuya in the 2000s together. While there is something like media convergence at play here,

characterized by Henry Jenkins as the "flow of content across multiple media platforms" (2-3), the diversity of screen devices throughout the 2000s and their own distinct functionalities suggest the need for a theory that accounts for a different kind of connective tissue, especially if we accept the account of Shibuya provided by Verhoeff and Morris alike that the large screens of the Shibuya crosswalk and the small screens of personal devices are interrelated components that help to constitute the city. To understand what holds the assemblage together in Shibuya, I turn to the game *The World Ends with You* and address its insistence that Shibuya's screen field is held together by acts of modulation that configure a self capable of navigating a plurality of screen and media spaces. It is these acts of modulation, rather than the media platforms themselves, that allow something like convergence to take place.

The Reapers' Game

When *The World Ends with You* was released for the Nintendo DS by Square Enix and Jupiter Corporation[xxvi] in 2007, it sold a relatively solid 210,000 copies in Japan ("The World Ends with You: Summary"). That number is relatively quaint compared to the millions sold by other Square Enix games, including those developed by Kando Tatsuya[xxvii], the director of the in-house team that created *The World Ends with You*, namely the massively successful Disney-centred franchise *Kingdom Hearts*. Nevertheless, the game would develop an ardent cult following that would help the game get multiple re-releases and ports to a range of digital platforms and devices years after its initial release. The game's popularity and legacy are tied to its divergence from genre expectations, its unusually contemporary setting in 2000s Shibuya, and its innovative use of the multiple screens of the Nintendo DS handheld, all of which I detail here.

The game loosely belongs to a genre of games known as roleplaying games or RPGs. Originally derived from tabletop games such as *Dungeons and Dragons*[xxviii], which require

players to participate in a communal form of storytelling by improvising the role of a created or assigned character within a fictional world, video games adapted the genre by excising most of the improvisational story-telling components and casting the player-character in a digital world with a more rigid structure for actionality. Japanese roleplaying games came into prominence in the 1980s with series such as *Final Fantasy* and *Dragon Quest*, both of which were created by Square Enix, the same parent company that produced *The World Ends with You*.

While the term RPG, as it relates to video games, is an increasingly nebulous label, these games are most typically defined by a progression through a narrative world and a gradual increase in power as characters overcome obstacles and defeat enemies[xxix]. Conventionally, player-characters accumulate this power in the form of experience points (EXP or XP). When EXP reaches a pre-determined threshold, health, strength, and other characteristics related to character competency increase. This makes the character more resilient to enemy attacks, capable of dealing more damage, and able to progress toward greater challenges. In *The World Ends with You* and similar games, players also earn currency from battles, which can be used to purchase items that further augment character's overall ability in battle. Most early video game RPGs, such as those in the *Dragon Quest* series, featured gameplay characterized by "turn-based battles." These are enacted by selecting a desired attack, item, or magical spell from a menu of options and taking turns attacking and sustaining damage until player or enemy is defeated. While it is now relatively common for roleplaying games, including recent entries in the *Final Fantasy* series, to eschew or augment battle systems in favour of quicker, "real-time" gameplay, *The World Ends with You* was an early example of developer's changing the RPG formula so that player and enemy could attack simultaneously.

While *The World Ends With You* features non-turn-based battles, it does retain the basic structure of character progression. The central protagonist Sakuraba gains in power throughout the game and is able to purchase apparel from the money earned in battle that grants additional empowerment. In this way, he was able to tackle progressively greater challenges and eventually overcome the central antagonist. While this progression is typical of Japanese RPGs, its setting within Shibuya is not. Historically, most RPGs have reflected their roots in fantasy-themed tabletop roleplaying games and featured worlds of wizards, knights, and dragons. *The Worlds Ends with You*, in contrast, is stubbornly contemporary, and the journey of its protagonists is set in a space that is recognizable as Shibuya in the year of the game's release.

When the game's protagonist Sakuraba first awakens, he finds himself out of sync with the world around him. He is in a shadow version of Shibuya, and the player is left with few hints as to the exact nature of the protagonist's predicament. Though the space he now occupies seems visually identical with the Shibuya he knows, he quickly discovers that he is unable to communicate or interact with the people around him. He is in the Underground (UG), a hidden and invisible version of the city that overlaps with the routine daily space of Shibuya termed the Realground (RG). The UG is a gameic space circumscribed by an event called the Reapers' Game, in which players must complete a series of challenges over the course of one week in order to return to their regular life in the RG. Significantly, however, while the RG and UG are distinct, they are not completely separate. Within the UG, the inhabitants of the RG are visible going about their daily business. Members of the UG, on the other hand, remain invisible to the general populace, who are unaware of the game going on around them.

Sakuraba finds himself suffering from amnesia[xxx] without a memory of how he ended up in his current predicament or what he is supposed to do. Eventually, Sakuraba is

approached by a series of menacing figures who explain his predicament and the rules of the Reapers' Game. If he wants to return to his life in the RG, he must complete a series of tasks over a one-week period, beating out other teenagers who are participating in the same game. However, the game cannot be completed alone. In the player's first battle, they find themselves helpless to land attacks and are forced to flee and look for an ally amongst the game's other participants scattered through the UG. By moving Sakuraba around a manga-like approximation of Shibuya, the player quickly finds a young woman named Misaki and together, the characters are able to overcome mandated challenges, such as reaching a certain part of Shibuya in an allotted time or defeating a certain number of enemies. Throughout the competition, Sakuraba is joined by additional allies, and by completing game tasks transmitted as messages over the character's cell phones, they begin to recover their memories, realizing that they were all social misfits or delinquents that had died in the RG. Sakuraba, for example, shunned all social interactions, repeatedly affirming his alienation from everyone around him both vocally and with the large purple headphones he refuses to remove, until he was shot in a Shibuya alley. The competition helps them form new social connections, and they all eventually return to the RG with a new appreciation for life.

Unlike *Jet Set Radio*, which finds a game-like world-form in the practices of Shibuya's subcultures and its countercultural clashes with authorities, *The World Ends with You* erects its game space in a hidden world with power structures that mirror but remain separate from the forces shaping the area around Shibuya Station. These forces are initially just a series of titles, but as the player progresses, a hierarchy emerges. The game is run by the Producer, who oversees the game but seems absent from its actual functioning. Underneath the Producer, the Composer has the highest position of authority. He runs the game, dictates its challenges, and oversees its participants. His dictates are then carried out by the Conductor, who plays a more hands-on role in the game, occasionally even confronting

and battling Sakuraba and his allies. The rest of the game is made up of the participants, and the Reapers—the rank and file of the game that stand in Sakuraba's way. These figures are all otherworldly. At the highest level are figures like the Composer, termed "angels," and tasked with overseeing the world from an unseen space called The Higher Plane. At the lower levels, reapers are more akin to spirits, seeking spiritual advancement and tasked with more directly challenging the game's participants in battle.

Mid-way through the game, Sakuraba is informed that the Composer has abandoned his post. Disenchanted with Shibuya and seeing it tending toward stagnancy and corruption, he now plans to destroy it. The Conductor disagrees and challenges him to a bet. The Conductor will participate directly in the Reapers' Game in order to preserve it. If he fails, then Shibuya will be erased from existence. Until the very end of the game, Sakuraba believes he is participating in a routine version of the Reapers' Game but learns that he is actually a pawn of the Producer, who needs a participant in the game capable of challenging the Conductor. In one of the game's final revelations, one of Sakuraba's companions is revealed to have been the Composer in human form. The blond-headed, *keitai*-wielding Joshua is responsible for shooting and killing Sakuraba so that he could use him as a proxy in his game against the Conductor. This means that Sakuraba's personal victory will actually entail the end of Shibuya. In the final chapter of the game, the Conductor, an artist whose love of Shibuya is more tied to its current aesthetic than its creative potential, comes to believe that the problems Shibuya faces arise out of too much conflict between its heterogenous populace. He "harmonizes" the area, effectively brainwashing everyone and arresting their movement entirely. In a final battle, Sakuraba challenges and defeats the Conductor, thereby ending the Reapers' Game and, supposedly, Shibuya along with it. In the end, however, Sakuraba awakens in the RG of Shibuya. Joshua, the Composer, moved by his time with Sakuraba and his allies, decides to spare the city.

While this story of personal mastery seems predicated on a power fantasy in which the protagonist is gradually afforded greater power over the world, *The World Ends with You* complicates mastery by staging the game's genre elements within a world-form that simultaneously necessitates synchronicity while emphasizing the possibility of divergence. This is staged using the game's bifurcated screens and parallel controls, which are perhaps the most atypical aspect of gameplay. The player's success in *The World Ends with You* relies on how well they master the rhythm of battle across the Nintendo DS handheld console's two screens. The console eschewed the more conventional single screen display in favour of parallel assemblage of LCD screens housed in a rectangular clam shell design. The bottom screen is responsive to tactile controls via a plastic stylus, while the top screen is purely for display. Controls are either managed with the touch screen, the game's buttons that bracket the lower screen, or some combination of these inputs. This design allows for game worlds that are not delimited to a single visual plane, and while many games simply use the touch screen to display a game map or other supplementary information, *The World Ends with You* uses the dual screen format to split its titular world apart. The screens display disparate information and require separate forms of control.

The player controls Sakuraba using the stylus and the touchscreen, dragging him toward and away from enemies. In order to attack, Sakuraba must collect various pins that, when worn, allow different elemental and physical attacks to be performed. The player enacts these attacks not by simply selecting them but by tracing a pattern on the game's touchscreen that conforms to the required input. For example, in order to spray the enemies with projectiles, the player can drag the stylus across Sakuraba's body and towards the enemy in short linear bursts. Players will exhaust these attacks after a few uses, and they will need time to recharge before the player can enact them again. This means, that they will need to remember multiple attack patterns and switch between them in order to succeed. At the same

time, the ally character appears on the top screen and also requires input. This is achieved through the game console's buttons that sit to the right and left of the DS's touch screen. Images of the buttons appear on the top screen, and the player has to press the corresponding buttons to accomplish a maneuver. A battle requires that one hand attends to Sakuraba and the other attends to the ally, and both must be engaged with separate patterns of action. Both planes of action take place simultaneously and the player must be mindful of both to succeed. This bifurcated world-form provides a meta-narrative gameplay structure that helps us think about the conditions of action within a particular world[xxxi], and, as a discussion of the theoretical implications of this meta-model of control exposes, the conditions of subjectivity within the city's screen field.

The Underground

The game's control scheme predicated partially on replicating a series of button combinations as they appear on screen requires a process like what Alexander Galloway calls "playing the algorithm" in a chapter of his book *Gaming: Essays on Algorithmic Culture*. In a discussion of the fighting game genre, Galloway highlights a control pattern similar to the repetitive button pushes in *The World Ends with You*. In fighting games, the player is given a set of button combinations (often in the game's instruction manual) and reproduces them within the game. Galloway regards this as a distinctly gameic process where the player directly engages with the algorithmic code and procedure that structure movement through the game world (91). Contrasting the transparency of this system of control with contemporary action or police cinema, in which depictions of the bureaucratic minutiae of disciplinary control is excised in favour of more visceral sequences (89), Galloway finds in the operations of games like *The World Ends with You*, a navigation of digital algorithms that enjoins the player with text not only as spectator but as a complicit user (106), a

transformation that makes games structurally synchronous with modern societies that reflect the "political realities of the informatic age" (91). Galloway implies that the political control mechanisms that are metricizing and digitizing global society are equivalent to the processes that video games require a during a play session.

Galloway is primarily concerned with how the "flexibility" of "informatic" controls, such as the internalized inputs of a game's control system, are capable of accommodating any contingency. Actions have been standardized into a universal "logic," and players adjust themselves accordingly to play the codes of the game (101-102). Moreover, this logic betrays the notion that difference (national identity in the case of Galloway's critique of *Civilization*, personal identity in *The World Ends with You*) ultimately signifies only another "data type" within a diffuse network of data, which is to say an absence of difference altogether (103). Any pretense of active possibilities in gameplay betrays a "passivity" within a larger "informatic" logic that has transformed global society (106). Galloway equates this to Deleuze's passive modulations, described in the introduction, though in Galloway's account these modulations also require activation on the part of modulated individual, albeit ones that take place within the limits of a network logic that absorbs any difference into its control processes.

Yet Galloway's account, which deals primarily with the rigid operations of the nation-building game *Civilization*, overlooks the possibility of divergence in navigating algorithms. It is true that algorithmic procedures necessarily structure what is allowable within a game, but within those parameters, there is a degree of improvisation and actional deviation that should also be considered. In the case of *The World Ends with You*, this occurs because some of the actions that configure the game world are first localized within the body and not within the game's operations.

The kind of multitasking that the game's control requires is less a matter of conscious selection than it is one of mastering rhythms. In holding the two sets of control together, the player must constantly direct their attention up and down between the two screens of the DS. The enemies, however, never relent in their attacks and the player cannot afford to be lax in tending to the threats. When attention is directed to one screen, the other hand must continue to perform the correct patterns in order to avoid defeat. The player reads the field of battle, enemy proximity, and button symbols on the screen, at which point they must begin to perform the correct movements with one hand and then switch their attention to the other screen and perform this process again, this time tracing patterns on the touch screen rather than pushing buttons (see Fig 5). Since it is important not to relent on one screen while acting on the other, the body begins to feel its way through battles by mastering different rhythms, and cognition only plays a secondary regulatory function in the game's battles. There are "informatic" processes at work in how the game interprets inputs, but this only happens after the body has assembled and processed the different characters projected on the console's respective screens. There is certainly passivity here in the conditioning of bodily rhythms, but this can also be active if alternative rhythms are discovered, a distinction that comes to the fore when looking at how modulation is conceptualized differently in writing about electronics and music.

In electronics this consists of altering a signal in order to convey visual, audio, or other forms of information. This form of modulation is perhaps most familiar in regard to radio which operates through frequency modulation (FM) or amplitude modulation (AM). A user inputs a coded signal that changes the oscillation or the rate of a carrier signal. When received, this signal is then decoded. On the receiving end, it must again be modulated (or demodulated), so that the signal is interpreted as a sound, an image, or any other piece of data. Simply put, input and output alike must be attuned to one another for a successful

broadcast, and modulating is the action that connects these two states (Faruque 2017: 1). To reiterate, the listener is not apart from this act of modulation. In order to tune up or down, they must be receptive to the signal, sorting through the static noise in order to receive a clear signal. In this sense, even though tuning a radio in *The World Ends with You* is likened to more active possibilities, as I will explain in the following section, the tuning of a radio illustrates a more passive act of modulation directing the listener's actions in conformity with the waveform. It is only possible to become a listener by allowing yourself to be modulated. This is also indicative of the control-based modulation Deleuze describes. When an individual swipes a smart card to gain access to a private facility, the card and reader must be attuned to one another. The reader and the card both have antennae and use radio frequencies and if they are attuned to one another, the individual is identified and granted access ("Smart Card Primer"). What is being transmitted through the process, however, is the identity of the cardholder, and within the identificatory process there is little room for divergence. The system decides if a person does or does not belong by modulating their codified identity within a system designed to authenticate who gains access.

Modulation as described in musical theory affords more active possibilities. In musical terms, modulation usually refers to a shift from one tonality (arrangement of chords) to another, but it can also refer to shifts in other musical parameters. For the purposes of this chapter, rhythm or tempo modulation is the most relevant. The concept relates to a change in speed, whereby one time signature shifts into another. What is important here is the presence of a "shared durational unit" which Fernando Benadon theorizes in his essay "Towards a Theory of Tempo Modulation" as operating "on a level of subjective rhythmization" (563), and while it implies a temporal positionality for the subject, it also spans the levels of "micro" rhythms and "larger structural" patterns (566). It is the point at which heterogeneous rhythms are held together at a point of commonality. This presents a more active form of

modulation because the analog possibilities of musical performance entail more variance and participation. While the listener is receptive to an already encoded signal, the performer must receive and produce the signal, finding and enacting the moment of transition.

While the dichotomy between active and passive modulation within electronic and musical acts highlights two dominant modalities of engagement, the binary, is also, of course, imperfect. Both models of modulation offer active and passive possibilities for receiving and performing incoming signals, and this bifurcated model of modulation is echoed in *The World Ends with You*, which is also predicated on modulation as a two-fold process of acting and being acted upon. Within the terminology of the game, the former is likened to "*tuning*" and "*synchronization*," and both are key to progression through the game.

The Trance Field

As I have already suggested, the game's screens are divergent, and paying too much attention to either screen will likely result in failure, so the player must master two simultaneous attack rhythms by managing their attention and actions accordingly. Unilateral action is detrimental in the game space because the world itself is not uniform. There is no traversal between the planes, but there is the possibility of simultaneous action. When the player is modulating their actions in line with those required by the game's display and overall pace of battle, both respective chains of actions will begin to synchronize, as indicated by the "sync rate" meter that gradually fills at the top of one of the screens. When it reaches its maximum level, a selectable option appears on the screen for a powerful fusion attack. This will typically defeat or significantly weaken an opponent. These attacks, however, do not transcend the bifurcated world, as characters remain isolated on separate screens. Action momentarily carries across, but then the player must return to enacting two separate chains of action. This is characterized as being "in sync" and it offers the greatest

potential for power in battle. Here we can see something like modulation conditioning both the actions of the player and the relations between game characters within Galloway's logic of informatic control, as evidenced by the sync metre, indicating how well the player is performing parallel algorithmic repetitions.

Synchronization is also key to Sakuraba's success within the diegetic world of the game, as he must also enfold himself into surrounding everyday rhythms of Shibuya's populace, helping nearby shoppers, musicians, and business owners overcome their personal problems. These missions are secondary to the overarching story, but they are an important part of Sakuraba's development, as they repeatedly force him to confront the fact that his progression takes places within a wider social milieu. Effectively, the game suggests that Sakuraba's needs must be synchronized with those of the populace that surrounds him. However, because Sakuraba is out of synch with the populace of the RG, this must frequently be done unconsciously. Early in the game, Sakuraba obtains a special piece of apparel that allows him to read the minds of those around him. In order to obtain information necessary to complete missions, Sakuraba must focus and enter a psychic trance. Here the navigational plane of the UG gives way to a blue-tinted plane of legibility, overlaid with a ghostly image of Sakuraba holding his hands over his earphones (see Fig. 6). Entering a trance reshapes the world. The thoughts of Shibuya's inhabitants become readable by clicking on nodes appearing over their bodies. The information he gathers through mindreading is primarily mundane, relating to concerts and returning DVDs, but occasionally he can uncover important information that is needed to advance the narrative. This process, however, is not risk-free. Upon entering a trance, it becomes clear that there are monsters buzzing around Shibuya. These are graffiti-like creatures called Noise, and they resemble stylized creatures such as bears and frogs that the inhabitants of the UG must regularly battle and destroy. The creatures occupy both the UG and the RG. In the latter, they are merely able to influence the

thoughts of people wandering through Shibuya. The Noise are the incarnation of negative emotions and exist to consume the souls of Shibuya's residents. If they overwhelm a person, they will devour their soul, erasing them from existence entirely. The Noise are the only beings that exists in both versions of Shibuya, but they emerge in a third space that only Sakuraba has access too. Imprecise touch once Sakuraba is in the trance field causes Noise to swarm towards him, and so the player must learn to be careful about when they open the field and how they navigate it. Just as the players must open themselves to reading multiple incoming rhythms in battle, Sakuraba must parse the incoming thoughts of others and separate out the Noise. In both cases, synchronization is potentially dangerous but a necessary condition of advancement.

If modulation only implied synchronization, Sakuraba's trajectory could only be a normative one. By learning to read the desires of others and gradually modulating his own actions to correspond with the world around him, he moves from his initial state of *anomie* to a more socially acceptable existence. However, the game also insists on a second, more divergent form of modulation termed *tuning*[xxxii] within the game that is not limited to internalizing and reproducing surrounding rhythms without variation. This is best expressed through the game's complex cosmology. Scattered throughout the game world are several hidden files that a player can find if they take the time to explore Shibuya outside of the primary missions that advance the game's story. These hidden files, written by the game's Producer, detail the nature of the game world and flesh out the narrative. While they are not essential to parsing Sakuraba's experience in the Reapers' Game, they help to contextualize the Reapers' Game and how it operates.

From the start of the game, Sakuraba idealizes an enigmatic designer and graffiti artist known as CAT. Eventually revealed to be a trendy café owner named Hanaekoma Sanae, this character is briefly teased as the game's antagonist before being revealed to be the

overall monitor of the game known as the Producer, one of the angels that reside primarily in the Higher Plane. Hanaekoma's secret files reveal that the universe runs off the creativity embedded in individual souls and can only exist if it is constantly being created anew. The Producer had used his designs to gather creative individuals in the locality of Shibuya and encouraged them to "enjoy the moment" in order to foster greater creativity in their souls. The Reapers' Game is a kind of fail-safe designed to rescue particularly creative individuals, force them to confront their values, and either return them to the world in a newly vitalized state where they can use their creativity to cultivate the potential in other souls or absorb them into the operational structure of the Reapers' Game and eventually promote them to the Higher Plane.

Moving between these different realms is the first instance of tuning in the game and is compared in one of the files to tuning between different radio stations. As I already suggested, tuning a radio entails a more passive form of modulation as it is conditioned by the need to find a clear transmission, but the game here seems to be pointing to the more active component of this process: attuning oneself to the incoming signal, which involves feeling out the transmission amongst the noise. Tuning down necessarily limits the abilities of the higher beings, which is why the Composer, Producer, and other figures are severely depowered when they appear in human form. Tuning up, on the other hand entails a degree of empowerment. This process is never depicted outside of the secret files of the game but tuning back and forth is a mode of traversal that belongs primarily to angels and other high-powered individuals offscreen. It a means of navigation that keeps the cosmos running. It is a regulatory power but one that leaves the body vulnerable to the same forces that threaten players of the Reapers' Game or pedestrians in the Realground of Shibuya. In this sense, the divergent possibilities of modulation across enclosures is predicated on the synchronistic

modulation that is required to act within them, and both are contingent upon how well the people modulating are able to enfold themselves into the process.

With its insistence on modulation as a two-fold process that can move within or across enclosures, *The World Ends with You* provides a model of modulation that is both passive and active. The former categorized in the game as synchronization captures the process of being in alignment with one's surroundings. It is passive because it is limited to the operational needs of the space surrounding them. More concretely, the Reapers' Game entraps Sakuraba within a gameic space, where he has no choice but to move from point to point in accordance with the demands of the game's daily missions. He is being modulated by higher powers or rather modulating himself accordingly, and with minimal agency over modulation, he is limited to repeating the needs of the game. On the other hand, there are the more active affordances of tuning. Being in tune with one's environment also points to the limits of the game. The orchestrators of the Reapers' Game are able to push through the "membrane" separating different planes of reality and move within a new set of possibilities, though they must subsequently attune themselves to the possibilities of the new world. Navigation in *The World Ends with You*, therefore, is dependent on mastering both the active and passive possibilities of self-modulation.

What *The World Ends with You* provides us with is a gameic counterpart to a theory of subjectivity within the city's screen field. It is tied to acts of modulation, but they are negotiated ones can either be active or passive. In this sense, the theory of modulation developed by philosopher Brian Massumi in his text *Parables of the Virtual* can further elucidate how this modulation creates a subject and how it also pins a world to those same modulations. Massumi identifies modulation as the condition of change that occurs before more encompassing actional processes described by Galloway can occur. Modulation according to Galloway is a "local modification" of potentialities that reconfigure an entire

field of inter-relating objects (76). At the same time, by conditioning the relationality of subjects and objects and the way they respond to each other, modulation comes to define the entire field of action. It is a kind of mutual affective receptivity—a "field of immanence" though which an event unfolds (76). Action can only occur because all the elements within a world are first relating to each other and modulating themselves accordingly.

The relevance of Massumi's relational modulation to my research relates to his account of modulation within the game space of a soccer field:

> Superficially, when a player kicks the ball, the player is the subject of the movement, and the ball is the object. But if by subject we mean the point of unfolding of a tendential movement, then it is clear that the player is not the subject of the play. The ball is. The tendential movements in play are collective, they are team movements and their point of application is the ball. *The ball is the subject of the play*. To be more precise, the subject of the play is the displacements of the ball and the continual modifications of the field of potential those displacements effect. The ball is a thing, is the object-marker of the subject: its sign. (73)

For Massumi a game is defined as a field of potential, polarized by its goals and generalized by rules. This game field is not a space in itself, but an "event" that modifies space. The game is a result of various modulations, both local (between specific elements of the game) and global (across the whole field) (73-77). In other words, a game space is not simply the product of delimiting certain boundaries and applying rules that subvert the norms of daily life. A game space is a product of emergence where space becomes event through acts of modulation.

Massumi's model of space becoming event is the same field that allows for subjectivity to emerge, as the subjective and objective are "co-results of the same event" (212). In this sense, Lefebvre's subject, emerging out of an encounter with a universal space

that has been abstracted from their body (Lefebvre 1974: 182-183) is recast at the result of local modulations of subject-object relations that constitute an entire field of movement. In addressing the various ways that game processes cast light on modulation, Massumi reorients discussions of space away from the discussion of a subject parsing the codes of the environment and navigating them accordingly toward a more nuanced account of such acts as a unified field, or what I'm terming a world-form, in which signs, passages, landmarks, and surrounding flows of movement are produced to draw certain kinds of movement out of the people relating to them. People modulate their own behaviors in accordance with space, and a course of movement constitutes not just a journey through a world, but a relational and affective totality—the world itself, differing in accordance with variations in modulation. This is how we might begin to parse the title of the game *The World Ends with You*.

What the game productively adds to Lefebvre's theory of subjectivity is a model of how modulation plays out within a pluralized media landscape like that of Shibuya in the 2000s. Within *The World Ends with You*, Shibuya is rendered a game field that is constituted by various signals. There are those that constitute the Reapers' Game for Sakuraba (the cell phone messages that detail missions, the information obtained from his psychic trances, the Noise that challenge him in battle) and those that constitute the world of the game for the player (the visual information on the two game screens, the rhythm of battle, and the diegesis). In either case, Sakuraba and the player alike must modulate the waveform of their own actional signals in order to hold the diversity together. Because subject and object are attuned to one another, action can change the entire field of movement in even a rigidly regulated space like Shibuya's screen field.

The game provides a new model of modulation that better explains what even non-game players experience daily as they navigate a city that requires ever more screen interactions. The large screens of the Shibuya Scramble attempt to craft a subject that is also

a consumer, just as the functions of *ketai* delimit the possibilities of navigation for a user, thereby conditioning a subject that necessarily functions within the networks of global telecommunications networks. Yet, because these and other screens are held together within the self, divergent possibilities can also emerge. Local modulations, like the organizing of a meeting for Halloween in Shibuya via a text message on one's phone, carry across the entirety of Shibuya, transforming the city as a whole, albeit for a limited time. Of course, this is not inevitable. More likely, modulation comes to act upon bodies, and they conform to a normativized subjectivity that repeats the everyday needs of commercial consumption, labour, and transit. If, however, a body is attuned to potentialities that do not repeat Shibuya as an abstract space, within acts of self-modulation there are possibilities for divergence, innovation, and disruption.

The Higher Plane

This picture of modulation within and across a fragmented world-form is not the end of the story. It is undeniable that the appearance of the smartphone seems to signal something like greater convergence at the level of mobile screens, which begin to assemble the possibilities for divergence that once existed. The year of 2008, when *The World Ends with You* was released in America, also marked the Japanese release of the soon-to-be ubiquitous iPhone. Operations seem to become more localized within singular and personal enclosures that seem to enclose screen engagement within a more uniform media landscape. The more space lends itself to the rhythms of a single device, pattern, or logic, the less chance there seems to be for escape. In a very material way, for example, Shibuya is made to be commensurable with the operations of the smartphone, which can be used to purchase goods, gain access to transportation, capture Shibuya photographically, and share the experience over various networks. Moreover, the game itself seems to have become embedded in the

logic of convergence. Subsequent ports, and rereleases of the *The World Ends with You* released on iPhone and Nintendo Switch platforms, did away with the dual screen formation. In these releases action is localized on a single screen, and the player is tasked only with tracing the patterns that correspond to Sakuraba's attacks on the touchscreen. When Sakuraba is performing particularly well, he can still perform fusion attacks, but after a momentary appearance, the ally character disappears and leaves Sakuraba alone within the enclosure of a single screen.

Yet there is divergence here, too. Convergence only appears inevitable from the flat perspective of the screen, but within the screen, worlds go deeper and start to proliferate. As Matthew Fuller argues in his account of the 2000s digital and mobile media landscape, SMS (short message service) and other emergent mobile platforms retained their media specificity even as they occasionally held together in the same device:

> "They provide not a sign of medial convergence but of the user being involved in a simultaneous concatenation and switching backward and forward between different media and medial codes. While they share certain components, such as headsets, they remain two medial personalities trapped in the same body but firewalled out from any potential schizophrenizing tendency. (43)

Typing on a keyboard, taking pictures, texting, and playing games, are all predicated on different input rhythms and must be read and navigated in different ways at different speeds, and even when assembled into a single device or set of devices their functionality remains distinct. Convergence is not taking place here at the level of the platform or within the functionality of networked devices. A self must be attuned to multiple signals, intuit their connection, and act to instantiate it over a disjunctive. Rhythms run across the distributive networks of space, and in attuning oneself to these rhythms, space and self-become compatible. A self becomes a subject, but if that subject remains attuned and does not cease

to be open to alternative signals, messages, and movements, the possibilities for alternative rhythms and active forms of modulation emerge.

This raises the question of what active modulation looks like at the level of Shibuya's screen field, and several events in the first two decades of the twenty-first century offer clues. In addition to staging, capturing, and connecting spontaneous gatherings, such as the Halloween festivities described in the introduction, smartphones and the network platforms that connect them such as i-mode provide a means of augmenting urban space, creating what Mizuko Itō and Daisuke Okabe identify as "technosocial situations" that change the nature of the city by creating an "ambient virtual presence" of friends and acquaintances even in spaces where they are physically absent. As they suggest, "urban space has become a socially networked space criss-crossed with the flow of messages" (272). In this way, the modulation of mobile and later smartphone screens has a modulating effect on the city as well, opening up new social possibilities in its space. As for the larger screens of the Shibuya Scramble, they too have been proven capable of being modulated in the form a of a number of artistic projects that have been displayed across the synchronized surfaces of Shibuya's largest commercial screens. One such project was the animated short entitled *Toki no kōsa* (*Shibuya Vernacular*) by director Yoshitoshi Shinomiya broadcast to announce a crowdfunding campaign for a feature film project of the same theme. The one-minute film sees a young woman falling through time and visiting Shibuya throughout 10,000 years of history as it transforms from a lush forest up to its present configuration (Kinoshita 2018). Similarly, French artist Sophie Calle brought her video installation of Turkish city dwellers visiting the sea for the first time to the surfaces of Shibuya's large video screens every night at midnight for seven days in February of 2019 (Rambukpota 2019). In both cases, the Shibuya Scramble was briefly transformed into an exhibition and spectator space, repurposing the giant screens and presenting an alternative to their usual commercial fare. In all of these cases, screen

technologies which would seem to so suggest passive modulations of the self have produced opportunities for active modulations of subjects expressing resistance or creativity, and these expressions also produced secondary modulations in the space of the city itself.

Subjectivity is in the waveform, and while it is true that modulation requires a point of commonality between two termini, at the point of connection between the self and the signal there is also the possibility of divergence. For Sakuraba, this means abandoning the closed circuit of his media world entirely as is suggested by his final removal of the headphones he has worn throughout the game. Having successfully mediated his own bodily rhythms amidst the incoming signal of the Reapers' Game, he is now able to expose himself to the world of the Realground without the fear that he will become fully passive amidst the more totalizing flows surrounding him. While Sakuraba's refusal of the signal is one example of an alternative, in the final chapter of this dissertation, I elaborate on some of the new world-forms that are inherent to the digital space of Shibuya. Before that, however, I would like to discuss how authorities try to forestall alternatives by creating a normativized field of legibility within the city, one that attempts to further homogenize both the spatial conditions of the city and the subjects that run through it.

[xxiii] The original Japanese name of the game is *Subarashiki kono sekai*, a reference to the chorus uttered by the brainwashed inhabitants of Shibuya in the endgame, but the title was changed outside of Japan due to copyright conflicts ("This Week in Japan). "The World Ends with You," however is a phrase that appears in both versions of the game, appearing at the beginning of the story.

[xxiv] The section titles of this chapter are all named after the different planes of reality within *The World Ends with You.*

[xxv] Prior to the unveiling of the Jumbotron and the television screens that began to appear on buildings around the Shibuya Scramble, the Shinjuku Alta department store featured the first large-screen television outside the entrance to their store. However, this monochrome text-only display functioned more like an electronic

billboard than a television (“Nihon saidaikyū ‘Shinkuku arutabjhon’ no tokuchō wa? LED bijon no kōkoku riyō no meritto kaitsetsu” 2020).

[xxvi] Square Enix was formed after a merger between two large developers Square and Enix. They are behind several large game franchises such as *Final Fantasy* and *Dragon Quest* mentioned in this chapter. Jupiter Corporation is a smaller developer that specializes in development of handheld games such as the *Picross* puzzle game series and several digital pinball games for the Gameboy line of consoles, such as *Pokémon Pinball*.

[xxvii] Kando’s work on *The World Ends with You* is his only major director credit. His work on *Kingdom Hearts* was as art director, and most of his work is as animation director or supervisor on titles such as *Parasite Eve* or entries in the *Final Fantasy* series of games.

[xxviii] In Japan, the tabletop game *Sword World RPG* (*Sōdo wūrudo RPG*) has rivaled *Dungeons and Dragons* in popularity since the late 1980s and is perhaps a more relevant lineage for Japanese Roleplaying Games.

[xxix] It is worth noting that the roleplaying game genre is more complex and nuanced than the account given here. As José P. Zagal and Sebastian Deterding articulate in their definition of the genre from the 2018 volume *Role-Playing Game Studies: Transmedia Formations*, roleplaying games constitute a diverse assemblage of genres, play-forms, and narrative conventions that may be thought of more productively within game studies as an analytic “perspective” rather than a coherent genre or form (47).

[xxx] Rachael Hutchinson identifies amnesia as a persistent trope in Japanese Roleplaying Games like *The World Ends with You*, arguing that it intensifies the player’s identification with protagonist (112), as it positions both in the process of discovering their themselves and their world.

[xxxi] This model is also intended to affectively tether the player to the game’s protagonist through its difficulty. In an interview with IGN, the game developers highlight how the discordant rhythms of gameplay are intended to affectively tether the character to Sakuraba’s own sense of estrangement:

> Perhaps when [Sakuraba]'s actions align with personal experiences, players would feel that they have become part of the game, in turn developing an understanding and tolerance for [Sakuraba]'s actions. This could reduce the kind of stress associated with controlling a character that doesn't act exactly in the way that players want. (Bozon 2009)

The game is deliberately difficult to control because Sakuraba has little control over his own situation.

[xxxii] In the Japanese language version of the game, this is two terms, the phonetic translation *chūningu* but also the word *dōchō*, which implies a degree of alignment or conformity, thereby implying more of a connection with synchronizing acts of modulation.

Chapter Four: *428: Shibuya Scramble* and Agetopical Spaces

In the previous chapter, I historicized modulation in Shibuya within the globalized operations of network society, as described by Deleuze, but the ideology and function of control has a distinct history in Japan related to corporate governance and the rhetoric of business management. Discourse about this management has often been centred on the concept of *kanri shakai* (managed society), and according to a series of dialogues between Japanese communications scholar Kogawa Tetsuo and Douglas Lummis, it entails a kind of societal regulation that takes place indirectly, in contrast to the more violent disciplinary measures that preceded World War II (43). Kogawa characterizes the use of this term as typically negative, referring to the passive connotations of being managed by one's company or society in general (41) not by means of direct intervention but through rhetorical control over "common sense" (45). He makes the distinction between "*tatemae"* (public attitude) and "*hone"* (real thought or intention) and argues that while the latter retains the possibility of social difference, the former is made to align with common sense through the rhetoric of mass media (44), leading him to claim that public attitude and common sense belong to the government and other authorities (45).

In the second part of the dialogue, published a year later, Kogawa explains how *kanri shakai* functions within the management of space by indirectly delimiting the possibilities of action within constructed environments like the city. Speaking specifically about the transformation of Tokyo after the 1960s, he discusses how the possibility of riots was foreclosed by removing stone pavements and replacing them with smoother sidewalks that could not be dislodged into individual blocks that could be thrown (46). Similarly, he identifies the rationalization of the city that followed these changes, transforming once dense and labyrinthine streets and alleys into more open designs that eliminated the distinct characteristics of different Tokyo neighborhoods (46-47), albeit an imperfect rationalization

that is regularly transgressed by individuals who carve out new and unexpected paths within the managed space (46).

Yet, as detailed in the introduction, this begins to change in the 1990s when the rhetoric of a managed society seems to collapse along with the economic bubble. As the recession entered its second decade, the promise of social, familial, and personal fulfillment that had buoyed capitalism in the post-war years began to crack. Routine and normalized movement between work and home or school continued to drive circulation through Shibuya for many individuals, but for others, it was clear that even proper conduct was not a guarantee of security. In this way, the rhetoric surrounding the lost generation was consistent with a more general sense of alienation on the part of those unwilling or unable to participate in the normative dimensions of labour or family. The rejection of social norms and failure to resuscitate Japanese capitalism caused many youths to shoulder the blame for the recession. While the deterioration of faith in the social structures of Japanese capitalism was not necessarily caused by the logic of *kanri shakai*, it was exacerbated by it. Personal relations within local communities, workplaces, and families give way to social atomization.

Accordingly, the utopian imaginary of Shibuya in the 1990s gave way to a decidedly dystopian fictional landscape in the 2000s and early 2010s. Several narrative texts began to stage Shibuya as a site of post-apocalyptic destruction or potential calamity, such as the visual novel *Chaos;Head* developed by the companies 5pb. and Nitroplus and released for Microsoft Windows in 2008. The game imagines Shibuya as the centre of the apocalypse, affording the player only control over which "delusional" filters through which to perceive the game's events. Four years later, the developer Crispy's! released *Tokyo Jungle* on the PlayStation 3. The survival game takes place after the destruction of humanity and instead imagines Shibuya and surrounding areas as a re-wilded space, tasking the player with nurturing a variety of animal species. Other media forms promised similar destruction, such

as Hiroumi Aoi's horror-comedy manga *Shibuya Goldfish* released in 2016, which sees Shibuya decimated by swarms of gargantuan flying goldfish. This chapter examines what these imagined catastrophes tell us about Shibuya at the end of the 2000s.

The emergence of Shibuya as an imagined dystopian space contrasts the free-flowing movements and utopian formations detailed in the second chapter, in which I parsed how contemporary city spaces, like game spaces, hold together the globalized, homogenized, and metricized nature of corporate and governmental striations with the more nomadic tendencies of counterculture that constitute a kind of smooth space. The range of possibilities for movement within these cities, assembling smooth and the striating tendencies, is what I'm calling a world-form, and a world itself is actualized by a course of movement through it. In the third chapter, I detailed how a body is transmitted through this space and becomes a subject holding together a prescribed world as it internalizes and repeats surrounding rhythms, especially those of emergent screen technologies. While I explained that an attuned body is also capable of internalizing alternative rhythms and navigating paths through the city that do not simply align with the routine movements required for commerce or transit, the abundance of fictions pinning catastrophe to the Shibuya River Valley would seem to suggest that, at least conceptually, variance is not an exception. The coterminous assemblage of world and self seems to be an inherently unstable one. Management must, therefore, shift to regulating trajectories in aggregate.

The 2008 Nintendo Wii game *428 Shibuya Scramble*[xxxiii] illustrates this shift. The game follows five individual stories within a larger narrative formation about the threat of a viral outbreak in Shibuya. As many of the protagonists that the player controls are police or corporate executives, it encourages us to think of the official response to catastrophes resulting from the increased density of movement within Shibuya as it became a corporate and tourist centre. The game also presents a useful study of the navigational possibilities of

Shibuya in the way it invites player participation. In contrast with more action-heavy games where the player explores an environment by manipulating the movement of an avatar with a control stick, the novelistic genre of *428: Shibuya Scramble* is enacted through the selection of particular hypertext links that alter the story. By selecting correctly and managing the narrative trajectory of individual characters in relation to a larger narrative structure the game points to how catastrophe is managed or even averted in the city.

In *428: Shibuya Scramble*, as in the actual neighborhood of Shibuya, correct movement is produced through a narrative structure that accounts not for a single sequence of events but for a series of possible ones connected within a larger meta-narrative structure. In short, the game encourages us to think of cities chronotopically. As I cited in the second chapter, Ueno Toshiya insists that pirate-like countercultural movements created "chronotopes" in subcultural centres like Shibuya by highjacking the networks of capitalism ("Piracy Then and Now" 1998), but what these "pirates" are actually highjacking is the signifying potential of corporate and governmental operations that are already producing their own chronotopes in order to bolster practices of surveillance, transit, or retail consumption. This is explained by returning to Mikhail Bakhtin's original formulation of the chronotope and the subsequent theoretical approaches to space it produced.

In "Forms of Time and of the Chronotope in the Novel: Notes Toward a Historical Poetics," Bakhtin provides the basis for a narrative theory that, unlike the temporal and sequential theories of narratologists such as Barthes or Propp, gives equal weight to time and space in novels:

> In the literary artistic chronotope, spatial and temporal indicators are fused into one carefully thought-out, concrete whole. Time, as it were, thickens, takes on flesh, becomes artistically visible; likewise, space becomes charged and responsive to the

> movements of time, plot and history. The intersection of axes and fusion of indicators characterizes the artistic chronotope. (84)

For Bakhtin, chronotopes express that within the novel, as within physics, time and space are fundamentally inseparable, and any attempt to account for one must account for the other. The assemblage of chronotopes within a novel help define a text within a given genre. While the term has been occasionally criticized for its "lack of analytical precision" (Bemong and Borghart 2010: 6), its flexibility has led narrative scholars to examine a range of chronotopes outside of literature, interrogating historical spaces as wide-ranging as the segregated balconies of Jim Crow America (Abel 2010) and the nation-state of Cold War Yugoslavia (Spaskovska 2014). These applications tend to draw parallels between genre analysis and the different affective connotations of differing spaces within specific historical contexts. These kinds of approach lead us to think about how chrontopes might function within the space of Shibuya, with the transition from a managed society to a relation-less society constituting two competing chrontopes within Shibuya.

Within my world-based approach to city spaces, the question of chronotopes changing over time within literary texts encourages us to think about how the cities from which those texts derive their time-space are changing as well. To reiterate the foundation of Kirby's world-based treatment of Lefebvrian space, worlds are comprised of movement and change (1), and how this movement has been assembled historically can help us parse a transition between Shibuya as a subcultural haven in the late twentieth century and its more corporate-friendly landscape in the present. Yet, when we look at the fictional worlds of Shibuya at the end of the 2000s, they seem to be at odds with the supposedly dominant chronotopes of commerce and security that constitute the everyday space of the city. In this chapter, I argue that this is because the chronotope is limited in its ability to regulate the density of movement

within the city. Chronotopes provide an important foundation for reading such movement, but it must be augmented to account for the diversity of action that emerges.

When we talk about novels, a chronotope is sufficient, as Bakhtin writes the "primary category" of the chronotope in literature is time (15), but an account of time-space in games or cities is confronted with an individual's sometimes unpredictable navigational choices. Within games, time is frequently subordinated to action, and we need to think not only chronotopically but also *agetopically.* What I term an agetope can be understood as a set of actions that define an overall pattern of navigation. The roots of the agetope derives from the Greek prefix *ag* signifying the element of lead and the roots of English words such as agony and antagonize, but more relevantly it is cognate with the Latin *agere*, which has the useful double meaning of act and play and is also a component of relevant English words such as agent, agenda, and (most importantly) navigate. Cities and games alike are composed of collections of navigational possibilities, and by repeatedly performing and being performed by them, space begins to take on a particular character, admitting certain possibilities for movement and prohibiting others. This is most clear in a discussion of digital games. While patterns of time-space may belong chronotopically to a narrative genre, such as horror game. Its gameic genre requires a different treatment. A horror game shares many of the chrontopes of a horror novel. For example, two separated games may construct an abandoned house as a shadowy labyrinthine space via the way the setting lends itself to supernatural violence. Yet within games this chronotope can be constructed within a variety of agetopes, such as survival horror game tied to resource management and "real-time" navigation, or it may take the form of novelistic genre such as the one discussed in this chapter and structured around textual reading processes and the navigation of hypertext links. At once, there is the chronotopic space (in which the discursive structures of narrative dominate) and also agetopic space (in which actions and operations, events and their algorithmic processing

interact). Chronotopes and agetopes are not wholly separate here, and they are assembled into a *chrono-agetope* that accounts for a more holistic approach to time, space, and action within a world.

A study of chrono-agetopes in game texts points to their proliferation in the spaces of contemporary cities. The tension between chronotopic regulation on the part of authorities and agetopic navigation on the part of individuals becomes characteristic of Shibuya as it becomes understood as networked space of dense flows of movement. Power attempts to compensate by delimiting agetopic possibilities, but, as I explain, these are always at risk of being transgressed. Regulating a space requires that individuals relate to each other and space as part of a de-individuated crowd—their movements taking the form of informational flows that the can be planned and projected. Contagion, mass panic, and individual acts of violence threaten to undermine this social order and attempts to re-instantiate security must necessarily lag behind or double-down on more totalizing procedures of surveillance or policing. However, *428: Shibuya Scramble*, presents another possibility. In the de-anonymized navigation of connections and the possibility of cooperation, the game stages a more localized means of overcoming disaster.

Crisis Management

In the same way as a particular set of digital operations constitute a range of possible movements across smooth and striated space as a world-form in video games, the indirect regulation of space, within the form of governance highlighted as *kanri shakai* by Kogawa and Lummis, comes to dominate the everyday world-form of Shibuya beginning in the second half of the twentieth century. These attempts take place in the construction of Shibuya's retail landscape and the detailed procedures of its policing methods, but they are not wholly separate from and, in fact, are necessarily tied to attempts to create a chronotope

of safe and smooth network of circulation within Shibuya characterized by the high-density movements of undifferentiated and anonymous crowds.

As detailed in the introduction, accounts of retail landscapes and departments stores like the one founded by Tokyu in 1919 in attempted to spur retail purchases by attracting a high volume of shoppers into stores by selling a large number of cheap consumer goods and spectacularizing the sale of larger and more expensive items. This was aided by the circular layout that Tokyu implemented around the station, situating the department store at the centre of an orbital network of streets and roads. Similar formations have been analyzed as what urban geographers Ondřej Mulíček, Robert Osman, and Daniel Seidenglanz theorize as a retail chronotope that sets a standard everyday pace for the otherwise diverse rhythms of urban movement, fixing them around the temporality of retail consumption (317). Similarly, the individual structures of contemporary cities have been characterized as chronotopic in essays like "Tell-Tale Landscapes and Mythical Chronotopes in Urban Designs for Twenty-First Century Paris." Here, authors Bart Keunen and Sofie Verraest suggest that architecture has a narrative component, as it embodies experiential, representational, and world-making components that tie it to a larger architectonic project in the city (2), linking individual structures such as the 109 department store to larger retail construction projects in areas like the one around Shibuya Station.

More relevant to this chapter, are attempts regulate security in a neighborhood like Shibuya, as evidenced by documents like the "Shibuyaku kōtsu anzen keikaku", ("Shibuya Traffic Safety Plan") published every four years by the Shibuya Ward Department of Civil Works and Sanitation. The document illustrates how chronotopic controls were localized in Shibuya. The report outlines overall traffic trends in Shibuya and suggestions on how they might improve the movement of vehicles and pedestrians in the ward. Individual reports differ, but they all share the goal of maximizing the efficiency of movement and reducing

injuries and fatalities. In a report for the years of 2011 through 2015, for example, goals include reducing the number of accidents involving children and the elderly, as well as specific targets to reduce parking infringements and accidents involving motorcycles and mopeds (1). These interventions are tied to the wider goal of general safety, as espoused by their repeated insistence on reducing traffic related fatalities to zero (5).

Most of the planned initiatives within the report function by establishing the legibility of space in such a way that individuals recognize themselves within a population. These are semiotic measures such as the implementation of more safety barriers, painted crosswalks and other signs and visual cues intended to guide movement. The authors of the report include two pictures to illustrate the purpose of these measures. Though both pictures depict the same intersection in the Sakuragaoka neighborhood of Shibuya, the first is taken at a skewed angle to omit the more obvious visual markers. The second is taken straight on and features less congestion, creating a before and after effect and linking urban legibility with safety and ease of movement (9). Additional measures aid the legibility of the city through absence rather than inscription, such as increased road maintenance (11).

In addition to the measures targeting the populace, there are also disciplinary measures detailed that have more of an individuating function, whereby authorities can disaggregate the population into components that upset the population at large. These orders are related primarily to law enforcement. Along with increasing legibility, the report also calls for thorough enforcement of existing driving laws, a crackdown on illegal parking, and strengthened measures to target distracted driving (7). These interventions are also mass procedures in a sense, but the subject here switches from the public to the police force, who must be the ones to act according to a normative and prescriptive format for maintaining movement within a bandwidth of acceptable behavior. The overall goal of these measures is captured by a map on the final page of the report labeled the “Secure Walkway Area”

(“Shibuyaku kōtsu anzen keikaku” 2008: 14). It depicts a segment of space with secure boundaries and stable crisscrossing paths. It exists within the modality of Lefebvre’s representations, playing out within a normative spatial practice of reading and movement, but it exists primarily to inform representations.

Attempts to regulate safety within Shibuya have also been detailed chronotopically, as in *Chronotopes of Law* by criminologist Mariana Valverde. Valverde describes multiple “chronotopes of security,” operating at multiple levels including the nation-state, the family, and the body, but it is the second order, which she identifies as local that is most significant here, as it attempts to create a “crime-free and socially cohesive neighborhood” (156) by deploying a rhetoric like that of the *Shibuya Traffic Safety Plan* that communicates that local communities are “essentially static and inherently safe, and the occasional threats or rifts in the social fabric can be repaired by efficient police action” (166). In fact, it is the threat itself that is leveraged in order to bring intensified police operations to bear on localities allying governments with corporations to enact design, surveillance, and disciplinary practices and create a “well-ordered neighborhood” (155).

What these retail and security chronotopes illustrate is a management of space predicated on faceless relationships and a rigid set of procedures like the atmosphere of management described as kanri shakai. The problem, however, is that the more rigid a chronotope is, the more likely movement is to fall out of it. This is described by Kogawa and Lummis in the first part of their discussion of managed societies in relation to a neighborhood park:

> I think it’s important to emphasize that the control we’re describing is not fully successful. Outside the rear window of my house they built a park about six or seven years ago. It was built by the ward government, as a Japanese garden, and there is a little path which is the only place you’re allowed to walk. There is a sign that says do

> not walk on the grass, don't bring your dog here, do not play, don't bring your bicycle. What you're supposed to do is walk in at one side, down the path, or out the other side. You can also sit on the bench. There's a big heavy trellis to hold the wisteria, and there's a little hill . . . The first thing the local children discovered was that it was easy to climb the wisteria trellis and they could sit on top . . . The second thing the kids discovered was that if you ride around the path you can build up speed, ride up the hill . . . there's a beautiful stone . . . which becomes a jump for bicycles. (46)

As Lummis accounts for here, a path does not foreclose divergence it merely attempts to standardize it. The kind of chronotopes that are fixed within Shibuya similarly invite transgression, as in the acts of graffiti vandalism detailed in the second chapter. More concerningly, however, is the possibility of transgressive movements on a catastrophic level.

If the rhetoric of common sense, as described by Kogawa and Lummis (45), is buttressed by a chronotope of the city as a secure and well managed space, the history of Tokyo in the late twentieth and early twenty-first century shows the limits of the kind of controls, both rhetorical and material, that such a chronotope entails. As the density of movement within a space like Shibuya expanded along with increased tourism and transit, the possibilities for transgressive movements also grew, and several catastrophes beginning in the mid-1990s, exposed the precarity of dense urban spaces like Shibuya.

The Tokyo Subway Sarin Attack, which occurred on March twentieth, 1995, saw members of the Aum Shinrikyō cult release sarin gas on crowded Tokyo Metro trains killing 13 people and injuring over 5000. The doomsday cult had performed a similar attack in Matsumoto nine months earlier, and the leader, learning of an impending police raid and eager to hasten World War III and the apocalypse, ordered an attack on commuters ("Aum Shinrikyo: The Japanese Cult Behind the Tokyo Sarin Attack" 2018). While the attack did

not specifically target Shibuya, instead occurring within subway lines surrounding the national Diet, Shibuya was the site of Aum headquarters from the 1980s until the time of the attack (Shupe 1998: 34).

Another major incident in Tokyo occurred 12 years later in 2008 when a young man, who had faced online bullying, drove a truck into crowds of pedestrians in the consumer electronic neighborhood of Akihabara. Exiting his vehicle, he then proceeded to stab pedestrians randomly until he was apprehended. All told, he killed 7 people and injured an additional 10 ("Tomohiro Kato Sentenced to Death over Tokyo Stabbings" 2011). Dubbed the Akihabara Massacre in English-language press, the event was perhaps not as catastrophically disruptive as the Sarin Attack, but it left a major impact on the city and country, causing many to question the rhetoric of safety and highlighting the potential threat of networked technologies and the supposedly anti-social tendencies of a generation of young men who used them. While Shibuya was not directly connected to the event, its centrality and density made it vulnerable to similar attacks[xxxiv].

Even more devastating than the threat of mass violence was the nuclear meltdown at the Fukushima Daiichi Nuclear Power Plant operated by TEPCO. The plant was damaged by an earthquake and tsunami on March 11, 2011, and it emerged that not only had TEPCO been negligent in their construction standards for the plant, but that negligence and the full extent of the disaster were covered up in the days following the disaster despite the threat of radiation far afield from the disaster area (Lochbaum et al. 2014: 53). Subsequently, Shibuya was the site of successive demonstrations against nuclear power taking place in its streets and parks for over a year after the initial disaster (Ogura and Mullen 2012)[xxxv].

These incidents scattered over 17 years are not directly related, but they are intended to highlight some of the major incidents that, like the collapse of the real estate bubble that gave birth to the "lost generation," shook confidence in the security of Japanese society and

made chronotopes of a secure and free-flowing urban core seem precarious. In each case, the response was to double down on a set of operations that seek to account for even the most devastating of disasters within a set of standardized procedures. Shortly after the sarin attacks in 1995, the municipal government sealed up and removed all trash receptacles from city streets. While similar measures had been taken internationally after other attacks like those of September 11th in New York City, they never returned to public streets of Tokyo (Richarz 2019). More thorough plans for responding to terrorism took shape in the early 2000s when the *Bōsai keikaku* (National Protection Plan) was announced to deal with the possibility of armed attacks ("National Protection Plan" 2020). The plan was enacted locally in Shibuya beginning in 2007 and includes protocols for informing the public events and dealing with various possible violent scenarios. As might be expected, many of these measures are designed to synchronize Shibuya within a larger urban an international network of information, collecting and coordinating data of incidents in Shibuya and sharing it with other agencies in Tokyo, Japan, and around the world ("Shibuyaku kokumin hogo keikaku" 2016). The idea behind this plan was to create a unified response to any possible disaster starting with the individual and moving through a progressively larger network of local police agencies, hospitals, national institutions, and international organizations. These plans would be updated repeatedly over the following decade with new measures such as the J-Alert system, which bolstered the network of information by broadcasting disasters and terrorist attacks from the National Fire and Disaster Management Agency to televisions, radios, and individual cell phones ("National Protection Plan" 2020). Shibuya's part in this network was to exist between the nation and the individual, broadcasting information and coordinating responses locally.

It could be said that disruptions on a mass scale come to constitute chronotopes of their own, ones that operate as the flipside of the more normative chronotopes within

Shibuya. In this formulation, the everyday space of the city is defined by the threat of crisis which is mobilized to provide a cause or alibi for localized procedures that allow the city to be monitored and rationalized. The problem with this suggestion is that all movement within the city becomes operationalized. The agency of human actions proves illusionary. We have to accept that Shibuya's space within an intensifying network of people, goods, and information necessarily exposes it to greater destruction. If, however, we accept that there is movement that takes place outside of the chronotopes of the city, genuine alternatives for navigating Shibuya come into focus. When applied to contemporary Shibuya, the question most relevant to this study is whether the experience of space tends towards chronotopic or agetopic possibilities. Does abstract space continue to totalize the possibilities of spatial engagement into the procedural, normative, and axiomatic enclosures of various chrontopes, or are agetopical possibilities also possible at a level that collapses exchange-based operations? An analysis of *428: Shibuya Scramble* helps answer this question.

In A Blockaded Shibuya

428: Shibuya Scramble belongs to genre of novelistic games that are "played" in a manner similar to reading a book. The game's developer Nakamura Koichi began his career working on the first installment in the popular *Dragon Quest* RPG series but transitioned toward making games that he termed "sound novels" in the early 1990s. Nakamura's moniker was a play on the more common "visual novel" term, which reflected the audio fidelity of his early games in comparison with others in the genre. However, with later visual novels gradually incorporating complex audio-scapes like that of Chunsoft's sound novels, what actually sets *428: Shibuya Scramble* and its immediate predecessor *Machi*[xxxvi] apart from other visual novels is the use of photography and tableaus to supplement text. Blocks of texts in the game are accompanied by still photos that change with every few sentences. This

means that the story revolves around reading an organized narrative and parsing text and image. What makes *428: Shibuya Scramble* similar to other visual novels, however, is how it is ostensibly an easy fit for chronotopic analysis due to the limited options it provides for players. The game proceeds by calling on players to make a choice for in-game characters, which are typically limited to two or three pre-determined courses (e.g. following a suspicious individual vs. letting that person pass) that direct the flow of narrative to various outcomes. Although these games typically have multiple endings depending on which choices a player selects, divergence isn't so great that literary analysis fails outright. In the case of *428: Shibuya Scramble*, the plots of the game's individual storylines are all recognizable in a linear narrative account and all conform to the chronotropic intersections of space and time that render them recognizable within different genre formations. This is similarly true of the overarching story of a viral release in Shibuya that subsumes each of the individual narrative threads.

428: Shibuya Scramble centres on five primary protagonists as they cope with an escalating crisis that takes place over a single day in the area around Shibuya Station. The first character introduced is a local police detective named Kano Shinya. Along with his partner Sasayama, and later an American CIA agent named Jack Stanley, Kano begins the day investigating the kidnapping of a young woman and ends up uncovering a terrorist plot to unleash a viral agent similar to the plague in Shibuya. Fast-paced with constant revelations that continuously intensify the stakes, Kano's story begins as a hard-boiled police procedural before escalating into an international thriller. He begins investigating a kidnapping and ransom case involving the disappearance of Ōsawa Maria, the daughter of a pharmaceutical director, and uncovers a larger plot on the part of international terrorists to sow destruction within Tokyo. His story finds, within Shibuya, the chronotopic possibilities of what Marc Brosseau and Pierre-Mathieu La Bel identify in their study of crime fiction as "the

chronotope of the investigation" in which the city and is transformed into the everyday turf of the detective mapped out through their movements through different informational sites (51). The city is made to divulge its secrets piece by piece through the investigation, and both the parsing of information and the traversal of the space of Shibuya come to suggest potential danger that can only be relieved by the successful conclusion of the investigation[xxxvii].

The second protagonist is Achi, a dopey vigilante turned environmental activist. On his daily walk to collect garbage, he stumbles on Maria's twin sister, Hitomi, who is holding the ransom money that has been demanded by the kidnappers. Saving Hitomi from the kidnappers, who had plotted to capture Hitomi as well, Achi stumbles into the larger terror plot. Achi and Hitomi spend their story on the run from the kidnappers, Achi's former gang, and a lone detective who seems determined to kill Hitomi for reasons that are unspecified for much of the game. Achi and Hitomi also run into a young Middle Eastern assassin named Canaan, who Hitomi's sister befriended on at trip abroad. Canaan is looking to find and kill Alphard, the head of the terrorist organization behind the virus plot and aids Achi and Hitomi in their escape. Ultimately, however, much of Achi and Hitomi's storyline is a love story with constant breaks in the action for the two characters to gradually fall for one another. Achi's story most closely resembles a more modern take on Bakhtin's own account of adventure genre and it's chronotope of the "road" in which the routines of everyday life are disrupted by the movement dramatic series of events that are ultimately resolved by a new status quo and the "collapse of social distances" (233-244). This chronotope creates the pathways of Shibuya as a space of chance encounters that are tied to negotiating new social connections within the protagonist's personal history. It allows for novelty within the routines of Shibuya's everyday space.

Hitmoi and Maria's father Ōsawa Kenji is another protagonist. A viral researcher and lab director of a fictional pharmaceutical company, it is his company that created the virus at

the centre of the game. His narrative is constantly broken up with horrific images of the virus and ominous threats delivered by phone and e-mail. His story plays off the conventions of psychological horror[xxxviii], as he is confronted with the realities of his complicity with the unfolding disaster. His story also has elements of family drama as he confronts the betrayal of his wife and comes to grips with the strained relationship with his twin daughters. Chronotopically, Ōsawa Kenji's narrative differs from the other protagonists as it takes place primarily within his house, creating something like a "haunted house chronotope" (Prosser 10) that situates the private space of the protagonist as a space of temporally ungrounded personal anguish and stagnation, and the streets of Shibuya as a site of future-oriented space of potential reconciliation.

Ōsawa Kenji is ultimately aided by an outspoken and brash reporter named Minokawa, whose investigation constitutes the fourth narrative. Minokawa is a freelance journalist who takes a questionable job from a former journalistic colleague named Toyama but ends up stumbling upon the story of the virus and plays a role in connecting all the seemingly disparate elements of the story. Minokawa's boss is under pressure from debt collectors, and his attempt to uncover and publish the story stems from his desire to help Toyama and his young daughter avoid financial ruin. Minokawa's story is a bit more light-hearted than the previous the three and centres around Minokawa's efforts to save the tabloid that Toyama runs. Minokawa's story repeats the investigation chronotope of Kano, but in a less rigid and institutionally legitimized way, suggesting the need to transgress in order to disentangle the city's flows of information.

Finally, the player is introduced to a young woman named Tama in a large cat mascot costume. Tama begins the day handing out samples of an energy drink but is unable to remove the costume and spends the first half of the game engaging in a serious of comedic vignettes. When she finally frees herself, Tama is revealed to be Maria, Hitomi's twin sister.

Maria does not remember her identity due to amnesia but gradually recovers it over the course of the game while finding her way back to her family. As Tama, the story is purely comedic, but as Maria gradually remembers herself it becomes increasingly dramatic. As with Minokawa, Maria's story is a repetition of an earlier one. In this case, she repeats the chronotope of "the road" and the everyday chance encounters it entails, but the sudden transition within her story suggests that this was only possible because the open space of Shibuya is largely an anonymous space that is resistant to social connection.

As with many other games in the visual novel genre, certain branches of the story are contingent upon the player making particular narrative choices. In *428: Shibuya Scramble* there are two additional plotlines that the player can discover at the end of the game. In the final chapter, players also follow the story of the previously peripheral CIA agent Paul Stanley, who uncovers the truth that Canaan, the young woman aiding Achi and Hitomi is actually Alphard. Similarly, players can follow Kano's hero Detective Tateno, who seeks redemption for once failing to shoot the drug addict who killed Achi's mother. This is the same detective that has pursued Achi and Hitomi for much of the game. While his pursuit was motivated by a desire to capture Hitomi, as she shares a rare blood type with Achi's terminally ill sister, he ultimately changes his mind and helps bring down Alphard. These secret storylines both point to the overall meta-narrative of the game constitutes something like a global network chronotope, instantiating Shibuya as a series of synchronized flows and hidden, global connections that are not immediately obvious. Similar chronotopes are at work in international thrillers and conspiracy stories such as *The Manchurian Candidate*.

It's no doubt evident at this point, that *428: Shibuya Scramble's* storyline is extremely convoluted. Much of this is a result of the game's insistence on telling seven separate stories. While the overall story of international terrorism, viral contagions, and government coverups unites each of the individual plot threads, the details and tone of individual ones are

extremely different. Differences are also not limited to narration. The visual portion of each story underpins genre divergence. In addition to text, the game includes numerous photos and the occasional video, and each storyline features a different visual aesthetic. While Tama's comedic story is shot with bright colours and an almost cartoonish style, Ōsawa Kenji's story is claustrophobic with dark colors, and dim lighting, showcasing the empty halls of his large house.

Each of the individual stories share the space of Shibuya, but by evoking different chronotopes within that space, they are able to render different possibilities for the area: crime, conspiracy, horror, comedy, or romance. In this way, it folds Shibuya's topology into various affective formations that color the narratives of the story. Furthermore, by folding all the individual chrontopes into the larger chronotope of Shibuya as site of conspiracy and potential mass panic, it is able to point to Shibuya as a collective production, one that is sustained but also threatened by the same density of movement that provides its diversity. In order to stave off crisis, it is important to make connections between individual perspectives and gain a greater understanding of Shibuya as a whole.

This account of the game's narrative and its conformity to various genres conventions is ultimately as far as a chronotopic analysis can go. Although I've attempted to provide a brief summary for context, the unconventional manner in which the game unravels requires a more nuanced take on the narrative structure of the game to account for how the individual plot threads position the player in a field of narrative play. While *428: Shibuya Scramble* is a novelistic game, it diverges from novelistic forms in several key aspects that are characteristic of the visual novel genre to which it belongs. This divergence takes place at the level of action and suggests the possibility of an analysis of intensities of time-space that also takes patterns of action-space into account.

Chrono-agetopes

Action cannot be made subordinate to sequence in an analysis of games. The temporal structure is complex and pluralized and united through the action of the player. Action and narrative must be accounted for as separate entities, albeit ones that contextualize one another. This is not to suggest that action has gone unmentioned in narrative analysis thus far. As far back as the *Poetics*, Aristotle accounted for plot an "imitation of action" (8) with various genres defined according to the unity of actions they present. Contemporary accounts of narrative continue to rely on accounting for the sequence, conveyance, and affective connotations of actions or events. The most prominent proponent of this approach was Vladimir Propp, who, in *Morphology of the Folktale*, divided narratives between the "*fabula"* (the information of a story) and the "*syuzhet*" (the story's telling) (101). Though many narrative scholars have diverged from his morphological methodology, the basic strategy of approaching narrative as a division between multiple sequential or temporal structures remains intact. These distinctions are useful for highlighting the sense-making apparatuses produced by various temporal frictions. However, in most video games, the flexibility of the fabula and syuzhet alike complicate structural analysis. Certain events are fixed and often triggered when a player reaches a certain area, interacts with a certain character, or fulfills certain actional conditions. Moreover, player actions, which might be said to comprise much of the fabula are contingent upon how a player chooses to interact with the operations that structure gameplay. Programmed and rule-based, as they are, actions cannot be said to afford complete freedom, but they provide enough variance that they evade structural accounts until the game has been completed. Narrative tools simply cannot keep up with the degree of actional variance within both syuzhet and fabula. The former lacks a coherent and consistent structure, and the latter falls to the player and the modulations they make within a game world.

As I touched on in the introduction, the opposition of narrative and action or play is a particularly contentious subject in game studies. Scholars historically tended to emphasize the importance of ludological or narrative analysis respectively, and while some recent work has been done to blend the two approaches (Toh 2018), much Western analysis that preceded the contributions of writers like Amanda Phillips mentioned in the introduction remained yoked to the tension between narrative and play structures. This has not been the case in Japan where theorists such as Ōtsuka Eiji and Azuma Hiroki have insisted on an alternative tension within narrative between story-like fragments whose patterns draw on various genre conventions on the one hand, and the larger subjective enclosure within which those story elements are embedded on the other. Structures of play are not opposed to these meta-narratives but a constituent part of them. This is explained primarily in the work of theorist Azuma Hiroki who built of the meta-narrative world structure developed by Ōtsuka Eiji in his description of various media mixes. Azuma was initially dismissive of the importance of narrative within the media mix, instead insisting the indexical structure of the database as a more salient model for fan cultures in his book *Dōbutsu suru postumodan–otaku kara mita nihon shakai* (*Otaku: Japan's Database Animals*). However, in Azuma's sequel *Gemuteki riarizumu no tanjō–dōbutsu suru postumodan* (*Database Animals 2: The Birth of Gameic Realism*), Azuma reconsiders his initial downplaying of narrative, and addresses what narrative forms survive the shift to database cultures (26). In contrast to the subjectivized protagonists of traditional narratives, the characters in video game narratives are important primarily in regard to how they conform to or resist convention and cliché (36). Here the subjectivized self is not the chief determinant of social reality, as it was in Lefebvre's account of modern space, it is a denaturalized character, just one amongst many.

As Marc Steinberg addresses in his introduction to Ōtsuka's essay "World and Variation," Azuma's work is in dialogue Ōtsuka's notion of "manga-anime realism,"

particularly the notion that the heightened and dream-like sense of reality that Japanese and animated and comic media convey cannot be extended to video games (102). Azuma wants to complicate this, and by addressing video games (and novelistic games in particular) as meta-narrative productions full of multiple beginnings, endings, and divergent story paths, he finds a gameic realism that builds off "manga-anime realism" but complicates it by ungrounding the intensity of death and injury (Azuma 2007: 120). In fact, since game genres all deal with these elements in different way, he suggests that games present a plurality of realisms (122).

More important than a particular gameic realism to this chapter is Azuma's insistence on what unites these flexible narrative structures. For Azuma game-like realism is about reading meta-stories that do not have a single linear flow. They are full of multiple beginnings, endings, and divergent paths through the story and are often intensely self-conscious of their form (130); however, as in Ōtsuka's account, a grand narrative is revealed as these paths are mapped out. This meta-narrative formation comprised of intersecting paths that unify individual chronotopes is what constitutes the visual novel as a genre, but this doesn't immediately set it apart from contemporary non-gameic novels[xxxix], which are equally capable of polyvocal assemblages as intersecting plotlines, as in a novel like David Mitchell's *Cloud Atlas*. However, the structure of play, which splits apart action and time is distinct to novelistic games. If we want to be true to Bakhtin's historical project of finding a historical landscape within literature, it is this difference that must be investigated, as only digital games which proceed through the input of the player cleave action from narrative time. This is why actions must be considered a category apart from gameic operations. Certain events remain fixed even in gameic narratives. Non-participatory film-like segments termed cut-scenes, blocks of readable text, and certain events easily conform to the spatio-temporal structure of chronotopes (or divisions such as syuzhet and fabula,) but these gameic operations are more rigid and less dynamic than the actions that constitute a trajectory

through a game world. Once they end, action is required, and while it is true that game actions will always take place in the context of a gameic operations, they are also more fluid, more performative, and less linear. A player begins to interpret and move through their space, but along the way they test limits, improvise, and choose a particular trajectory from the many possibilities held in reserve within game space. Addressing the actions of game space through the temporal connotations of the chronotope risks standardizing the possibilities of action by subverting them entirely to operational possibilities. This is why agetopical possibilities are also needed for an account of how narrative structures game-like worlds.

This emphasis on the distinctions of gameic actions avoids calcification because agetopes are dynamic and flexible. An agetope does not attempt to completely account for all the dimensions of a spatio-temporal assemblage, it points to similarities in otherwise distinct performances, with one instance evoking others in a series, just as two people performing the same task inevitably follow separate trajectories. While a chronotope is limited to a temporal encounter of space within the city, an agetope, provides a heuristic function better suited to the multitude of ways the city can be performed or strategized.

A platforming game such as Nintendo's original *Super Mario Bros.,* for example, is one in which the chronotopic operations of a game world primarily function to drive the player to navigate a series of obstacles and enemies. The time-limit, scrolling screen, and layout of each stage combine to drive the player-avatar forward. In this way, the game is configured around a chronotope of progressive verticality and horizontality, as well as the fairy-tale conventions that see Mario attempt to rescue a princess from a dragon-like king Bowser. The agetopical formation of running and jumping which the player enacts, however, are required to make sense of how the game world is actualized. In fact, it is these actions, not the chronotopic elements of the game's settings, that link it to other games in the

platforming genre, which all delineate time and space quite differently but hinge on a foundational similarity of action.

The concept of an agetope is not meant to suggest that action falls out of Bakhtin's theory of a chronotope. What is time segmenting if not action? The idea of an agetope is instead a matter of focus, with different temporalities becoming evident through action rather than action deriving its meaning from the directionality of time. An agetope is not a constituent part of a chronotope. If a chronotope elucidates a temporal world, an agetope points to the world as experienced through action and movement where the force of time is less dependent upon operational constraints. Time is still present here, of course, but questions of temporal signification are subordinated to questions of how time is enacted. This is where the imaginative and symbolic nature of representational space become significant. The practice of a space does not precede rigidly from its structural organization, but also from how individuals encounter and perform structures.

The interdependent nature of spatial production means that agetopes and chronotopes, though situated at the level of actions and operations, impinge on one another, absorbing legibility and movement respectively. However, they do present separate modalities and take different objects. The operational enclosures of time-space (chronotope) are understood primarily through reading processes, while action-space (agetope) emerges within the repetition of certain navigational assemblages. Narratively speaking, action and sequence no longer constitute an indivisible unit of space-time, they are regarded as an assemblage. Each exerts a different pressure at different times, and both can be assembled in various ways. Strangely, this brings us back to something like a division of codes for narrative akin to Propp's formula of the fabula and syuzhet. It is the chronotope that comes to stand in for the raw information of the story, but on its own, this fabula is an event that does not necessarily imply the formalization of narrative discourse. The agetope is where movement happens, and

since movement is where a world emerges, it must be ordered into a more formal structure or syuzhet. Together, the assembled chrono-agetope constitutes the experience of a game, and with this narrative distinction in hand, *428: Shibuya Scramble* provides a more illuminating study of action and navigation in the city.

Bad and Good Endings

The navigation of the world in *428: Shibuya Scramble* hinges on making words actional. Words do not just function syntactically within the game. They are both chronotopic and agetopic in the movement they afford. The former can be explained by the movements of words across the screen and how the conspire with the chronotopes found within Shibuya in each of the story's individual plotlines. The developer of *428: Shibuya Scramble* recognized the importance of words in relation to the game and carefully considered everything from the way they look to the way they move, as detailed in an interview conducted by gaming site Polygon:

> But really, we put a lot of time and research into deciding how the letters should appear on the screen, things like scroll speed. Should the letters appear one at a time? Should they come out in chunks? You know, what's the best way that we can lead the player's eyes? If we have the text come out from the top and go down to the bottom, the player's eyes will follow the text as it comes out on the screen, so you move from the top to the bottom. When you go to the next page, the text returns to the top. That way, you're not only looking at the text, but you're also looking at images in the background and your eyes are constantly moving so it. Even though you're just reading the text, there's still a lot of action with your line of sight to prevent a player from getting bored. It also allows us to set the pace of the story. We set the speed and

> the style at which the characters are displayed on the screen, and that creates a tempo for the story. (Parish 2018)

It is words that set the rhythm for reading, directing the player's reading according to the affective connotations of Shibuya in each of the respective protagonists. In Achi's action sequences, only a few words appear on screen and zoom by quickly. During Ōsawa Kenji's bouts of existential horror, words hang in verses in the centre of a black screen to convey his sense of inner turmoil. Words are not static symbols that the player parses. They direct the act of reading by through affect and pacing game. The movement of words changes within and across each of the game's many narrative threads. Each narrative has its own genre conventions, which help to conduct the pace of the game's rhythm and the directionality of the narrative.

The problem is that these chronotopes congeal on their own. Following a single character's storyline will not allow the player to progress very far in the narrative. Before long, the player will reach one of the game's multiple bad endings, or they will be greeted by the image of yellow police barricade tape (see Fig. 7.), indicating the story has reached a temporary dead end. As with other visual novels. The game has several possibilities that conclude the narrative. Some of these endings are designated "bad," others are "good" and there is a single "true ending" that unites all of the plot threads. In order to reach one of the game's good endings, the actional nature of words must be sought out and activated. In *428: Shibuya* Scramble, a player's ability to navigate the branching storyline and reach the good or true ending is predicated on a player's ability to not only make the correct choices when prompted but to also correctly navigate hypertext links, much like the experience of navigating webpages on the internet. Like other visual novels, many of these links act as selection prompts for individual character actions. For example, early on Aichi and Hitomi are escaping would-be kidnappers and are given a choice to run to a police station or try to

escape on their own. These choices cause the story to branch in different directions, and if the player has chosen poorly, the narrative will end poorly, sometimes with a character's death or a failure to prevent disaster in Shibuya. The outcomes are frequently unpredictable and require trial and error. In the case of Aichi and Hitomi's escape, for example, the player must avoid the police and make a run for it. While this kind of choice is common in visual novels, what sets *428: Shibuya Scramble* apart from many other games in the genre is the how limited the effects of these choices are until a player manages to trace the appropriate connections within the network.

In order to ensure a character arrives at a location in time to meet another, for example, it's important to know what time they are departing. In a typical play session, the player will begin by selecting one of the five stories at random and begin to read the text. Within a relatively short amount of time the player will either encounter the police tape, indicating a story break, or one of several bad endings. This forces the player to go back and access another character's story and work through it until they reach a similar end. The player tracks these relations through a timetable interface that sits outside of the diegesis and shows when the events of each plotline occur (see Fig. 8). In other words, each story can only go so far. On their own, each narrative tends towards disaster, death, and failure. As I already described, players can overcome these dead ends by making successful choices, but this is only a small portion of the game's action. A much larger component of play involves searching out the correct keyword and using it to connect two plotlines.

Throughout the blocks of text, that constitute the game text, certain words are highlighted in blue or red font. Clicking on blue text provides encyclopedic information. Some of this information relates to fictionalized individuals and organizations unique to the world of the game. Other information is non-fictional, explaining police jargon, slang, or the history of Shibuya. Other hyperlinks are red and present points of intersection between the

cooccurring storylines of the five primary protagonists. These words, typically the name, profession, or description of one of the other characters mark points of intersection and by clicking on them, the player can jump to another player's storyline, causing the police tape that otherwise blocks progress to unfurl. These links are the point at which multiple unitary narratives are enjoined into a large assemblage and searching them out while making successful narrative choices across storylines is required for a successful traversal of the game world.

The effects of individual story choices are not limited to a single character's plotlines. Frequently, choices must be made so that one character can be in the right place at the right time. This often means making sure to delay the movement of certain characters by having a protagonist engage them in conversation so they don't impede other protagonists. On the other hand, the player may want to let a character move freely so that they meet up with another protagonist at the right time. Everything needs to move in accordance with the larger meta-narrative. For example, the explosion of a car halfway through the game marks the beginning of the crisis that eventually overtakes Shibuya. If players let the event unfold within individual narratives, either Minokawa or Hitomi will be killed in the explosion. To prevent these fates, the player needs to make sure that Achi is in the right place to call out to Hitomi. However, this only saves Hitomi, and Minokawa still dies as he charges towards the car. To stop this, the player must select the option for Achi to call out to Hitomi by name. This distracts Minokawa, who recognizes Hitomi's name from an earlier news story, and the momentary delay is enough to prevent Minokawa's death.

The effect of many of the choices a player makes will not be evident at first. It only becomes evident at points of stoppage. The narrative structure puts the player in an unusual situation of correcting a story when it goes wrong. The narration in *428: Shibuya Scramble* is in third person, but one that cannot be said to be omniscient, as the player-narrator stumbles

towards incorrect outcomes on multiple occasions. This is not the case of an unreliable narrator, rather it is a result of a pluralized narrative structure that must fail repeatedly before the sequence is correctly calculated. There are 86 false endings within the game. Some are humorous, such as Minokawa giving up journalism to become a fisherman. Other endings are catastrophic, as when Ōsawa Kenji's choices result in a missile strike leveling the city. In each case, however, the false endings serve as a corrective. They are typically accompanied by a hint that alerts the player to which particular action resulted in that particular outcome. It becomes important to locate problem points where the narrative has stopped and finesse movement so that the narrative unfolds properly. They must read the text diegetically and intuit how to connect the network of events.

The player is situated between the diegetic function of the word, which signals a path that unfolds operationally, and the actional function of the link, which affords action over how the path unfolds. The player-reader actualizes the narrative at the point where clicking on a word transitions to another level of the textual field, but the conclusion can only be reached if the player is able to hold the various branches of the text together. The game's meta-narrative is what allows chains of action-space and clusters of time-space to sit beside one another and inform each other. On their own, each story is confined to a narrative structure that is delimited by the genre conventions that arise out of how it shapes time, but the possibility of action across these enclosures, allows a larger narrative to take shape that informs a more general understanding of the world. Similarly, understanding how to act within a narrative thread requires the player to understand how actions fit within the meta-structure. This encompassing narrative comes to totalize the smaller stories as the viral threat becomes increasingly insistent. In order to forestall crisis, players must learn to move within the modality of reading and simultaneously intuit how movements connect. This is the only way to re-instantiate Shibuya's more pluralistic narrative possibilities.

This manipulation of the networked narrative, along with the centrality of police detectives and CIA agents, may seem to ally players with the totalizing operations of municipal and globalist powers, but this is only true if the player ends the game at one of the "good endings." As is typical with visual novels, the true ending of *428: Shibuya Scramble* requires that the player move in an aberrant way, uncharacteristic of the kind navigation that has moved the characters through the narrative thus far. While the primacy of making connections has been emphasized throughout much of the game, it is only in the final section of the game that the ethical dimensions of these connections come into full view. In the game's final twist, the CIA agents that apprehend Alphard are revealed to have been in cahoots with her the whole time, as a means of collecting both the viral and anti-viral agents. If the player repeatedly chooses to show mercy in their choices throughout the game, they are rewarded with a final cutscene in which the real Canaan confronts Alphard in the lobby of CIA headquarters[xl].The crisis the player believed they were preventing is revealed to be in aid of a larger conspiracy to solidify American power internationally.

While *428: Shibuya Scramble* stages a number of chronotopes that fail to cohere into a world on their own, the game also embeds them within a network of connections that the players must trace and align in order bridge a path through the world and avert catastrophe. In order to reach the True Ending, however, the game requires that players help the characters relate to each other in a humane way, ultimately revealing that the catastrophe was manufactured by the network itself. In this way, while each of the game's individual plotlines stage Shibuya chronotopically as a space of horror, action, or comedy, it relies on the actional conventions of the visual novel to emphasize Shibuya as a site of de-anonymized cooperation.

True Ending

As with the game world, the signs and symbols the comprise Shibuya's networked space assemble various chrono-agetopes to guide and regulate movement and stave off the kind of crisis that threatens Shibuya in the game. Points of connection need to be managed in relation to a whole. Crisis, however, is only one goal that the production of chrono-agetopes is directed towards. Minimizing danger and increasing consumption are also obvious targets of urban signs and markers. In short, the role of chrono-agetopes within the contemporary city is to configure the overall parameters of normative movement within a given space. As in the world of the game, this is not the case of singular signs guiding particular actions. Chrono-agetopes only take place when multiple signs intersect to create an area that implies a set of actions. These actions frequently rely on individuals relating to each other as abstractions rather than as individuals or members of a community.

What is often overlooked in chronotopic approaches to space, is that Bakhtin's original theorization of the chronotope was primarily concerned with how their positioning within the novel opened up the possibility of situating literature within history, tracing the development of genre through modifications to various chrontopes over time (85). To this end, an analysis of chronotopes in Shibuya shows the failure of a long dominant narrative mode, that sought to pin flows of bodies, goods, and information to rhetoric of collective well-being. In short, the ease in imagining Shibuya as a site of mass catastrophe in the late 2000s, points to a city that seems precarious due to a series of widespread calamities that exposed the weaknesses of urban management predicated on the regulation of the city's movement through abstract relations. There continue to be attempts to manage navigation chronotopically, fixed into regular patterns of routine movement in which people do not relate directly or spontaneously and bolstered by rhetoric of safety and security. However, this rhetoric is at odds with the realities of over twenty years of disaster and violence. Official

responses have entailed intensifying chronotopic measures by creating systems of spatial management that delimit the possibilities for action within the society.

428: Shibuya Scramble, approached chrono-agetopically, suggests an alternative to this formation, finding opportunities for local cooperation. While de-anonymization in public space, might lead us to think in terms of surveillance or corporate and governmental information gathering, we could also think about it in terms of pushing back against these power structures. While Shibuya has seemed increasingly precarious in the decades bracketing the new millennium, it has also provided opportunities for organizing and protesting events including government attempts to ease restrictions on the country's defense laws (Holtz 2015) and protests against the police treatment of Tokyo's Kurdish community after images of police abuse were caught and shared over social media (Saito 2020). These protests suggest cooperation and organization that is not predicated on the consumptive and disciplinary chronotopes of Shibuya's transit and retail space. This example is not meant to draw a direct connection between the chrono-agetopical space of *428: Shibuya Scramble* and that produced by activism and protest, but it does attest to the historical possibility for spaces of encounter like those of the game world within the actual space of Shibuya. In other words, Shibuya retains the possibility for actional or agetopic possibilities that are not based on individuals reading themselves and other as abstractions circulating in accordance with the signs of the city.

Nevertheless, such cooperation is challenging in the space of a city that is designed to regulate high flows of pedestrian movement. In the corridors of Shibuya's underground or the streets around Shibuya Station, individuals move quickly from point to point, and only Hachiko-mae square seems to afford any significant public space for meeting. The possibility for cooperation is rare when individuals cannot easily stop and encounter one another. However, digital and network technologies also bring with them new ways of navigating

space, and with that, new means of encountering one another. These spaces of encounter are the subject of the final chapter of this dissertation.

[xxxiii] The game was developed by Chunsoft and published by Sega Corporation under the original Japanese title *428 ~Fūsasareta Shibuya de* translates more literally to *In a Blockaded Shibuya*. While it only sold a modest 44,000 in Japan in its first year ("Gēmu sofuto nenkan ureage rankingu: kishu 'hādo' betsu Top30") and did not immediately receive an English localization, the game was subsequently ported to a number of other platforms where it achieved greater success including Android, PlayStation Portable It finally received an English translation in 2018 when it was ported to the PlayStation 4 and Windows.

[xxxiv] In fact, Shibuya was the site of its own attack. On January 1st, 2019, Shibuya ward was the site of another instance of violence. A man claiming to protest the execution of members of Aum Shinrikyo drove a rented van into crowds in Takeshita Street in Harajuku, a short distance from Shibuya Station. He injured nine pedestrians and was apprehended. (Harumashi et al. 2019).

[xxxv] Shibuya was also the site of one of TEPCO's large interactive museums about nuclear history that was free to the public until the disaster shuttered the facility along with several other museums and PR offices permanently ("TEPCO Amuseum").

[xxxvi] *Machi* never received localization outside of Japan but was a much larger phenomenon when it was released. Originally released for the Sega Saturn, it was ranked fifth in a poll of the 100 best games by readers of popular Japanese video game magazine *Famitsu* (Carless 2006). The game features a structure similar to that of *428: Shibuya Scramble* and is also set in the area around Shibuya Station.

[xxxvii] As Sari Kawana argues in her text *Murder Most Modern: Detective Fiction and Japanese Culture*, the tropes of detective fiction also suggest a regime of "cultural globalization", in which transnational forces of cultural production are re-negotiated locally (27-28), employing the detective genre to create the kind of world-form I am addressing in this dissertation.

[xxxviii] The link between the horror genre and Kenji Ōsawa's position as the head of a pharmaceutical company also implies a connection with the survival horror genre of games such as the *Resident Evil* or *Biohazard* series particularly popular in 1990s. These games similarly focus on viral outbreaks and genetic manipulation, which as Rachel Hutchinson suggests, reflects the bioethical debates that were happening in Japan throughout the 1990s (155).

[xxxix] This formula has also been highlighted as a popular contemporary trope in cinema such as the film *Babel*, which feature multiple characters in a "network narrative" of indirect relations, which as film scholar Neil Narine argues, expose the globalized operations of contemporary society alongside the more ominous effects of power which is not limited to any one locality (211).

[xl] The story ends on this cliff-hanger, but is continued in an anime spinoff called *Canaan*, which follows the exploits of the titular character alongside Maria and Alphard. This continuation of the story further evinces the need for a flexible narrative account of action across media mix formations. In this case, the franchise is not strictly limited to the novelistic game genre, the textual field extends outwards into a further anime-tized configuration.

Chapter Five: *Persona 5* and Spaces of Encounter

In 2001, the *Toshisaiseitokubetsusochihō* (Act on Special Measures Concerning Urban Renaissance) or the *Toshisaiseihō* (Urban Renaissance Law) was drafted (Ishī 2017: 1). Passed the following year, the law enabled the local government to designate certain areas of Tokyo as Urban Renaissance areas, exempting them from existing pre-existing limitations on the height and density of development ("Urban Development in Tokyo" 2011: 26). The neighborhood around Shibuya Station was designated as one such area in 2005. The planned reconstruction efforts were announced in 2008 with the release of the "Shibuyaekimachiku kiban seibi hōshin" ("Shibuya Station Area Infrastructural Development Plan") and again in 2010 with the approval of the *Shibuyaekimachiku tochi kukakuseiri jigyō* (Shibuya Station Area Block Town Planning Project), and construction began in earnest (Tamura 2013: 196). While this project was ostensibly a government initiative, the reality was that the redevelopment of Shibuya was a collaboration with private companies, in particular Tokyu, and involved private construction on government-owned land ("Urban Development in Tokyo" 2011: 6).

A portion of the Infrastructural Development Plans stands out from the rest. In the second part of the revised 2012 version of the document, the goal of broadcasting or transmitting Shibuya's culture domestically and internationally is outlined (7). While most of the other initiatives outlined in the plan relate to material investments such as construction, maintenance, and disaster preparation, the section on Shibuya's culture stands out as a cultural rather than infrastructural initiative. The plan identifies this culture as *Shibuya-rashisa* or Shibuya-ness, disseminated through local consumption and amounting to a kind of feeling, play-style, and form of production that can be consolidated locally and broadcast internationally (7). While the plans are vague about what this *Shibuya-rashisa* might look like, identifying only broad categories such as fashion and diversity, the assertion that

Shibuya has become a quality that can be strengthened, harnessed, and deployed, points to a fundamental change in the nature of Shibuya. It is a recognition that Shibuya is more than a geographic entity. It is also a cultural force within those boundaries.

This corporate and governmental claim on *Shibuya-ness* has not gone uncontested. Network technologies have also allowed users to harness the affective dimensions of Shibuya and make them perceptible to a community of like-minded users. For example, the website *Dokomade no machi* (*How Far Does the City Go*), builds off of the 2009 work of photographer and author Ōyama Ken who created an aggregate mapping project called "*Dokomade Tokyo*" (*How Far Does Tokyo Go*) to highlight differences between Tokyo's official territorial limits and its affective dimensions as understood by individuals. *Dokomade no machi* extends the project to individual neighborhoods, and users can mark the dimensions of Shibuya and other areas according to which feel sufficiently Shibuya-like. Comments attached to the coordinates explain users' reasons for their selections:

> - *Aoyama janakute, Harajuku janakute, Daikanyama janakute, Shinsenjannakute tokoro*. (It is the place that is not Aoyama, not Harajuku, not Daikanyama, and not Shinsen.)

> - *Sukuranburu—Sentāgai—Tokyu honten—sonosaki shōtō toka Shinsen toiu imēji. Ato NHK mo shibuya.* (Shibuya goes from the Scramble to the Center Gai to the Tokyu Flagship store. After that, areas like Shōtō and Shinsen also correspond to my image of Shibuya. Also, the NHK is Shibuya.)

-*Sundeirukara. Jibun no sundeiru chiiki ni katmatteiru no kana. To kanjita. 'Shibuya' muzukashii*. (Because I live there, I feel like my notion of Shibuya is probably set around the area where I live. 'Shibuya' is difficult.)

(Mitsuchi)

Individual justifications and boundaries differ, but the aggregate space of the map produces Shibuya as central intensity with gradually diminishing and uncertain boundaries. By re-tracing Shibuya's lineal representations and offering new striations predicated on what affectively feels like Shibuya, the aggregated coordinates, overlapping and intensifying in certain areas, suggest Shibuya's spatio-temporal coordinates create a new more mobile topology of Shibuya's city space. Here, first-hand experiences attempt to trace the contours of *Shibuya-rashisa*, exposing its location within different coordinates than those offered by Tokyu.

This contest between individuals and corporate/governmental authorities to define, deploy, and delimit Shibuya has much in common with Michel de Certeau's description of strategies and tactics, as defined in *The Practice of Everyday Life*. De Certeau seeks to reorient the analysis of space from the institutional strategies of corporations and governments, which attempt to circumscribe areas like Shibuya by separating them from their wider environment in order to generate a set of rationalized relations (xix)—economic and political in the case of Shibuya. As this is a primarily spatial procedure, strategies are often expressed in blueprints, maps, or designs like Shibuya's Infrastructural Development Plan. Tactics, on the other hand, belong to crowds and individuals like those that gather and navigate Shibuya, emphasizing a temporality that does not rely on a "visible totality," and instead relies on improvising and personalizing space, thereby subverting its totalizing aims (xix). In the city, de Certeau writes, this plays out in a distinct way, with strategies mobilized

within the city's panoptic, vertical space and everyday tactics constituting a mobile escape from visuality into crowded passages of the city's horizontal space (93).

Moreover, through the street-level navigation of the city's space, the city takes on mythological and poetic qualities (102). Places like Shibuya take on distinct histories, characteristics, and symbolic orders as they are navigated by individuals and crowds–movements. As I explained in the last chapter, crowds frequently elude the normative directionality of spatial rationalizations and operations. What is different about the example of the Shibuya aggregate mapping project is that network technologies are allowing the lateral, mobile experience of Shibuya to be fed into new kinds of representations and regimes of visibility, including those that rely on "delimitation" or "marking boundaries" (116). These not only complicate de Certeau's distinction between the panoptic and the opaque, they would seem to complicate the Lefebvrian methodology employed in this dissertation, with the affective, dreamlike, and symbolic nature of Shibuya's representational space leaking into the realm of representations. Dream-space becomes media-space and offers new possibilities for navigation in the city.

The game best-equipped to help us parse this navigation is the 2016 roleplaying game *Persona 5* developed by Atlus and released for the PlayStation 3 and PlayStation 4 consoles. Like other games in the commercially popular video game series, *Persona 5* situates players in a high school setting in which they must contend with the everyday rigours of student life by day while fighting demons in a secret second world at night. The series is anthological, with each entry telling a different story and featuring different characters, but similar conventions, enemies, and structure of progression bridge the otherwise disparate narrative worlds. Also common to all the entries in the series is the Jungian connotations of the game's second world, tied to the navigation of a spatialized collective unconscious, in which characters confront enemies termed "shadows." The protagonists battle these demon-like

monsters with their weaponized "personas" in the pursuit of discovering a true self. In *Persona 5*, this second world is termed the "Metaverse," and accessing it is a technologically mediated process, pinned to the "MetaNav" app that mysteriously appears on the protagonist's smartphone at the beginning of the game. By selecting the app, the everyday world in which the protagonists live, commute, work, and attend school gives way to a reimagined realm of "palaces" that reveal the delusions of several powerful figures controlling the schools, businesses, and government of Tokyo and Japan. These figures are responsible for a series of crimes and abuses that have ruined the lives of the teenage protagonists, and in order to stop them, the protagonists become a band of masked thieves, staging heists to steal the reified desires[xli] of corrupt officials. Throughout the course of the game, the band of teenage thieves also explore a labyrinthine series of tunnels buried beneath Shibuya Station, which ultimately reveal the game's final secret: the source of power for the game's antagonists was actually the collective desire of Tokyo's inhabitants, pinned to the need to be led and controlled.

Shibuya here is a hybridized and algorithmically mediated space that creates opportunities for perception, movement, and gathering that are not possible otherwise. This mediated space is pointing the way to a new kind of spatiality that is structurally similar to architectonic coordinates of what Lefebvre terms "absolute space," a kind of natural and divine space that precedes the rationalized, metricized, and systemized space of abstraction. According to Lefebvre, absolute space is space as experienced cohesively through an embodied reality that enfolds representational elements into the movements of daily life (Lefebvre 1974: 235). Lefebvre goes on to provide a general account of the symbolic connotations of this absolute space:

> Directions here have symbolic force: left and right, of course- but above all high and low. I spoke earlier of three levels: surface, heights, depths - or, in other words, the

> earth, as worked and ruled by humanity; the peaks, the heavens; and abysses or gaping holes. Altitude and verticality are often invested with a special significance, and sometimes even with an absolute one (knowledge, authority, duty), but such meanings vary from one society or 'culture' to the next. By and large, however, horizontal space symbolizes submission, vertical space power, and subterranean space death. (236)

In contrast with abstract space, which needs to fix itself to a specific place in order to give an account of it within a generalized system, absolute space is "no place because it embodies all places" (236). As Lefebvre suggests, capitalism needs to rationalize the symbolic nature of absolute space into a set of formal representations and signs, thereby allowing it to sit quite easily within the more relativistic dimensions of modernity (231). For Lefebvre, absolute space provides a way around the impasse of spatial abstraction and the nihilism that such void-like space would imply. While this space was once spiritual, Lefebvre sees within it the potential for a return to a recognition of space as a social production, as implied by the symbolic connotations that remain in place even in the contemporary city and its reliance on abstract space.

Persona 5 finds within the symbolic coordinates of absolute space a perceptual space that makes apparent the power structures exploiting the teenage protagonists, as well as the possibility of actions that allow the characters to challenge this power. It insists on the importance of the symbolic codes of absolute space, not as some affective residue left behind in the more encompassing abstracted space of Shibuya, but as an unconscious topology residing in a Jungian collective unconscious that underpins the abstract space dominated by corporate and governmental authorities. Like Lefebvre's absolute space, *Persona 5* divides spaces of actions into three symbolic categories. The vertical space of power becomes a series of "palaces" ruled over by the game's antagonists. The horizontal space of submission

takes the form of the protagonist's everyday high school life. Finally, the subterranean space of death is imagined through Shibuya's dungeon-like subway system, which the protagonists explore in order to expose and destroy the authoritarian controls dominating their lives. *Persona 5* is insistent that absolute space continues to be operational in abstract space and can serve as a potentially disruptive force–the actual site of action underpinning the abstraction. While the abstract space of Shibuya is necessarily dominated by corporate interests in the twenty-first century, the absolute space of Shibuya remains a site of contention, and as the game's end suggests, a space of encounter.

Yet treating absolute space as a unified field is not sufficient. It is abstraction that teaches us to think of space as a single pervasive plane. To that end, *Persona 5* renders each of the three spaces of its game world according to a different technical apparatus of production: the palaces of the antagonists suggest a projection-mapped appropriation of various institutions, the everyday space of Tokyo is painstakingly rendered to resemble actual parts of Tokyo but within an exaggerated anime-like aesthetic, and the labyrinth underneath Shibuya Station relies on semi-random and algorithmically driven generation methods. Holding these three spaces together is a fourth algorithmic space of menus and databases that sits outside of the coordinates of absolute space but binds them and must be mastered to progress. By insisting on these different mediations of space, the game also suggests the need for multiple navigational techniques. Power, submission, and death need to be approached on their own terms and not through a single mode of normative or nonnormative conduct. Moreover, because this dissertation hinges on the notion that the world exists within movement, the pluralized nature of spatial navigation within the game also comes to suggest the necessity of leading multiple lives within multiple worlds at the same time. While *Persona 5*, like other games in the series, points to the possibility of empowerment through personal and collective transcendence within a Jungian realm of the unconsciousness, it is

ultimately digital media that actualizes the symbolic nature of absolute space and activates it as navigable space.

In this final chapter, I argue that *Persona 5* provides a general model of urban spatial production that helps us think through the changes to Shibuya in the 2010s, where corporate plans seem to fully territorialize the vertical and horizontal space of the city. At the same time, the once subterranean connotations of death, change, and transformation, emerge into perceptible space of everyday Shibuya through a number of new digital spatial technologies, with temporary, intermittent, and not fully localizable coordinates that evade the seemingly fixed dimensions of abstract space. In making this space perceptible and navigable, *Persona 5* points to the possibility of new kinds of gathering and a new kind of mytho-poetical experience of space.

Absolute Shibuya

By the second decade of the twenty-first century, the Urban Renaissance Project had come to dominate the landscape around Shibuya station. The first stage of the renewal was completed in 2012 with the opening of the Shibuya Hikarie, a large commercial skyscraper with retail, entertainment, and commerce facilities. Similar skyscrapers began to open in the years that followed. The reimagined landscape of Shibuya is part of a larger revitalization project and features multiple skyscrapers, several interconnected underground corridors, and external walkways hanging over the open plaza of Hachiko-Mae Square ("Urban Development in Tokyo" 2011: 6). While these plans are ostensibly a collaboration of governmental and corporate authorities, they serve as an intensification of Tokyu's long-held aim to control circulation within the city and of the gradual enclosure of public space via the totalizing operational procedures that are transforming Shibuya into a network configuration that resembles a multi-tiered maze of crisscrossing corridors. It is a move away from Shibuya

as one of many consumptive centres in the city, particularized through its ties to youth culture, fashion, and music, and toward a model of Shibuya that posits it as the central node in the urbanized network of Tokyo.

While the plans published by the Shibuya Ward Urban Development Division were revised multiple times, they are all consistently showcase the same general interventions for Shibuya Station and the surrounding areas. The goal of the reconstruction efforts was primarily to alleviate congestion caused by the pedestrians and vehicles crisscrossing through the area around the station, but reconstruction efforts in Shibuya and other parts of Tokyo are also intended to provide more residential space within the city, attract new business to underdeveloped areas, and new pedestrian space ("Urban Development in Tokyo" 2011: 3-6). In short, the collaboration between private business and government authorities is intended to provide a blueprint for guiding the design of the city as a whole, as well as the modular function of neighborhoods like Shibuya within that conception.

The outlined plans for Shibuya begin with an account of urban planning as it relates to multiple sites such as Dogenzaka and Sakuragaoka. These areas are identified collectively as the *Shibuya Chūshin Chiku* (Central Shibuya Station Area) and are targeted by the most immediate construction efforts, such as the Hikarie skyscraper which opened in 2012. Outside of the centre is simply the *Shibuya Shūhen Chiku* (Shibuya Station Area) a more diffuse geographic area that extends out beyond the 109 and Q-front department stores and towards the Bunkamura cultural centre. In turn, this area extends towards the wider boundaries of the *Toshi Saisei Kinkyū Chīkitō* (Urban Renewal Emergency Maintenance Area). As part of the urban planning initiatives, authorities aim to expand the Central Shibuya Station Area outwards, creating new retail and residential construction further abroad from the station and easing the flow of traffic by enlarging the city centre ("Shibuyaekimachiku kiban seibi hōshin" 2012: 3-4).

The expansion of the city centre also entails its verticalization with several of the new proposed construction projects taking the form of massive skyscrapers that are intended to house new businesses, retail stores, and entertainment venues. These include the Hikarie, a set of offices and condos in Sakurgaoka set to open in 2021, and a skyscraper in Dogenzaka designed for shopping and entertainment set to open in 2022 (Hornyak). As part of the overall goal of integration and controlled development, these new structures are not intended to be one off developments but rather a kind of networked community connected by corridors circulating underground and above street level (Tamura 2013: 197).

Perhaps one of the most conspicuous and economically intensive projects that emerged from the Urban Renewal project in Shibuya was the burying of the Tokyu Toyoko line that runs between Yokohama and Shibuya and the opening of the Fukutoshin line, which connected to the Toyoko line's Shibuya terminus in 2013 as far as Wakoshi in Saitama. As part of this project several new underground paths were dug below Shibuya Station, creating a complex web of pathways leading to the Fukutoshin line at the bottom and the Ginza line at the tope (see Fig. 2) In order to traverse this space, commuters must carefully follow signs to ensure that they don't end up lost. In a volume detailing changes to Shibuya Station over the last century entitled *Mayoimayotte Shibuyaeki* (*Getting Lost in Shibuya Station*), architectural scholar Tamura Keisuke suggests that the need to bury the messy transit infrastructure of Shibuya Station ended up creating a cobbled together Frankenstein's monster-like creature underground in order to preserve the clean aesthetic of the proposed reconstruction plans that aim to project the image of Shibuya as the gateway to the city (22-24).

These changes and similar new construction developments within Tokyo have been theorized by a number of urban studies scholars as a local variant of global processes of competition and collaboration between capitalist accumulation and state management. Many of these articles take John Friedmann's 1986 "World City Hypothesis" as a departure.

Friedmann's work theorized large cities such as Tokyo as central nodes in a global system of labour, migration, and capital, one that underscored the ascendency of a globalized space and economy (69). Scholars dealing with the specific case of Tokyo have sought to complicate this model by citing local differences, particularly in the governmental rather than strictly corporate management of urban space (Fujita and Hill 1993: 283-284; Saito 2003: 285), and debates have emerged about whether the movement of capital or local governance has played the dominant role in shaping a cityscape that continued to grow and intensify amidst economic woes. Geographer Paul Waley, for example, argues that the role of capital has frequently been downplayed in accounts of Tokyo's urban development, and that local governance takes a backseat to the industrial policies that have truly shaped Tokyo in the postwar period (1466). On the other hand, an article authored by André Sorensen, Junichiro Okata, and Sayaka Fuji in 2010, takes the stance that Waley himself is ignoring the State-mandated regulations that have allowed for the private investment Waley describes, including measures to allow for a greater intensification of high-rise development (558).Ultimately, whether control of the Urban Renaissance in Tokyo and Shibuya lies primarily in the hands of companies such as Tokyu or municipal authorities, the historical accounts and official documentation addressed throughout this dissertation has shown that corporate and governmental agents are not wholly separable and have collaborated and cooperated throughout twentieth and twenty-first centuries. The combined forces of private and public investment have both aimed to consolidate the force of Shibuya's retail, corporate, and infrastructural investments, channeling movement between their respective spaces[xlii].

Yet, within the corporate and governmental claims of ownership in Shibuya, there is also something like a claim on Shibuya's imaginary space, not only present within its insistence in transmitting Shibuya as a cultural force but also within the reshaping of the landscape itself, and this is where the architectonic dimensions of Lefebvre's absolute space

prove useful. Lefebvrian absolute space allows us to track the symbolic investments of Shibuya's changes, as they play out in the vertical, horizontal, and subterranean space of the city. This helps us think about how the corporate changes to Shibuya retain some of their affective force but only to the degree in which it can be territorialized, branded, and regulated. The potency and embodied experience of the symbolic fades into the background, but its very existence suggest that there is something operational in these symbolic dimensions that can be productively analyzed to examine how corporations like Tokyu leverage social architectonic associations in order to centre their corporate identity within Shibuya and Tokyo.

The verticalization of Shibuya entails not only the construction of new high-rises and skyscrapers but also the displacement of ground-level gathering spaces. Following Japanese sociologist Yoshimi Shunya's formulation of Shibuya as a collective performance, I outlined the three characteristics of Shibuya's youth culture in the introduction: itinerant, group-based, and trendy (322). Of these three elements it is the itinerant nature of Shibuya that is most affected by the shift to verticalization. In Shibuya, wandering had historically been tied to the horizontality of the city, which instantiated the area not in any one particular spot but within the movement around the Hachiko-Mae square and through the surrounding area of boutique clothing and music stores, even extending as far as nearby Yoyogi Park and Harajuku. While department stores such as the 109 and Parco were certainly consumptive centres within this landscape, their offerings were typically limited to fashion and circulation within them was tied to wider patterns of circulation within Shibuya as a whole. The nomadic tendencies of Shibuya's space were bound to the diversity of its retail landscape and the movement between various trendy stores, cafés, and boutiques. This was the space in which people gathered and was the site of mutual spectatorship.

By displacing horizontal movements into increasingly verticalized space, the Shibuya Renaissance Project diffuses some of Shibuya's nomadism. The space of wandering is increasingly guided through interconnected enclosures, and the tendency to wander between enclosures is diminished greatly. Instead, a space like Hikarie offers more sedentary options for gathering on top of its large panoramic rooftop garden. This space of gathering is not ideologically neutral. As the PR documents evince, it is key to establish Shibuya as the central node in Tokyo's urban, national, and global networks. One of the many mocked up photographs used in Tokyu's proposal to the Tokyo governor features a group of individuals lounging atop a Shibuya rooftop garden overlooking the city and even Mt. Fuji (see Fig. 9). While the top-down perspective may imply the gaze of the governor or bureaucrat approving the plans, the landscape in this picture is not meant to belong to any one person. The assemblage of individuals in the picture are imagined as a kind of community, and they are united by a privileged perspective that puts them at the heart of both the city and the nation. The image is an invitation to build both the community and the space that will foster it. Tokyu appears to seek legitimacy from this utopian ideal, aligning their corporate vision with the subjective gaze of Tokyo's citizens, but what is less clear from the focalized perspective is the location of this proposed social space, sitting atop Tokyu's building, enjoined to Tokyu's transit system, built on land owned by Tokyu.

If Shibuya's instances of verticalization were isolated from each other than totalization would likely prove elusive. A building like the Hikarie, though furnished with retail space, corporate offices, a theatre, art studios, and a rooftop garden, would still be limited, but by enclosing horizontal space, the Renaissance Project is able to link verticalized sites into a community of vertical space through connecting corridors. If horizontality suggests submission, as Lefebvre suggests, here it becomes a specific brand of submission to a corporatized community. By looking at the plans for the space itself, the capitalist

motivations of Tokyu become clearer. A map of one of the proposed buildings features a residence equipped with childcare facilities and a church linked to the primary Tokyu office tower and department store via underground passages (see Fig. 10). This construction would see Tokyu playing an increasingly diverse set of roles, profiting not simply from their transit and residential ventures, but also laying claim to retail, restaurants, leisure space, spiritual services, and thanks to the further liberalization of the electricity market in April 2016, the power that runs through these spaces ("Tokyu Group: 2016-2017 Group Guide" 2016: 20).

Moreover, enclosure begins to work itself further underground with the Renaissance Project. This is a move that has led several writers to identify "dungeon-ification" of Shibuya Station (Ishī 2017: 19). This labyrinthine space is an attempt to mitigate the chaotic masses of crowds that characterized Shibuya in the 1990s and early 2000s, channeling the large numbers of people into more manageable underground corridors, but here the Renaissance Project makes a key change to the formulation of absolute space. By turning this dungeon into a series of connecting corridors, it no longer symbolically speaks to the possibility of death or change, as Lefebvre insists. It simply becomes more horizontal space– more layers of connection that aim at securing and regulating flows of pedestrians.

The plans for the Renaissance Project read through the Lefebvrian lens of absolute space provides a glimpse of a kind of symbolic social control that attempts to harness an architectonic impulse that signifies the totalization of Shibuya and the range of possibilities for movement within it. This raises the question of whether de Certeau's mytho-poetical space can even emerge when not only divergent trajectories are foreclosed by enclosure but even the imaginary space of Shibuya has been territorialized by corporate branding. *Persona 5*, however, provides a way around this impasse, by not conceding corporate and governmental claims on the architectonics of Shibuya's absolute space but finding within the navigation of media space the possibility of challenging the power structures that support it.

Persona 5

Persona 5 is not subtle about its opposition to the exercise of corporate and governmental power in Tokyo. In early promotional material for the game, images of school desks shackled to balls and chains featured the text "You are a slave. Want emancipation?" (see Fig. 11). Similarly, the 2019 rerelease of the game opens with an animated sequence of giant versions of the game protagonists gleefully smashing the screens and skyscrapers around Shibuya Station with baseball bats. From the very beginning, *Persona 5* stages a world in which the oppressed youth of the city break free from authoritarian controls and act against them. These non-diegetic depictions, however, are not representative of the more subtle tack the game takes in questioning the multi-tiered power structures that dominate the lives of the game's central group of protagonists. Instead, the game positions the player-character in a world that requires both transgressive acts and the successful navigation of the systems of control in which they are enmeshed. In many ways, the themes it deals with reflect the investments made in Shibuya during the first decade of the twenty-first century. While the other games were still dealing with the legacy of Shibuya as a site of juvenile delinquency, trendy restaurants and stores, and emergent network technologies, the Shibuya of 2016 had become all but dominated by corporate interests who had enacted a massive revitalization project in order to assemble Shibuya into the centre of tourism and commerce in Tokyo. The game's protagonists are stuck dealing with this legacy, and their quest for liberation is an attempt to extricate themselves from similar power structures.

The game is the fifth installment of a series in which teenage protagonists attend high school classes during the day and explore shifting dungeons in the evening. The *Persona* series of video games is a subset of the *Shin Megami Tensei* game series which originated on the Super Famicom in 1992. Both series involve protagonists summoning demons to help them navigate monster-filled dungeons, but the *Persona* games are distinct in both their high

school settings and the recurring theme of teenagers overcoming their anxieties and discovering their true selves. As with *The World Ends with You*, the Persona games also fit into the roleplaying game genre. In fact, the game is more representative of the conventions of the genre. Battles are more static, with player-characters and enemies trading attacks. Once a battle commences, the player is cued to select an action from a menu of options such as attacking, healing, and defending. The game emphasizes strategy over reflex, and by searching out enemy's elemental weaknesses and exploiting them, enemies are overcome, and the player receives experience points that empower them to tackle increasingly powerful enemies. Gradually, players advance through the game and toward a final encounter.

Another key aspect of the *Persona* franchise is the discovery of a second world that is disclosed through locally spread rumours: In the first game the protagonists explore an urban legend surrounding a fortune telling game that allows people to see ghosts. In the second game, the protagonists investigate a figure spreading rumours that change reality[xliii]. *Persona 3* follows a group of characters seeking the truth behind a secret hour of the night in which the vast majority of people are asleep, and in *Persona 4*, a television channel appearing at midnight and featuring images of people shortly before their death. Finally, in *Persona 5*, the events of the game are set in motion by an app that transports users to an unseen world called the Metaverse.

The second worlds of the *Persona* series are based on the Jungian notion of the collective unconscious, inhabited by "shadows" that take the form of mythical monsters and spirits from a range of sources that include folklore, religion, and urban legends from Japan and around the world. The Christian figure of Satan coexists with the Japanese creator deity Izanagi and the Celtic shapeshifter Kelpie. These shadows wander through the second world and can be harnessed and controlled by the main protagonist. This is typically done by engaging the enemies in battle and weakening them sufficiently, or by engaging shadows in

conversation and correctly navigating conversational prompts. By correctly reading the emotional tone of the shadow's dialogue, the player can respond in kind and cue the monster into remembering that it exists only as an archetype in the collective unconscious. It is, therefore, part of the protagonist's inner self, and joins him as an ally. In this way, shadows become personas, part of a psychic army the protagonist is able to call on in battle.

Embedding the roleplaying genre within a world Jungian psychoanalytic concepts that manifest as mythic beings lends the games in the series the overall thrust of Campbell's monomyth from *The Hero with a Thousand Faces*.[xliv]. As Michael Nitsche points out in *Video Game Spaces*, Campbell's monomyth provides a general heuristic device for deciphering the quest structure of video games more generally (61), but the *Persona* series adopts that structure along with Jung's terminology quite plainly[xlv]. Characters are cast into a supernatural world, encounter monstrous beings, realize that these are unconscious components of a larger power, harness it to overcome their shadow self, and return home newly empowered. The player-character then repeats this basic pattern several more times for other members in the party, until they are strong enough to tackle a powerful adversary who has been pulling the strings the whole time. Thomas Lamarre, in his reading of the *Persona 4* animation from *The Anime Ecology* provides an account of how the *Persona* games yoke Jungian analytic tropes to the conventions of the monomyth in the game series:

> [T]here is the Jungian scenario, which entails the spiritual quest or monomyth and self-transformation through an encounter with archetypes or archetypal forces. In effect, it assumes that the encounter with the shadow self in the mirror allows you to confront your negative attributes and to overcome them. It implies a movement of self-transcendence–you travel into the mirror and then come home again to bestow boons on your community. (325)

At first glance, *Persona 5* doesn't differ greatly from this formulation. Early in the game, the protagonist Amamiya Ren (sometimes referred to by his alter-ego Joker)[xlvi] discovers a new icon on his phone, and by selecting it he finds himself immersed in the Metaverse, which he is told is the manifestation of the collective unconscious of Tokyo's residents. Within this space are various "palaces" constructed from the desires of the in-game antagonists. Palaces remain tied to specific locations in the everyday world of the game, but they are transformed into different forms within the Metaverse. For example, the game's first palace is ruled over by the protagonist's high school gym teacher, an authoritarian former Olympian named Suguru Kamoshida, who sexually abuses his female students while physically abusing the male members of the school's volleyball team. The space itself is in the same location as the protagonist's high school, but by clicking on the app on his smartphone, the school comes to resemble a medieval castle ruled over by a kingly Kamoshida, complete with a red cape and a crown. Outside of the Metaverse, Kamoshida is unaware of his shadow self, but characters repeat multiple times that Kamoshida's palace, as well as those of other game antagonists, are a result of their "distorted desires," and it is these desires that enable them to abuse their authority outside of the Metaverse. In order to end the abuses, the protagonists must enter the antagonists'' palaces and seek out the source of their desire. By stealing them, the antagonists suddenly and unconsciously realize the weight of their crimes outside the Metaverse, and without their fantasies of power, confess and turn themselves in to the authorities.

Defeating Kamoshida provides a template for almost all subsequent confrontations. Players begin on the ground floor and sneak around the palace, which is patrolled by shadows. The player can either choose to take a stealthy approach, hiding behind walls, chairs, and other palace objects, or they can choose to confront the shadows directly, entering a turn-based battle in order to gain experience and grow stronger. Gradually, the player

advances in the palace and reaches the source of the antagonist's desire, appearing at first as a wispy cloud of smoke. Having secured a route to the source of the antagonist's desire, the characters make an exit from the Metaverse and alert the individual's conscious self to the threat they now face in the Metaverse. For Kamoshida, and many of the subsequent antagonists, this threat does not make sense, but it is enough to put them on alert unconsciously and solidifies their desire into a physical object that can be stolen. In Kamoshida's case this is a crown. Upon retrieval, the shadow version of the palace's ruler lies in wait, and the characters must engage Kamoshida's shadow self in a final battle. If successful, the protagonists escape as the palace crumbles around them. Upon exiting the Metaverse, the treasure appears as a replica of whatever object the antagonist regarded as the source of their empowerment. Kamoshida's crown is reconfigured as a copy of a gold medal he won in the Olympics. While future palace explorations change this formula slightly, it remains essentially the same throughout its six repetitions. In stealing desire, the protagonists must transform themselves into masked figures patterned off famous literary and historical thieves such as the Japanese outlaw Goemon or the French fictional character Arsène Lupin. Collectively, they call themselves "Phantom Thieves of Hearts" or the "Phantom Thieves" for short.

Through their many heists, the Phantom Thieves themselves become an urban legend: rumoured vigilantes whose exploits are shared by word-of-mouth, internet message boards, and eventually television news. Broadcast throughout Japan, and, as a mid-game trip to Hawaii reveals, around the world, the urban legend of the Phantom Thieves become, at turns, celebrated and reviled. As they grow in prominence, so too do their targets. In the penultimate conflict, the Phantom Thieves infiltrate the palace of a politician who is set to become the Prime Minister of Japan. He has also been aware of the Metaverse and has used it to secretly assassinate political rivals and gain power, but in stopping him, the Phantom

Thieves prove they are capable of tackling power at its highest levels and are seemingly free to return to their daily lives as students and leave the Metaverse behind. While the palace exploration segments of *Persona 5*, resemble a typical RPG in both their monomyth structure and menu-based gameplay, outside of the Metaverse the story is a very different one. In contrast with the rhetoric of liberation and resistance that unites the Phantom Thieves, the player must also control the protagonist in his routine daily life, commuting to school, attending classes, and working part-time jobs. Additionally, Amamiya can spend his free-time socializing, hanging out, or dating the other Phantom Thieves or non-player characters. The game is predicated on living a double life. Amamiya must maintain social connections, earn money at various part-time jobs, and go to school by day while he enacts a series of heists in a secret world by night. The navigation of seemingly mundane everyday space, which takes place over the course of a single school year, is what sets the *Persona* series apart from other games in the roleplaying genre, which tend to focus on more fantasy-like journeys free from the trappings of daily life.

In navigating daily life and the game's palaces, the Phantom Thieves advance toward the end of their journey, but in toppling the prominent politician at the end of the game, the Phantom Thieves are surprised to find that their actions are not celebrated. In fact, their heist has left the populace disillusioned and apathetic. The real antagonist is not any one individual, but the collective desire of authority altogether. This desire, however, is not localized as obviously as those belonging to the game's politicians, criminals, and business executives. In addition to the palaces, which belong to particularly powerful individuals, the Metaverse also features a vast catacomb called Mementos running underneath Shibuya station and extending far underground. In order to reach the game's conclusion, the player must explore this multi-level labyrinth, which represents the collective desires of all of Tokyo's residents. This area is also guarded by shadows, as well as smaller, optional

authority figures whose crimes and misconduct are less significant than those in palaces. This dungeon resembles a distorted version of Tokyo's subway systems, with tracks winding around themselves, leading off to dead ends, and spiraling deeper underground.

While, the purpose of Mementos is initially unknown to the Phantom Thieves, the characters ultimately discover it houses its own treasure. This is termed the "Holy Grail," and it represents humanity's desire to be led. In a final conflict, the Phantom Thieves are confronted by the god-like figure that has been controlling many of the game's events behind the scenes. The figure patterned off the Gnostic creator god announces himself as Yaldabaoth, and it is revealed that he set the events of the game in motion by placing the MetaNav app on the protagonist's phone and teaching the protagonist how to access the personas that he uses in battles. He explains that he has given protagonist the ability to see the true nature of the world in order for him to determine whether or not it should be destroyed. The protagonists' ability to access the Metaverse, and their own personas is revealed to be a direct relationship with a seemingly divine authority who has enabled all the earlier antagonists' claim on power. By tapping into this power, however, the Phantom Thieves are able to topple it.

In defeating Yaldabaoth, the protagonists put an end to humanity's need to be controlled and guided through life, and in doing so, refuses the desire for submission underpinning the teachers, politicians and other authoritarian figures that comprise the games primary antagonists. The protagonist and his allies are able to do this by drawing on the power of spirits originating in mythology, literature, religion, folktales, and urban myths. Human and non-human agents unite to undermine the exercise of power and liberate Shibuya, Tokyo, and the world from internalizing what the game insists are illegitimate desires.

Thomas Lamarre's discussion of *Persona 4* provides a productive starting point for a discussion of how *Persona 5* complicates and develops the series' preoccupation with desire and self-empowerment. In his account of the game and its media-mix, he points to the series insistence on death and the loss of self in order to awaken to the empowering potential of a "true self." Through acts of self-destruction, the protagonists are able to summon their spectral personas and execute more powerful attacks. The trope is repeated throughout the series, perhaps most infamously evoked in *Persona 3* where the characters summon their personas by seemingly shooting themselves in the head. *Persona 5* puts its own spin on this trope, with the costumed vigilantes ripping off their masks and a portion of their face along with it in order to call on powerful archetypes from the collective unconscious. Lamarre touches on the worrying aspects this transformation:

> [S]uch a gesture may be easily simplified, psychologized, or misconstrued. In fact, the scenario may appear downright fascistic—as a desire for submission to totalizing forces in order to take on a share of their authority, or as a path to self-empowerment. (320)

Lamarre suggests that *Persona 4* ultimately complicates the narrative of self-empowerment through its insistence on using media to assemble the polarized tendencies of broadcast media and the relationality it constitutes between the self and others. As Lamarre states, the game is insistent on overcoming distortion—both through unraveling the mystery at the centre of the game and through spiritual transcendence—but it must first stage that distortion through a relation to media that renders the screen of the television both Lacanian mirror-space and Foucauldian heterotopia (323-324). The ostensibly Jungian world of personal empowerment gives way to a more complex media world, in which screens provide points of management for negotiating desire between human and non-human selves and others (343-344).

While Lamarre correctly suggests that what characterizes the media ecology of *Persona* and the larger *Megami Tensei* series is porting, characterized by iterative reworking of games (317), I am less interested in *Persona 5*'s place within a media mix[xlvii] than how its gameic operations stage urban space. Therefore, instead of looking to how porting and portable media assemble the polarizing tendencies of broadcast media, as Lamarre does, I want to look to how the city itself within *Persona* 5 becomes a media space, assembling the polarized tendencies of normativized conduct and transgressive counter-conduct, of submission and power. Therefore, while broadcast media remains an important intervention in the game, particularly with the frequent interruptions of news broadcasts within the diegesis, as well as the uninvited download of the MetaNav app on the protagonists' phones, the key to staging distortion in *Persona 5* is more akin to augmented reality. The protagonist and his allies do not transition between worlds, as the protagonists of *Persona 4* did via the television screens, they map the hidden world onto the institutions of the city in order to reveal and steal the desire that has produced them.

In order to examine how the game's diegesis and play structure provides commentary on the kind of symbolic interactions of desire within Lefebvrian absolute space, as well as the opportunities for navigation this space affords, I want to diverge slightly from the structure of the previous chapters. While my discussion of the world-form in the previous three games covered in this dissertation was relegated to analyzing the game's space holistically, the complexity of and heterogeneity of game space in *Persona 5* calls for a different approach that first analyzes each of the game's spaces on their own terms before pivoting to how they relate to each other. To this end, each of the following four sections analyzes a single portion of the game's space and analyzes how it helps us think about the Urban Renaissance Project in Shibuya and similar developments in contemporary cityscapes. Mapping out these four

spaces also illustrates how the world-form, as described in the previous three chapters can operate as an assemblage.

An Honest Student Life

To reiterate, in mapping out Shibuya and Tokyo, *Persona 5* provides three spaces exemplary of the coordinates of Lefebvre's absolute space, each aligning with the horizontal, vertical, and subterranean spaces of the city. Additionally, the game also features a fourth space that constitutes a kind of liminal space underpinning and connecting the other three. Because *Persona 5* creates each as an actional game space, it allows us to think about Shibuya as a site of engagement with the power structures that shape the city. In analyzing each of these spaces, the game helps us think about how we might re-centre a new kind of socially invested absolute space as an antidote to the kind of spatial abstraction upon which corporate and state power rely. Within the game, this rethinking begins with horizontal space, which is staged within the game world as the space of everyday life for its teenage protagonists.

In attending to the protagonist's social life and self-development, the player-character is able to travel by transit to various Tokyo neighborhoods including Shinjuku, Ginza, and, other areas. While smaller areas appear briefly as flat backgrounds for brief staged interactions, larger areas such as Shibuya can be explored at length on foot, and afford opportunities for shopping, dining, or recreation. What is significant about exploring these destinations is how recognizable these spaces are as recreations of Tokyo. One notable example is Amamiya's home neighborhood of Yongen-jaya. This is the first area of Tokyo that the player is introduced to, and by navigating the avatar to through the neighborhood its resemblance to the actual Sangen-jaya from which it takes its inspiration becomes apparent (see Fig 12).

The significance of the game's visual and spatial fidelity is twofold. Firstly, it differentiates itself from other games in the series, which take place in fictionalized locations like *Persona 4*'s Inaba—a small town that takes its inspiration from an actual hot spring town (Ashcraft 2014) but is largely imaginary. This allows the game to tie the stakes of its diegesis to the actual space of Tokyo, making the collection of authoritarian antagonists recognizable as the kinds of figures presiding over Tokyo outside of the game. Secondly, the game's visual reproduction allows it to stage the conditions of clarity, amidst a range of perceptible "distortions" that are staged in the game's other spaces. In other words, the game must be recognizable as Tokyo, not to create a division between the actual and fictional city but to further implicate the city and its power structures in the game's version of Tokyo. This is emphasized by director Hashino Katsura[xlviii] in an interview with Japanese website 4Gamer, in which he discussed his original plan to make a game that touched on the failures of the 3.11 disaster and its lasting repercussions before deciding to enlarge the scope of his game to include the failures of Japanese institutional power more broadly (Junpoco 2016). The routine space of Tokyo in the game is where the consequences of these failures play out, and situating players in such a space allows the game is able to leverage the familiar structures of the *Persona* franchise to comment on the failures of a specific system of power in Tokyo after in the early twenty-first century.

However, fidelity here should not be equated with photorealism. The visual landscape of the game is predicated on an anime-like aesthetic that is highly stylized and rendered to bridge the discrepancy between the hand-drawn animated cinematic sequences, and the playable portions of the game. Like *Jet Set Radio*, discussed in the second chapter of this dissertation, *Persona*'s world is rendered graphically with a "toon shader" that emphasizes the game's world as an animated one, but unlike the loosely detailed world of Shibuya-cho and the GGs*, Persona 5*'s version of Tokyo uses a proprietary software engine to craft

environments that resemble their out-of-game counterparts right down to particular signs and landmarks (North 2011). It is recognizable as an anime facsimile of Tokyo.

This space evokes Azuma's "gameic realism" as described in *The Birth Gameic Realism*. Parsing the consequences of the gameic meta-narrative structures described in the previous chapter, Azuma finds a new kind of representational logic at play, which itself draws on Ōtsuka's anime-manga realism to posit a style of "*shasei*" (sketching) that tends to exaggerate and characterize rather than aim at a "naturalistic" realism (56). This exaggerated "sketched" reality captures the space of high school life in *Persona 5*, in which mundane routines are situated alongside overly dramatized story arcs about students that are magazine models, corporate heirs, and *shogi* champions. While routine and repetitive, the Tokyo of *Persona 5* must also be capable of nurturing the seeds of teenage rebellion. While Japan Studies scholar Shoko Yoneyama has suggested that the authoritarian power structures of Japanese high school environments is more likely to result in silent alienation than expressed opposition (86), the heightened world of *Persona 5* is able to find the possibility of resistance in the tropes and conventions of anime, and by projecting them onto a space that is recognizable as Tokyo, the game becomes an expression of opposition itself, tying the game space to elements of the game's diegesis and gameplay.

Technically, *Persona 5* does not begin in the space of Amamiya's high school life. It opens in media res towards the end of the game, when Amamiya and the Phantom Thieves are at the height of their power. They are in the midst of one of their heists, and this opening serves as a tutorial, allowing players to familiarize themselves with the game's combat systems and controls. However, this introduction ends with Amamiya's capture by police and leads to an interrogation that forms the game's framing device, which the game returns to repeatedly whenever the player-character does something significant such as meeting a new primary or secondary character. The framing device eventually gives way to the

chronological beginning of the game's story, and this is where the player is introduced to the conventions of student life that serve to structure the day to day events of the game.

Amamiya is a falsely accused juvenile delinquent that has been given one more chance at a prep school named Shujin Academy in the heart of Tokyo. He has been taken in by a distant relative named Sojiro who owns a café in Yongen-jaya, a facsimile of Tokyo's Sangen-jaya[xlix]. Sojiro, like many of the adults that Amamiya meets is distrusting of his delinquent past but gives him a room to sleep in above his coffee shop. The following morning, Amamiya begins attending high school and the player must begin attending to his daily routines, attending school, forming new social connections, working part-time jobs, and pursuing hobbies and extracurricular activities. As with previous installments in the *Persona* series, the game takes place over the course of a single school year, and so the player falls into the rhythms of Japanese school life, attending to activities and errands that change with the weeks, months, and seasons. This is a space of almost unending repetition, routines that circle back on themselves and must be performed countless times within the game, such as choosing to spend a block of the day studying for exams that recur throughout the game or visiting the neighborhood bath to tend to hygiene.

Amamiya's high school life is punctuated by repetitions but even in this portion of the game, there are hints that his life is being crowded out by the linear algorithms of self-development. Amamiya has five basic social statistics: charm, proficiency, guts, knowledge, and kindness. By spending his time reading books, going to the movies, or working part-time jobs, the protagonist can increase these statistics, which gives him new social opportunities. Certain characters will refuse to socialize if, say, the player is not sufficiently kind. If they watch enough dramatic movies and read the right books, however, their kindness metre will increase, and they be able to advance that particular relationship. Relationships are also charted with metrics, ranging from 1 at the lowest to 10 at the highest, and each outing is an

opportunity to raise the social connection to the next level. The repetitions of daily life are channeled through the developmental routines of self-improvement, providing the means by which a player meets the central objective pinned to top right corner of the screen from the beginning of the game: “Live an honest student life.”

Living an honest life, however, is not simple for Amamiya. As an accused delinquent, simply attending to his self-development alone is insufficient to meet the goal of even a normative existence. It is within this routine space that the players encounter the conflicts that will shape the game’s battle. Within the halls of Shujin Academy, Amamiya first hears rumors of Kamoshida’s abuses, and when he and his friends challenge the coach, they are immediately threatened with expulsion. They are at an impasse, and as Amamiya’s first ally Akechi repeatedly affirms, they are helpless to challenge Kamoshida because they are perceived as misfits and Kamoshida is supported by the faculty and parents who admire his former athletic success. At this point, the game points to its recreation of Tokyo as a Lefebvrian horizontal space, not simply because it is a space of everyday repetitions enacted across the lateral space of the city, but because this space is being overwhelmed by linear procedures and authoritarian figures. Counteractions are not even imaginable in this space, let alone effective, and another kind of space is needed to progress.

Take Your Heart[l]

Through the various institutions that the protagonists are called on to challenge over the course of *Persona 5*, the game provides a picture of how power functions in Tokyo. It does this by making visible a second world in which power is laid bare. This is the vertical space of the Metaverse, where it becomes clear what kind of power is dominating the horizontal space of the teenage protagonists. Figures like Kamoshida loom large over this space and preside over it as monarchs, tyrants, and other sovereign figures. The game provides a picture of power that is comprised of teachers, politicians, CEOs, and mobsters

alike. What emerges is a system of power that is equated to ownership over the space of the city through the manipulation of private and public institutions. As students, the Phantom Thieves are all subordinate to this power. While they can't attack power head on within the routine space of the city, they can tackle it vertically by learning to navigate differently. The augmented reality of the MetaNav allows them to expose the desires of these figures directly, exposing the distortions that are crowding out the horizontal space of the city.

To understand the conditions that allow the protagonists of *Persona 5* to act, it is important to briefly give an account of augmented reality (AR), as the second world the players enter resembles it in several ways. *The Augmented Reality Handbook* appropriately opens up with a technical definition of the process: "We define Augmented Reality (AR) as a real-time direct or indirect view of a physical real-world environment that has been enhanced/*augmented* by adding virtual computer-generated information to it" (Furht 2011: 3). This definition encompasses a range of mediations that date back as far the 1960s and early attempts to extend the perceptual field of cinema to senses such as smell (4), but the term is more commonly linked with the with the ubiquity of the smartphone and the emergence of wearable technology such as Google Glasses. With the increased mobility of digital perceptual technologies, the opportunity to augment perceptual information with digitally rendered images became more commonplace. Most notably, the app *Pokémon Go*, released in 2016, allowed users to perceive and capture rendered images of Nintendo's animated monsters on the surface of their phone, discovering them via the phone's camera in different corners of their lived environments. These technologies are typically contrasted with virtual reality, which seeks to fully dominate sensory experience (3). Perceptually, the technology is additive rather than displacive, and augmented reality aims to produce experiences of space where digital images are made perceivable in the concrete world. This arguably constitutes a new hybridized space entirely, rendering the difference between

virtual reality (which also relies on an embodied experience outside of the digital world) and augmented reality one of degree rather than kind. However, in the case of *Persona 5*, it is important that digital reality and daily life constitute two separate but entwined realities. The palace worlds are not authentic. They are misappropriations of the "real" world of daily life. For this reason, augmented reality is better equipped to help us think about this disjunctive.

Persona 5 never explicitly mentions augmented reality, but it is clear the protagonists' MetaNav app functions in a similar way. While the immersive qualities of the space, moved from the surface of the phone to the actual corridors of institutions like schools and courthouses might encourage us to think of virtual reality as a more relevant process, the repeated insistence of actual world within the game palaces, reminds the player that the Metaverse, like augmented reality, is being generated on top of the preexisting world. This becomes particularly evident near the palace safe rooms, which allow the player to save their data in order to exit the game and resume playing at a later time. In these rooms, the light flickers, and the palace walls give way to the appearance of a more mundane room before flickering back to their original state. For example, in the safe rooms of Kamoshida's palace, the room momentarily gives way to a classroom, revealing the unconscious imaginings of Kamoshida sitting inside and on top of the perceptual space of the school. The MetaNav, like augmented reality[li], is generating the virtual world of the metaverse in real-time and on top of institutional space.

What the MetaNav reveals in this way is distortion. The characters are reminded by Morgana, a cartoon cat that serves as an ally and guide to the Metaverse, that what they are seeing in the palaces is not the truth, but a projection of "distorted desire". Strengthened by the degree of power the game's antagonists wield, the distortions come to territorialize a large segment of the collective experience, providing an almost paradigmatic example of

Lefebvre's formulation of verticality in absolute space. The palaces all suggest a kind of height, with towers, parapets, and walls that all protect the hidden desires of the antagonists. Inside, these palaces are labyrinths that the Phantom Thieves must learn to navigate as they climb. Institutions become imagined spaces patterned off medieval castles, futuristic factories, and casinos. The character's perceived strength allows them to imagine space as something other than it is.

In the Deleuzian terms of the second chapter, this vertical space along with the horizontal space provide the striated space of the game's world-form. From the horizontal axis, it may appear that the game is predicated on cyclical rhythms of self-care and socialization, but the MetaNav makes this perceptible as a quotient of striated space. Empowerment in the palaces is linear and vertical. In contrast with the looping repetitions of student life, the Phantom Thieves get stronger as they engage with enemies and scale the vertical palaces, and the repetitions of daily life feed into this. As Amamiya raises his social connection with other characters, they are able to dispense special advantages that lead to further empowerment in battle. The most important of these connections are those between Amamiya and the other Phantom Thieves, as boosting connections will enable new attacks. However, non-player characters also provide advantages, such as a doctor who can dispense increasingly powerful medicine as she becomes closer to the protagonist[lii]. In other words, the routines of high school life feed directly into the navigation of the Metaverse.

However, the compatibility of the game's vertical and horizontal spaces allows the protagonists new navigational opportunities. *Persona 5*'s vertical space, like that of *Jet Set Radio*, can be traversed smoothly. The Phantom Thieves slip through the corridors of the palaces unnoticed, scale walls, and use grappling hooks to swing across rooms. Instead of pirates and vandals, they are cast as master thieves, but they are similarly nomadic in their resistance to normative movement and their ability to slip between Tokyo and the metaverse.

As long as the players are willing to connect themselves to the distortion, it becomes legible and subsequently navigable. Moreover, it is within the metaverse that the routine investments of daily life are valorized and begin to pay off. By tending to oneself and building one's social connections day by day, they become a better group of thieves and more successful nomads.

This returns us to the problem that Lamarre identified in his discussion of the more fascistic connotations of empowerment in the *Persona* series. Is self-cultivation and self-discovery merely a means of participating and succeeding at cultivating influence, and competency in an uneven socio-economic system? Are the AR-like heists within the metaverse simply an illusion that masks a more straightforward accumulation of excess power? Ultimately, the game answers these questions in a third space buried beneath Shibuya Station.

Steal the Public's Heart

Trapped between the repetitive loops of Tokyo's horizontal space, and the linear progression of the Metaverse's, the player-character's position within a striated dialectic of the vertical and horizontal seems to preclude escape. Moreover, conflict within the game is only capable of tackling instances of illegitimate power and not the conditions that enable that power in the first place. The game resolves this impasse by introducing a third space in the dungeon-like Mementos running below Shibuya Station. The Metaverse, it turns out, not only raises up to the peaks of various palaces, it also descends beneath the ground in a labyrinthine dungeon. It is here, that the characters tunnel downward through 66 floors of twisting subway tracks, and it is this realm that the relationship between power and submission is ultimately challenged.

Mementos is opened to the player gradually throughout the game, only affording a few floors of exploration before the Phantom Thieves encounter a door that is barred until one of the game's principal antagonists is overcome. The players continue to descend downwards as the game progresses, unaware of what lies at the bottom. After defeating the plot by the game's would-be Prime Minister to seize power, they finally gain access to the lower levels of Mementos, discovering that it is one final palace to explore. Unlike the previous palaces, which each belong to a single powerful individual, this final palace is a collective one. It takes the form of an immense prison confining versions of all of Tokyo's shadow selves. Upon locating the final treasure located at the bottom of the prison, the Phantom Thieves discover that this object itself is an adversary. The treasure takes the form of a golden chalice named after the Holy Grail. Any attempt to damage the object is thwarted by the collective will of the palace/prison's inmates who heal it by sacrificing themselves. The Phantom Thieves are helpless against this power and are ejected from Mementos.

In Mementos, as in the game's vertical and horizontal space, a different relationship with power calls for a different form of spatial mediation. In fact, Mementos takes this one step further, relying on different spatial rendering processes entirely. While the palaces of *Persona 5* have much in common with the dungeons of earlier *Persona* games, they differ in the technique used to create its space. Earlier games in the series featured dungeons that were procedurally rendered. This means that rather than being generated manually by a designer, they were programmed to generate automatically in response to player movements. Procedural rendering is a general term in computing that refers to the generation of information, in this case game space, according to algorithmic principles. Designers might craft an overall aesthetic or pattern, but the game's software determines the exact form of rendered objects (Ebert 2003: 1). In most of the *Persona* games, the player-character is positioned in a hallway that trails off into the darkness, and as they move into depth, the

hallway will begin to curve and change unpredictably, occasionally revealing monsters, treasures, or exits to other floors. Once the floor of a dungeon has been fully explored, the dimensions of the floor will remain static, but every journey through that space will differ in seemingly random ways. While the algorithm has to work within specific limits—for example, the exit to each floor must be revealed after a certain amount of exploration—the space does not have a fixed topography prior to player movement. While the palaces of *Persona 5* developers diverged from this rendering method, opting for the more elaborate possibilities of manual design, Mementos retains the procedural nature of previous *Persona* games.

The importance of the procedural nature of *Mementos* is linked to the collective need to be led, which awaits the Phantom Thieves on the bottom-most level of the dungeon. To get there, they need to move through numerous labyrinthine floors that emerge with the player's movement, constantly receding whenever a limit is discovered. The procedural nature of this space generates the world around the movements of the player-character, resulting in a kind of trial-and-error process of hitting up against multiple dead ends before the correct path is discovered. This form of spatial rendering brings us back to the notion of active and passive forms of modulation, as described in the third chapter. The subterranean space of mementos presents a kind of algorithmic (and passive) modulation of the player's movements, where space is formed around their actions in such a flexible matter, that it procedurally encloses their movements at every turn. They appear to be choosing their movements but are being guided by a set of predetermined procedures. Yet, within these enclosures are the alter-egos and hidden desires of Tokyo's populace, and it is within this space that encounters with character's "true" selves are possible. Through these encounters, something like active modulation becomes possible: a confrontation with the other citizens of the city and a negotiation of their collective desire for power. This is what Mementos ultimately reveals, a

space of meeting that has been foreclosed by the striated nature of the game's palaces and daily high school life, which channel repetitions and smooth movements alike into linear enclosures and procedures. True to Lefebvre's formulation, it is movement through this subterranean space that ultimately signals the possibility of death for the Phantom Thieves.

After failing to destroy the grail that embodies the city's collective desire, the Phantom Thieves are ejected from Mementos, and Shibuya begins to merge with the Metaverse. As the game's two worlds become one, linked by the collective denial of change, Tokyo's populace no longer believes in the Phantom Thieves. One by one they become invisible and disappear from existence. The Phantom Thieves have learned to navigate the symbolic dimensions of Tokyo, but instead of absolute space, they discover more abstraction that is itself sustained by the social investments and collective desire of Tokyo's inhabitants. Once that has been made clear, there is no more room for picaresque fantasies or double lives.

The Wings of Rebellion[liii]

In order to resolve the diegesis of *Persona 5*, the game introduces a fourth space that does not fit in as neatly with the triadic symbolic dimensions of Lefebvre's absolute space but provides the connective tissue that allows Amamiya to act across the game world. This is the liminal realm called the Velvet Room, which is a mainstay of the *Persona* series. While the room appears throughout each of the games in the series, it appears slightly differently each time. It first appears to Amamiya in a dream, taking the form of a prison cell, where the protagonist is informed that he will be rehabilitated. The Velvet Room itself is navigated solely by selecting actions from a menu. These actions mostly relate to creating personas to use in battle, and the player can experiment by fusing allied persona into new, more powerful entities. Amamiya enters this space either in dreams at pivotal moments in the game's

diegesis or by locating purple, spectral doors located in Shibuya or at the start of the world's palaces. Throughout the game, the player will likely visit this place whenever they need more powerful personas to defeat an enemy. In doing so, they must consider a persona's various strengths and weaknesses, how those will carry over to the new fused persona, and how much power a given combination will afford. In other words, this space is one in which players managed the world-form's algorithms.

The Velvet Room is also where the protagonist receives guidance about their overall journey from the proprietor of the Velvet Room, who is named Igor. With a long pointy nose and bulging eyes, Igor resembles his namesake in *Young Frankenstein* or even a *tengu* from Japanese folklore. Like the Velvet Room, he is one of the only constants the *Persona* series. Igor claims to be a servant of Philemon, a biblical figure and a spirit guide in Jung's *Memories, Dreams, Reflections*. As both his introduction and name would suggest, Igor's primary function is to serve as an assistant and guide to the player, helping them to tap into their hidden potential and confront their true selves. Across the *Persona* series, Igor typically only manifests himself to the central protagonist and provides insights into the game's events at key moments. Despite his gothic appearance and horror-movie cadence, he is a largely benign figure in most of the *Persona* games, but this is not the case in *Persona 5*.

In the game's final twist, the Igor that players have conversed with throughout the game is revealed to have imprisoned the real Igor, and it is further revealed that the imposter was actually a manifestation of the god-like Yaldabaoth the whole time. In other words, the figure that has been guiding the player on their quest to steal and appropriate the desire of authority figures throughout the game is himself another example of false authority. Despite, claiming to guide the protagonists towards rehabilitation, Yaldabaoth has simply been driving the protagonists toward his own goals. In this way, the game implicates its own operations and algorithms in the structure of power that needs to be cast off. At the same time, learning

how to navigate these operations remains important. Even after Yaldabaoth's departure and the return of the real Igor, players must continue to operate the game's algorithms in order to disperse the system of power on which it relies.

In the previous chapter, I explained how gameic agetopes provide a means of complicating the strictly spatio-temporal nature of Bakhtinian chronotopes, producing patterns of action that do not fit easily into narratological accounts. This is also the case in *Persona 5*, where much of the game's version of Tokyo has been structured around the spatio-temporal conventions of the picaresque genre, and a city navigated by living a double life. This ends when the twin spaces of Tokyo and the Metaverse begins to collapse in on themselves in the endgame and the Phantom Thieves disappear from the world. When Amamiya and the other protagonists awaken, they find themselves in the agetopical space of the Velvet Room, and it is here that the player is faced with a choice. With the city in ruins, the false Igor suggests that he can restore the city if Amamiya agrees to become his servant or Amamiya can reject this offer and face Yaldabaoth directly in combat. Agetopically, the world can now go in two directions. If the player agrees to Yaldabaoth's terms, the world is restored as it was. Amamiya and the Phantom Thieves return to their double lives and continue to correct instances of corruption in a city that continues to be owned by a collection of authoritarian figures operating across public and private institutions, or they can reject the system wholesale. In the latter case, the final battle sees the Phantom Thieves empowered by the renewed belief of Tokyo's residents finally putting an end to Yaldabaoth and implying a new kind of collective ownership over the space of the city that rejects the tacit and unconscious desire for absolute authority.

What is important about the Velvet Room in *Persona 5* is its liminality, sitting both within and outside of the other spaces of the game's world-form. It constitutes the distribution of power in the world and must be properly navigated in order for the Phantom Thieves to be

victorious. As the city's chronotopes begin to collapse on each other, the player-characters must learn to move in an agetopic space, characterized by algorithmic procedures and a fluency with the operational structure of the RPG game genre and the menus and database structures it entails. Proficiency can also lead to complicity with the system of power, a choice the player is explicitly give during the endgame. It is only by reading the game's diegesis against the game's algorithmic operations, and choosing to reject the power it affords, that the game's true conclusion is reached[liv]. *Persona 5* is not explicit about what comes next for Tokyo after the destruction of Yaldabaoth, but the Phantom Thieves decided to pack themselves into a van and leave Tokyo for the open road. No longer a collective of criminals, the game chooses to end with the group of friends setting out to explore the country.

I Am Thou

The takeaway from this mapping out of Persona 5's world-form lies in its insistence that perceiving space differently opens up new opportunities for navigation that play out across a pluralized media-cityscape. This emphasized by Amamiya's fellow Phantom Thief Goro Akechi in the final moments of the game when he states, "If you want to change the world all you have to do is just look at it differently." I have attempted to map out what Lefebvre calls the "symbolic force" of absolute space, not because a naturalized absolute space can be recovered in contemporary Shibuya, but because the game shows us that the city's media space allows us to perceive new mytho-poetical possibilities emerging in Shibuya. As with the example of the Shibuya mapping project detailed at the beginning of this chapter, or even the example of Shibuya's social media-enabled Halloween festivities that opened this dissertation, media technologies are allowing different worlds to be perceptible within the city.

Persona 5 has itself played a part of these digital appropriations. Since the release of *Persona 5,* a number of players in Tokyo have been cataloging the real-world inspirations for

the game's environment, comparing photos of the locations along screenshots of the digital recreation, and discussing their findings online (Ashcraft 2017). Through this mapping process, a new Shibuya emerges that serves as a relay to the fictional one of *Persona 5*. Shibuya becomes a site of digital pilgrimage, drawing in fans from around the world to find the locations that inspired the game. The collective nature of these appropriations admittedly serves as a mild antidote to the more totalizing nature of the Shibuya Renaissance Project, and even falls within its goals to draw more tourists to the area, but it does expose the traces of representational space in the streets of Shibuya. There is a second layer of Shibuya here that is not visible to the uninitiated put provides a digital space of gathering for fans of the game when connected to the internet.

As with the countercultural practices, spontaneous events, digital gatherings, and festivals detailed throughout this dissertation, the exploration of fictional space in the actual corridors of Shibuya entails new ways of perceiving, imagining, and conceiving of space that constitute world-like experiences in the city. The local specificity of these experiences provides alternatives to the totalizing nature of globalized network space, which can be traced back to Lefebvre's notion of spatial abstraction and its homogenizing, exchange-based processes. What *Persona 5* shows us is that these worlds can also be spaces of encounter, in which claims of spatial ownership can be reconsidered and re-evaluated.

While Shibuya may continue to be overly rationalized, surveilled, and policed, by what de Certeau calls the "strategies of instituted powers" (23), different forms of reading and navigating space constitute tactics for turning the city into a place of encounter and meeting. Ultimately, these kinds of tactics constitute the innovation, improvisation, cooperation, and occasionally transgressive movements that continue to provide the qualitative and affective force of Shibuya. While corporate and state players seek ownership

over this impulse, *Shibuya-rashisa* like the gameic worlds analyzed within this dissertation cannot be produced by the processes of digital and global networks alone: it emerges at the points of connection inherent within those networks when a world-form is perceived and navigated in ways unintended by those that claim ownership over it.

[xli] As *Persona 5* is predicated on Jungian tropes, discussion of desire in this chapter relates primarily to the game's take on Jungian desire. Jung himself was ambiguous about the exact nature of libidinal desire. While he retained Freud's insistence that it was composed of a kind of energy, he famously diverged from Freud's theory of libido as purely sexual and Oedipal instinct (Jung 1961: 563-564), instead finding in the libido a kind of directionality that evades analysis: "Libido can never be apprehended except in a definite form; that is to say, it is identical with fantasy-images" (Jung 1997: 63). *Persona 5* stages this directional desire against the conditions of mediated clarity that make the fantasy-images visible, clear, or distorted.

[xlii] The corporate attempt to harness Shibuya's cultural production can also be regarded as part of this consolidation. As urban scholar Jiewon Song argues local needs to capture, intensify, and transmit difference, as evidenced by something like *Shibuya-rashisa*, arises as part of a more generic process of projecting "authenticity" to create a distinct and "improved urban identity" that vies for attention with other cities in a global economy (312).

[xliii] The second Persona game was actually released in two installments. Confusingly, the first of the two installments cited here and entitled *Innocent Sin* was not localized into English for several years.

[xliv] Joseph Campbell's theory of the "monomyth" or hero's journey is itself embedded in Jungian analysis and describes the basic pattern of "separation-initiation-return" that he argues structures adventure stories: "A hero ventures forth from the world of common day into a region of supernatural wonder: fabulous forces are there encountered, and a decisive adventure is won: the hero comes back from this mysterious adventure with the power to bestow boon on his fellow man" (30). Campbell goes on to complicate this formulation through analyses of different genres, but it provides a model that games like the Persona series consciously emulate, and one that game theorists and journalists frequently tout (Ettleman 2015; Dunniway 2000)

[xlv] This is overt throughout the series but most evident int the PS Vita iteration of *Persona 4* entitled *Persona 4: The Golden*. The game features optional information sessions that take the form of supplementary classes led by a visiting teacher named Mr. Edogawa. The subject of Edogawa's lecture is an in-depth analysis of the Jungian psychology that underpins the series.

[xlvi] *Persona 5* follows a popular RPG convention that allows the player to name the protagonist. Similarly, the character is mostly silent, allowing the player to craft his personality through dialogue choices. As with other games in the series, this gameic convention proved a stumbling block when adapting the game into an animated series. The narrative conventions of film and television demand named characters with recognizable personalities. To simplify my account of the game, I follow the lead of the anime adaptation, and other instances of the game's media mix, and refer to the protagonist as Amamiya Ren rather than his Metaverse identity Joker, which he adopts later in the game.

[xlvii] *Persona 5*, however, does have an extensive media mix of its own including anime and manga adaptations, and merchandise. Characters also appear in other games, occasionally interacting with the characters from earlier games in the franchise.

[xlviii] Hashino is known primarily for his directorial work on the *Persona* series and a few other Atlus titles such as the relationship simulator and puzzle game *Catherine*.

[xlix] This is the only neighborhood in the game that doesn't retain the name of its real-world inspiration. The *san* (三) refers to the number 3, becoming *yon* (四) or four in the world of *Persona 5*, and affecting a slight dislocation, similar to that of *Jet Set Radio* discussed in the second chapter. However, the degree of similarity between the game's Yongen-Jaya and Sangen-jaya, means the effect is less significant. Anyone familiar with the latter would recognize the layout and landmarks of the former.

[l] This and the following section title are all quotes from the game and objectives that the player-character must undertake.

[li] While the augmented reality experience of the Metaverse is a site of potential empowerment and free movement for the Phantom Thieves, Tara Fickle in her text *The Race Card: From Gaming Technologies to Model Minorities*, explains that Augmented Reality games such as *Pokémon GO* have historically been less equitable, embedding "reality" in a cartographic logic that obscures one's embodied perspective and relational (and frequently racialized) positionality (173).

[lii] Additionally, social connections also unlock new diegetic segments. These segments are composed primarily of text, and the player is called on to make the occasional conversational choice by selecting from one of two or three options in a manner similar to that of *428: Shibuya Scramble*. The consequences of these choices are not significant to the overall plot, but they do reshape interactions and also cast further light on the personalities and motivations of particular characters. These interactions can also be romantic adding otherwise absent love stories, though the heteronormative nature of the game limits such interactions to female characters.

[liii] This and the following section title are quotes from *Persona 5*.

[liv] In this case, it is important to note that I am only talking about the original 2016 release of the game and not the 2019 re-release *Person 5 Royal,* which features several additional hours of gameplay and story, including a separate ending in which Shujin Academy's school therapist Takuto Maruki attempts to use the Metaverse to craft an ideal world for Tokyo's populace by giving them exactly what they desire. Despite Maruki's good intentions, his claim of ownership over the metaverse must also be challenged and overcome by the Phantom Thieves.

Conclusion

Throughout this dissertation, I have not directly engaged with the one body of writing in which the relations between games and cities have been frequently addressed. This is the concept of "gamification," and it is the notion that games are coming to inform the space of daily life through smart-phone apps, wearable technology, and other digital mediations that typically metricize human actions and turn them into competitive or point-based activities. Gamification has been a popular topic for scholars and journalists alike in the early twenty-first century (Huotari and Hamari 2012), and the adding of game elements such as point-based incentives for performing otherwise mundane tasks has been detailed in the use of navigation software (Teodorescu 2018), education (Bell 2018), and health management (Maturo and Moretti 2018). In particular, media scholar Patrick Jagoda has written extensively about the topic, identifying gamification "not merely as a generalizable game-design strategy that can be applied to areas such as business or education but also as a form that economic, social, and cultural life increasingly takes in the present" (116).

While I have not approached gamification directly in my dissertation, the concept has been in the background of many of my discussions about how gameic processes are claiming the spaces of cities. However, rather than looking primarily at how game processes invade the world, I have also been attempting to analyze how city spaces inform game worlds. In this sense, I have aimed to provide both a complement and counterpoint to gamification. On the one hand, my project has examined how the corridors of streets, the assemblage of screens that exist within them, and the transit hubs that connect them, are themselves becoming game-like in nature. On the other, I have analyzed how urban spaces become legible within video games. Together, these two perspectives cast light on world-like formations in which perceptual, conceptual, and experiential differences present opportunities for appropriation, divergence, and reconfiguration. Moreover, the reading and navigation of

these spaces is also configuring a kind of subject capable of acting within it. In this sense, we might begin to talk about the relation between game spaces and city spaces not only as an adding of game-like processes to physical environments but as a transformation in the political landscape of the city.

Considering the changes identified within this dissertation as part of a transformation of the city's political landscape brings us back to the problem of subjective positionality with which I began this dissertation. Who are the people that act within this space? In the introduction, I stated that this dissertation would not offer a firm description of the kind of subject emerging out of the gameic city, opting to instead account for the spatial channels in which they are beginning to take form. However, in this conclusion, I would like to revisit the question of subjectivity in order to assemble the preceding research and parse what kind of individuals the gameic space of the city is producing. These are not necessarily the subjects playing the games themselves. Rather, they are the subjects that belong to what I call the world-forms of Shibuya. These subjects are capable of recouping autonomy and agency in a space where they are often depicted primarily as passive victims and pathologized offenders.

In the first chapter, I gave an account of Shibuya's history. By tracking its history as a gateway between interior and exterior and a consumptive centre in its own right, I concluded this history by suggesting that Shibuya provides not only a paradigmatic example of Castells' network space but also serves as a locus for Tokyo's youth culture in late 1980s and 1990s. This helped centre my research on youth culture at the turn of the millennium and consider how teenagers and young adults adapted and adopted to the techno-social and economic changes that were reshaping Shibuya into a commercial, tourist, and transit hub in the 21st century.

In the second chapter, I began to consider Shibuya's youthful subcultures more concretely. In contrast to the accounts of Japanese subcultural theorists such as Anne

McKnight, who suggests that Japanese subcultures often lack the directly oppositional tactics of other national subcultures such as the British punk movement in the 1980s (125), I found a bifurcated trajectory for Shibuya's 1990s subculture that led, on the one hand, to legitimization and absorption into Shibuya's corporate-sanctioned aesthetic and towards transgressive and illegal graffiti vandalism on the other. Through an analysis of the 2000 Sega Dreamcast game *Jet Set Radio*, I argued that new aesthetic worlds emerge in acts of transgression, and they are ones that appropriate the striated commercial channels of network space itself. In this chapter, it became clear that the kind of subjects that my research points to are not just any youth, but those capable of navigating Shibuya's space in ways that do not always align with dominant flows of movement and the semiotic measures that regulate them.

The conditions of subjectivity in spaces like Shibuya became even clearer in my third chapter, in which I analyzed the 2008 Nintendo DS game *The World Ends with You*. In looking at the history of Shibuya's screen-field, I found a model of subjectivity that does not only passively absorb and repeat incoming flows of information but also challenges them by embedding their bodily rhythms within the modulatory processes that constitute action within digital and algorithmic space. In contrast with the primarily passive models of modulation suggested by writers such as Deleuze, Galloway, and even Lefebvre himself, my analysis pointed to the possibility of a more actional form of modulation. The subjects capable of enacting it, like artists and musicians, are also capable of engaging with digital technologies without being delimited to prescribed algorithmic enclosures.

In the fourth chapter, I shifted my focus from Shibuya's youth culture directly, and considered how spatial structures such as signs and passages are assembled to forestall crisis and standardize the flows of movement within the city. I analyzed the 2008 Wii game *428: Shibuya Scramble* to explore how space is narrativized. By reading the game through

Bakhtinian chronotopic analysis, I found that digital games evince a new kind of narrative tension between the game's time-space (read chronotopically) and its action-space (which I read with a concept I identify as the agetope). Within a world-form, chronotopes continue to guide many of the typical narrative components (such as text or cut-scenes in a video game), but agetopes fall to the player and take the form of patterns of movement capable of shaping and guiding flows of movement. Reading the city chrono-agetopically in this manner, I identified attempts to secure the space of Shibuya through a set of procedures aimed at regulating anonymous and undifferentiated flows of bodies. In contrast, *428: Shibuya Scramble* shows that city can also lend itself to alternative chrono-agetopes, where the city becomes a space of encounter, and de-anonymized cooperation becomes possible. This too points to the conditions of potential subjects, ones capable of finding opportunities for organization and collaboration in the otherwise abstracted space of the city.

In the final chapter, I concluded my gameic analysis of Shibuya by examining the game *Persona 5*. Within its story of teenage thieves navigating the digital "Metaverse," I found a four-fold spatial assemblage that fragments the game world along with the spatial rendering processes upon which it relies. Within the game, the chief conflict over the future of city is playing out not primarily within its everyday space, where powerful authority figures dominate, but within a symbolic and digital space patterned off reality-augmenting technologies. If the subjects with which my project is implicitly concerned are ones capable of finding opportunities for gathering and cooperation, this final chapter suggested that they do so within the perceptual and navigational regimes allowed by digital and networked technologies. They do not exist outside of the global network formations. Instead, they instantiate new worlds within them.

In sum, through the preceding gameic exploration of Shibuya a navigational trajectory has emerged that begins to hint at the kind of subjects capable of instantiating alternative

spaces within that of globalized network formations. They are vandals, activists, partiers, and artists. They act across digital and analog spaces alike, blurring the line between the two so as to make them all but indistinguishable. They act transgressively or live double lives: navigating normativized spaces of labour and education by day while challenging those same social norms by night. They are often blamed in the mass media for the precarious social positions they occupy within the city, but in moving through its space, they suggest a new political reality where they are actional subjects capable of reshaping not just the city but the abstracted space that underpins it.

There is something excessive about these subjects that is not fully contained by attempts to regulate and monitor the city. As I stated at the beginning of this dissertation, Shibuya's youth resist easy categorization because they belong to a world-form that both obscures them and makes them legible. The political landscape of the world-form is not a simple oppositional one. Shibuya's youth, like Shibuya itself, sit at the intersection of local and global flows of commerce and power, of digital and analog actions, and of conformity and resistance. It is by navigating the world-form in which these oppositions are held in tension that new relationalities come to the fore and new kinds of space become possible.

It is not yet clear what trajectory these spaces will take. Video games themselves are changing, moving away from discrete console games like the four discussed in this thesis, as they are superseded in popularity by the ubiquity of mobile games and their endlessly iterative and pay-based functions, which are not easily delimited to a single commodity-form[lv]. Similarly, the pace of technological change in Shibuya, the global pandemic beginning in 2020, and infrastructural projects related to the 2021 Olympic games are all reshaping Shibuya and social relationships within it in ways that are not yet fully evident. Nevertheless, the processes that I have attempted to track in this dissertation—the player actions and digital operations which characterize the experience of digital space as a game-

world—will likely only intensify in the space of cities like Shibuya. In this sense, the analysis of gameic world-forms, such as the one undertaken in this dissertation provides an indispensable tool for studying the social, technological, and cultural changes already underway in contemporary city spaces.

[lv] I am thinking here of games such as the massively successful and cross-platform release *Genshin Imapct,* which like other free-to-play mobile and console games have generated hundreds of millions and in some cases billions of dollars in revenue (Deschamps 2021). These games lack a conventional ending and rely on different tiers of paid content, thereby making the kind of textual analysis, which I have undertaken in this dissertation extremely difficult. Such games are in a perpetual state of development and change constantly, making it difficult to delimit them to a single platform, set of platforms, or characteristic player experience.

Figures

Figure 1 - Image of *Super Mario Bros*. From "Super Mario Bros." *Nintendo*. 2020. mario.nintendo.com/history. Accessed 25 Nov. 2020.

Figure 2 – Screenshot of *Syphon Filter* released in 1999 for the PlayStation 1. From Thorpe, Nick. "Syphon Filter." *Retro Gamer*. 2015. retrogamer.net/retro_games90/syphon-filter. Accessed on 25 Nov. 2020.

Figure 3 – Screenshot of *Jet Set Radio.* From "Jet Set Radio." Steam. 2020. store.steampowered.com/app/205950/Jet_Set_Radio. Accessed on 25 Nov. 2020.

Figure 4 - Screenshot of *Jet Set Radio*. From "Jet Set Radio." Steam. 2020. store.steampowered.com/app/205950/Jet_Set_Radio. Accessed on 25 Nov. 2020.

Figure 5- Screenshot of *The World Ends with You*. From Ramsay, Randolph. "The World Ends with You Review." *Gamespot*. 2008. https://www.gamespot.com/reviews/the-world-ends-with-you-review/1900-6189661. Accessed on 26 Nov 2020.

Figure 6- Screenshot of *The World Ends with You*. From "The World Ends with You Walkthrough: Week 1 Day 06." *Ign.* 2012. https://www.ign.com/wikis/the-world-ends-with-you/Week_1_Day_06. Accessed on 26 Nov. 2020.

Figure 7- Screenshot of *428: Shibuya Scramble*. From "428: Shibuya Scramble Review." *The Shonen Otaku Corner*. Blogger, 2019. shonenotakucorner.blogspot.com/2019/04/428-shibuya-scramble-review.html. Accessed on 28 Nov. 2020.

Figure 8 - Screenshot of *428: Shibuya Scramble*. From Santana, Steven. "428: Shibuya Scramble - Jumping Between Time." DualShockers. 2018.dualshockers.com/428-shibuya-scramble-review-pc-ps4. Accessed on 28 Nov. 2020.

Figure 9 - Image of proposed Shibuya observation deck. From “What Will Shibuya Look Like in 2020?” *realestatejapan*. GPlus Media Inc., 2015 resources.realestate.co.jp/news/what-will-shibuya-look-like-in-2020. Accessed on 29 Nov. 2020.

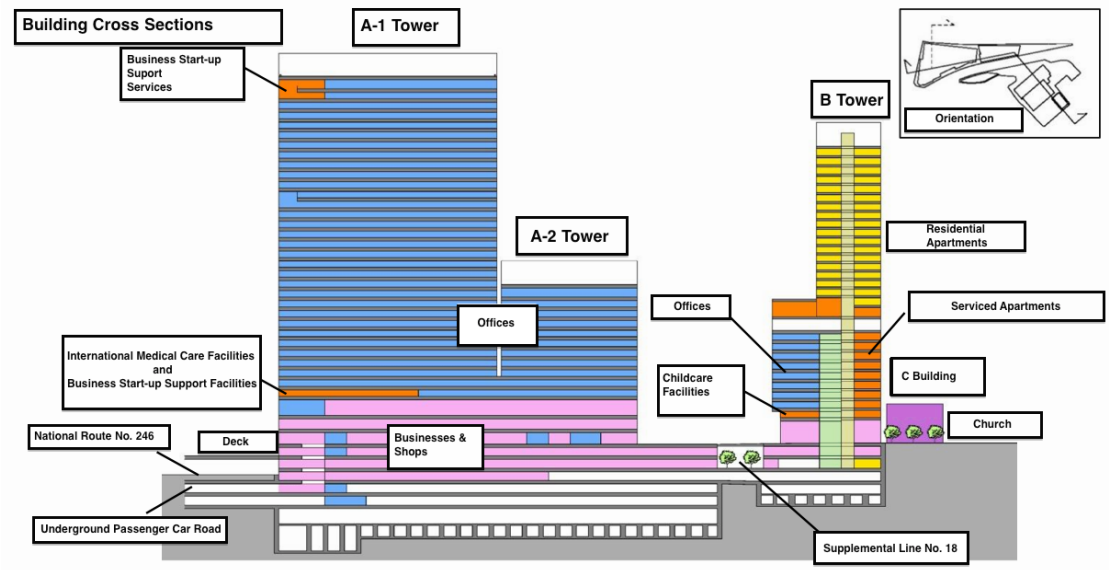

Figure 10 - Map of new Dogenzaka Residential Development. From “What Will Shibuya Look Like in 2020?” ?” *realestatejapan*. GPlus Media Inc., 2015 resources.realestate.co.jp/news/what-will-shibuya-look-like-in-2020. Accessed on 29 Nov. 2020.

Figure 11- Promotional image for *Persona 5*. From Barnes, Josh."Persona 5's Message is One of Individuality and Change." Scholarly Gamers. 2017. scholarlygamers.com/feature/2017/05/31/persona-5-message-one-individuality-change. Accessed on 30 Nov. 2020.

Figure 12 - Visual comparison of Sangenjaya and Yongenjaya in *Persona 5*. From Schell, Vanessa. "Persona 5 in Real Life: Tokyo's Sangenjaya Neighborhood." Breaker Japan. 2018. breakerjapan.com/gaming/persona-5-real-life-tokyo-sangenjaya. Accessed on 30 Nov. 2020.

Works Cited List

Abel, Elizabeth. *Signs of the Times: The Visual Politics of Jim Crow*. University of California Press, 2010.

Aristotle. *Poetics*. Translated by Malcom Heath. Penguin Classics, 1996.

"Aum Shinrikyo: The Japanese Cult Behind the Tokyo Sarin Attack". *BBC*. 2018. bbc.com/news/world-asia-35975069. Accessed on 27 Nov. 2020.

Ashcraft, Brian. "Persona 4's Train Station is Real (and It's Closing)." *Kotaku*. G/O Media Inc., 2014. kotaku.com/persona-4s-train-station-is-real-and-its-closing-1513048570. Accessed on 30 Nov. 2020.

--. "Persona 5's In-Game Locations Compared to the Real World." *Kotaku*. G/O Media, 2017. kotaku.com/persona-5s-in-game-locations-compared-to-the-real-world-1787125885. Accessed on 30 Nov. 2020.

Ayukawa, Kei. "Toshi no shūen" ["The Fringes of the City"]. *Shibuya isan.* [*Shibuya Heritage*]. Edited by Muramatsu Shin. Basilico, 2010.

Azuma, Hiroki. *Gemuteki riarizumu no tanjō: Dōbutsukasuru posutomodan 2* [*Japan's Database Animals 2: The Birth of Gameic Realism*]. Kodansha, 2007.

--. *Otaku: Japan's Database Animals*. Translated by Jonathan E. Abel and Shion Kono. University of Minnesota Press, 2009.

Bakhtin, Mikhail Mikhailovich. "Forms of Time and of the Chronotope in the Novel: Notes toward a Historical Poetics". *The Dialogic Imagination: Four Essays*. Edited by Michael Holquist. Translated by Michael Holquist, et al. University of Texas Press 2010.

Bayne, Siăn. "Smoothness and Striation in Digital Learning Spaces." *E-Learning and Digital Media*, vol. 1, no. 2, 2004, pp. 302–316.

Bell, Alice. "Digital Fictionality: Possible Worlds Theory, Ontology, and Hyperlinks." *Possible Worlds Theory and Contemporary Narratology*. Edited by Alice Bell and Marie-Laure Ryan. University of Nebraska Press, 2019.

Bell, Alice and Marie-Laure Ryan. "Introduction: Possible Worlds Theory Revisited." *Possible Worlds Theory and Contemporary Narratology.* University of Nebraska Press, 2019.

Bell, Kevin. *Game on!: Gamification, Gameful Design, and the Rise of the Gamer Educator*. Johns Hopkins University Press, 2018.

Bemong, Nele, Pieter Borghart et. All. *Bakhtin's Theory of the Chronotope: Reflections, Applications, Perceptions*. Academia Press, 2010.

Benadon, Fernando. "Towards a Theory of Tempo Modulation." *Proceedings of the 8th*

International Conference on Music Perception and Cognition. Springer, 2004. pp. 563-566.

"Bijon kōkoku no kōkoku kachi no takasa" ["The cost of large-screen advertising"]. *Shibuya Bunka Project*. 2013. shibuyabunka.com/phone/data/20131127. Accessed on 26 Nov. 2020.

Bozon, Mark. "The World Ends with You Interview." *IGN*. ign.com/articles/2009/01/22/the-world-ends-with-you-interview. Accessed on 26 Nov. 2020.

Brosseau, Marc and Pierre-Mathieu la Bel. *Popular Fiction and Spatiality: Reading Genre Settings*. Edited by Lisa Fletcher. Palgrave Macmillan, 2016.

Calimente, John. "Rail Integrated Communities in Tokyo." *Journal of Transport and Land Use*, vol. 5, no. 1, Apr. 2012, pp. 19-32.

Campbell, Joseph. *The Hero with a Thousand Faces*. New World Library, 2008.

Campana, Andrew. "Fold, Flip, Stick: Paper Mario, 2.5 Dimensionality and the Media Mix." *Kinephanos*. vol. 5, no. 1, 2015. kinephanos.ca/2015/fold-flip-stick. Accessed on 25 Nov. 2020.

Carless, Simon. "Famitsu Reveals Top 100 Reader-Voted Games of All Time." *Gamasutra*. Informa Tech, 2006. gamasutra.com/view/news/99332/Famitsu_Reveals_Top_100_ReaderVoted_Games_Of_AllTime.php. Accessed on 27 Nov. 2020.

Castells, Manuel. *The Rise of the Network Society*. Wiley-Blackwell, 2009.

Castronova, Edward. *Synthetic Worlds: The Business and Culture of Online Games.* University of Chicago Press, 2005.

Caufield, Anthony and Nicola Caufield. "The Rude Awakening." *Jet Set Radio HD*. Sega, 2012.

Certeau, Michel de. *The Practice of Everyday Life*. Translated by Steven F. Rendall. University of California Press, 1988.

Chino, Hiroaki and Momota Hiroshi. *Streets of Rage*. Sega, 1991.

Chun, Wendy Hui Kyong. *Programmed Visions: Software and Memory*. MIT Press, 2011.

Clarke, Brett. "Ebenezer Howard and the Marriage of Town and Country: An Introduction to Howard's Garden Cities of Tomorrow (Selections)." *Organization and Environment*. vol. 16, no. 1, 2003, pp. 87-97.

Collins, Karen. *Game Sound*. Cambridge and Durham: The MIT Press. 2008.

Çokay Nebioğlu, Rahime. *Deleuze and the Schizoanalysis of Dystopia*. Palgrave Macmillan, 2020.

Condry, Ian. *Hip-Hop Japan: Rap and the Paths of Cultural Globalization*. Duke University Press, 2006.

Dannenberg, Hilary P. *Coincidence and Counter-Factuality: Plotting Time and Space in Narrative Fiction*. University of Nebraska Press, 2008.

Deleuze, Gilles. "Postscript on the Societies of Control." In *October*, vol. 59, 1992. pp. 3-7.

Deleuze, Gilles and Félix Guattari. *Anti-Oedipus*. 1972. University of Minnesota Press, 1983.

--. *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Brian Massumi. University of Minnesota Press, 1987.

Deschamps, Marc. "Genshin Impact has Made and Absurd Amount of Money." *Comic Book*. comicbook.com/gaming/news/genshin-impact-absurd-money-app-store-google-play. Accessed on March 22, 2021.

Dower, John W. *Embracing Defeat: Japan in the Wake of World War II*. W. W. Norton & Company, 1999.

Dunniway, Troy. "Using the Hero's Journey in Games." *Gamasutra*. Informa Tech. 2000. gamasutra.com/view/feature/131527/using_the_heros_journey_in_games.php?page=2 Accessed on 30 Nov. 2020.

Ebert, David S. *Texturing & Modeling: A Procedural Approach*. Morgan Kaufmann, 2003.

"e-Japan Strategy." *Prime Minister of Japan and His Cabinet*. IT Strategy Headquarters, 2001. japan.kantei.go.jp/it/network/0122full_e.html. Accessed on 25 Nov. 2020.

Ettleman, Tristan. "The Hero's Journey Explored through Video Games." *USG*. 2015. usgamer.net/articles/the-heros-journey-video-games. Accessed on 30 Nov. 2020.

Faruque, Saleh. *Radio Frequency Modulation Made Easy*. Springerbriefs in Electrical and Computer Engineering. Springer, 2017.

Fickle, Tara. *The Race Card: From Gaming Technologies to Model Minorities*. New York University Press, 2020.

Foucault, Michel. *Discipline and Punish: The Birth of the Prison*. Translated by Alan Sheridan. Vintage, 2012.

--. *Security, Territory, Population: Lectures at the Collège De France. 1977-78*. Edited by Michel Senellart, et al. Translated by Graham Burchell, Palgrave Macmillan, 2009.

Friedmann, John. "The World City Hypothesis." *Development and Change*. vol.17, no. 1. Jan. 1986. pp. 69-83

Fujita, Kuniko, and Richard Child Hill. "Global Interdependence and Urban Restructuring in

Japan." *Japanese Cities in the World Economy*. Edited by Kuniko Fujita and Richard Child Hill. Temple University Press, 1993.

Fuller, Matthew. *Media Ecologies*. The MIT Press, 2005.

Furht, Borivoje. *Handbook of Augmented Reality*. Springer, 2011.

Galloway, Alexander. *Gaming: Essays on Algorithmic Culture*. University of Minnesota Press, 2006.

"Gēmu sofuto nenkan ureage rankingu: kishu 'hādo' betsu Top30" ["Yearly Game Sales: Top 30 by Console." *Game Compass*.] 2008. gcompass.sp.land.to/rank/2008_hard.html. Accessed on 27 Nov. 2020.

Genosko, Gary and Adam Bryx. "After Informatic Striation: The Resignification of Disc Numbers in Contemporary Inuit Popular Culture. *Deleuze and Space*. Edited by Ian Buchanan and Gregg Lambert. Edinburgh University Press. 2005.

Goodman, Steve. "Sonic Algorithm." *Software Studies: A Lexicon*. Edited by Mathew Fuller. MIT Press, 2008.

Guins, Raiford. *Game After: A Cultural Study of Video Game Afterlife*. MIT Press, 2014.

Harumashi, Shota et al. "Driver in New Year's Day Vehicle Attack had Strong Lethal Intent: Police." *The Mainichi*. 2019. mainichi.jp/english/articles/20190104/p2a/00m/0na/036000c. Accessed on 27 Nov. 2020.

Hashino, Katsura. *Persona 5*. Atlus, 2016.

Hirano, Sachie. *The World Ends with You*. Square Enix, 2008.

Hiroumi, Aoi. *Shibuya Goldfish*. Translated by Ko Ransom. Yen Press, 2018.

Hocking, Clint. "Ludonarrative Dissonance in Bioshock." *Click Nothing*. 2007. clicknothing.typepad.com/click_nothing/2007/10/ludonarrative-d.html. Accessed on 23 Nov. 2020.

Holtz, Michael. "Long Quiet, Japanese Youths Find their Voice in Protesting Defense Reforms. *The Christian Science Monitor*. 2015. csmonitor.com/World/Asia-Pacific/2015/0813/Long-quiet-Japanese-youths-find-their-voice-in-protesting-defense-reformsAccessed on 26 Nov. 2020.

Hommerich, Carola. "Feeling Disconnected: Exploring the Relationship between Different Forms of Social Capital and Civic Engagement in Japan." *Voluntas: International Journal of Voluntary and Nonprofit Organizations: Official Journal of the International Society for Third-Sector Research*, vol. 26, no. 1, 2015, pp. 45–68.

Hookway, Branden. *Interface*. MIT Press, 2014.

Hornyak, Tim. "Shibuya Station History." On *Shibuya Station*.

https://www.shibuyastation.com/shibuya-station-history. Accessed 21 May 2017.

Hutchinson, Rachael. *Japanese Culture Through Videogames*. Routledge, 2019.

Huotari, Kai, and Juho Hamari. "A Definition for Gamification: Anchoring Gamification in the Service Marketing Literature." *Electronic Markets: The International Journal on Networked Business*, vol. 27, no. 1, 2017, pp. 21–31.

"IGNDC Interviews the Creators of Jet Grind Radio." *IGN*. 2000. ign.com/articles/2000/05/26/igndc-interviews-the-creators-of-jet-grind-radio. Accessed on 25 Nov. 2020.

Ikeda, Ryo. *"Shibuya, rakugaki No! Kanchigai gaikokujinmuke eigo postā*" ["No Graffiti in Shibuya! English Posters Target Confused Foreigners"]. *Asahi Shinbun*, 2016. asahi.com/articles/ASJB546XLJB5UTIL00T.html. Accessed on 24 Nov. 2020.

Inoue, Toshiki. *Chaos;Head*. Madhouse; 2008.

Ishī, Kenji. *Shibuyagaku* [*Shibuya Studies*]. Kōbundō, 2017.

Ishida, Munehisa. "The Changing Face of Shibuya: Renewal Speeds up Shift from Cultural Center to IT Hub." *The Mainichi Shinbun*. 2020. mainichi.jp/english/articles/20200106/p2a/00m/0bu/022000c Accessed on 26 Nov. 2020.

Itō, Mizuko. "Introduction." *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*. Edited by Mizuko Itō, et al. MIT Press, 2005.

Itō, Mizuko and Daisuke Okabe. "Technosocial Situations." *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*. Edited by Mizuko Itō, et al. MIT Press, 2005.

Iwatani, Toru. *Pacman*. Namco, 1980.

Jagoda, Patrick. "Gamification and Other Forms of Play." *Boundary 2*, vol. 40, no. 2, 2013, pp. 113–144.

"Japan Penal Code." *Office of the Cabinet Secretariat.* cas.go.jp/jp/seisaku/hourei/data/PC.pdf. Accessed on 24 Nov. 2020.

Jenkins, Henry. *Convergence Culture: Where Old and New Media Collide*. New York University Press, 2006.

"*Jet Set Radio* to Receive a Name Change in North America." *IGN*. 2000. ign.com/articles/2000/04/12/jet-set-radio-to-receive-name-change-in-america. Accessed on 24 Nov. 2020.

Jung, C.G. "Psychoanalysis and Neurosis" *Collected Works of C. G. Jung, Volume 4: Freud and Psychoanalysis*, edited by Gerhard Adler, et al., Princeton University Press, 1961.

--. "The Technique of Differentiation between the Ego and the Figures of the Unconscious."

Jung on Active Imagination. Edited by Joan Chodorow. Princeton University Press, 1997.

--. *Memories, Dreams, Reflections*. Edited by Jaffé Aniela Collins and Routledge & Kegan Paul, 1963.

Junpoco. "'Persuona 5' Hashino Katsura intabyū: 'kokoro wo nusumu kaitō' wo tēma ni shita honsaku to 20 shūnen wo mukaeru 'Persusona' shirīzu ni komerareta omoi wo kīta" [Interview with *Persona 5*'s Hashino Katsura: We Hear about Thieves that Steal Hearts and his Thoughts on the 20th Anniversary of the *Persona* Series]. *4Gamer*. 4gamer.net/games/272/G027222/20160613013. 2016. Accessed on 30 Nov. 2020.

Juul, Jesper. *Half-Real: Video Games between Real Rules and Fictional Worlds*. The MIT Press, 2011.

Kamei, Yukiko. "Toshi no hōga" ["The Sprouts of the City"]. *Shibuya isan.* [*Shibuya Heritage*]. Edited by Muramatsu Shin. Basilico, 2010.

Kataoka, Yohei. *Tokyo Jungle*. Crispy's!, 2012.

Kawamura, Yuniya. *Fashioning Japanese Subculture*. Berg, 2012.

Kasuya, Takashi. *"*Umoreta Shibuya" ["Buried Shibuya"]. *Rekishi no naka no Shibuya.* [*History within Shibuya*]. Edited by Ueyama Kazuo. Yūzankaku, 2011.

Kikuchi, Masayoshi. *Jet Set Radio*. Sega, 2000.

Kinoshita, Yuri. "Gōka kurietā wa Shibuya wo anime de saigen! Jōei wa sukuranburu kōsaten" ["Master Creator Reproduces Shibuya in Anime! The Screening Takes Place in the Scramble Crossing"). *Kai-You: Pop Portal Culture Media*. 2018. kai-you.net/article/52820. Accessed on 26 Nov. 2020.

Kirby, Peter Wynn. "Introduction: Lost in Space." *Boundless Worlds: An Anthropological Approach to Movement.* Edited by Peter Wynn Kirby. Berghahn, 2008.

Kitase, Yoshinori. *Final Fantasy VII*. Squaresoft, 1997.

Kittler, Friedrich. *The Truth of the Technological World: Essays on the Genealogy of Presence*. Translated by Erik Butler. Stanford University Press, 2013.

Kogut, Bruce Mitchel. *The Global Internet Economy*. MIT Press, 2003.

Kohiyama, Kenji. "A Decade in the Development of Mobile Communications in Japan (1993-2002)." *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*. Edited by Mizuko Itō, et al. MIT Press, 2005.

Keunen, Bart, and Sofie Verraest. "Tell-Tale Landscapes and Mythical Chronotopes in Urban

Designs for Twenty-First Century Paris." *Clcweb: Comparative Literature and Culture*, vol. 14, no. 3, 2012.

Lachman, Richard. "Graffiti as Career and Ideology." *American Journal of Sociology*. vol. 94. no. 2. pp, Sep. 1988. 229-250.

Lamarre, Thomas. *The Anime Ecology: A Genealogy of Television, Animation, and Game Media*. University of Minnesota Press, 2018.

--. *The Anime Machine*: *A Media Theory of Animation*. University of Minnesota Press, 2009.

Lavocat, Françoise. "Possible Worlds, Virtual Worlds." *Possible Worlds Theory and Contemporary Narratology*. Edited by Alice Bell and Marie-Laure Ryan. University of Nebraska Press, 2019.

Lehany, David. *Think Global, Fear Local: Sex, Violence, and Anxiety in Contemporary Japan*. Cornell University Press, 2006.

Lefebvre, Henri. *The Production of Space*. Translated by Donald Nicholson-Smith. Blackwell Publishing, 1974.

--. *Rhythmanalysis: Space, Time, and Everyday Life*. Continuum, 2004.

Lochbaum, David A, et al. *Fukushima: The Story of a Nuclear Disaster*. New Press, 2014.

Lowood, Henry and Raiford Guins. *Debugging Game History: A Critical Lexicon*. The MIT Press, 2016.

Lummis, Douglas C. and Kogawa Tetsuo. "Kanri Shakai – The Managed Society." *AMPO: Japan Quarterly Review*. vol 23, no. 4, 1992. pp. 43-46.

--. "The Managed Society Part 2: The City and Control. *AMPO: Japan Quarterly Review*. vol. 24, no. 1, 1993. pp. 46-49.

Maeda, Ai. *Text and the City: Essays on Japanese Modernity*. Translated by James A. Fujii. Duke University Press, 2004.

Makimura, Kenichi, et al. *Shibuya ongaku zukan* [*A Field Guide to Shibuya's Music*]. Ohta Shuppan, 2017.

Malkowski, Jennifer, and TreaAndrea M Russworm, editors. *Gaming Representation: Race, Gender, and Sexuality in Video Games*. Indiana University Press, 2017.

Manami, Rei. "13nen no toki wo tatte HDgashitsu de fukkatsu shita 'Jetto setto rajio' purei inpuresshon." *Famitsu*. 2013famitsu.com/news/201303/04029542.html. Accessed on 25 Nov. 2020.

Martin, Thomas L. "'As Many Worlds as Original Artists': Possible Worlds Theory and the

Literature of Fantasy." *Possible Worlds Theory and Contemporary Narratology*. Edited by Alice Bell and Marie-Laure Ryan. University of Nebraska Press, 2019.

Marx, W. David. "The Legacy of Shibuya-Kei Part Five." *Néojaponisme*. 2004. https://neojaponisme.com/2004/11/22/the-legacy-of-shibuya-kei-part-five/. Accessed 23 Nov. 2020.

Massumi, Brian. *Parables for the Virtual: Movement, Affect, Sensation*. Duke University Press, 2002.

Maturo, Antonio Francesco, and Veronica Moretti. *Digital Health and the Gamification of Life: How Apps Can Promote a Positive Medicalization*. Emerald Publishing Limited, 2018.

McKnight, Anne. "Frenchness and Transformation in Japanese Subculture, 1972-2004." *Mechademia*, vol. 5, no. 1, 2010, pp. 118–137.

McQuire, Scott. *The Media City: Media, Architecture and Urban Space*. Sage, 2008.

Mitsuchi, Tatsuo. "Dokomade Shibuya?" ["Where Does Shibuya End?"]. *Dokomade no machi* [*Where Does the City End?*]. dokomade.net/cities/1. Accessed on 29 Nov. 2020.

Miyamoto, Shigeru. *Super Mario Bros.* Nintendo, 1985.

Möller Tomas, et al. *Real-Time Rendering*. Fourth edition. CRC Press, Taylor & Francis Group, 2018.

Miyamoto, Shigeru. *Super Mario Bros.* Nintendo, 1985.

Montfort, Nick. "Obfuscated Code." *Software Studies: A Lexicon*. Edited by Mathew Fuller. MIT Press, 2008.

Montfort, Nick and Ian Bogost. *Racing the Beam: The Atari Computer System*. The MIT Press, 2009.

Morikawa, Kaichirō. "Otaku and the City: The Rebirth of Akihabara." *Fandom Unbound: Otaku Culture in a Connected World*. Edited by Mizuko Itō, et al. Yale University Press, 2012. pp. 133-157.

Morissy, Kim. "*Persona 5*: The Animation Sets up Its Palace in Shibuya with Pop-Up Exhibit. *Anime News Network*. 2018. https://www.animenewsnetwork.com/interest/2018-05-09/persona-5-the-animation-sets-up-its-palace-in-shibuya-with-pop-up-exhibit/.131357. Accessed on 23 Nov. 2020.

Morris, Brian. "Un/Wrapping Shibuya: Place Media and Punctualization." *Space and Culture*. vol. 13, no. 3, July 2010. pp. 285-303.

Muramatsu, Shin. "Shibuya isan wo sagashite" ["Searching for Shibuya's Heritage"]. *Shibuya isan.* [*Shibuya Heritage*]. Edited by Muramatsu Shin. Basilico, 2010.

Murphy, Paul. “Bit Valley Grows Up.” *Japan Inc*. 2001. japaninc.com/article.php?articleID=91. Accessed on 26 Nov. 2020.

Nagano, Takayuki. “‘Rakugaki’ no igi” [“The Significance of Graffiti”]. *Shibuya wo kurasu: Shibuya minzokushi no kokoromi*. [*Living in Shibuya: An Attempt at an Ethnography of Shibuya*]. Edited by Kuraishi Tadahiko. Yuzankaku, 2010.

Nakamura, Koichi. *428 Shibuya Scramble*. Sega, 2008.

Nango, Yoshikazu. “*Shibuya no Harowin wa nan no yume wo mita ka? – sukuranburu kōsaten kara kangaeru*” [“What is the Dream of Halloween in Shibuya: Thinking from the Shibuya Scramble Crossing”]. *Synodos*. Jan. 2017. https://synodos.jp/intro/18813. Accessed 21 Nov. 2020.

Narine, Neil. “Global Trauma and Narrative Cinema.” *Theory, Culture & Society*, vol. 27, no. 4, 2010, pp. 119–145.

“National Protection Plan.” *Shibuya City*. Shibuya City Office, 2020. city.shibuya.tokyo.jp.e.mu.hp.transer.com/anzen/bosai/bosai_keikaku/kokumin.html. Accessed on 27 Nov. 2020.

Newton, Isaac. *The Mathematical Principles of Natural Philosophy.* Translated by Andrew Motte. Davis and Dickson, 1819.

“Nihon saidaikyū ‘Shinkuku arutabijon’ no tokuchō wa? LED bijon no kōkoku riyō no meritto kaitsetsu” [“What are the special features of Japan’s world class ‘Shinjuku Altavision’ An explanation of the merits of advertising on the LED Screen”] *LED Tokyo*. 2020. led.led-tokyo.co.jp/news/shinjukualtavision. Accessed on 26 Nov 2020.

Nitsche, Michael. *Video Game Spaces*. Cambridge and London: The MIT Press, 2008.

North, Dale. “Person 5 Uses Atlus’ Internal Enjine.” *Destructoid*. 2011. destructoid.com/stories/persona-5-uses-atlus-internal-engine-210273.phtml. Accessed on 30 Nov. 2020.

Ogura, Junko and Jethro Mullen. “Tens of Thousands Demonstrate Against Nuclear Power in Japan. *CNN*. 2012. cnn.com/2012/07/16/world/asia/japan-nuclear-protest/index.html. Accessed on 27 Nov. 2020.

Okada, Koji. *Persona 2: Eternal Punishment*. Atlus, 2000.

Okamoto, Yoshiki. *Final Fight*. Capcom, 1989.

Ondřej Mulíček , et al. “Urban Rhythms: A Chronotopic Approach to Urban Timespace.” *Time & Society*, vol. 24, no. 3, 2015, pp. 304–325.

Ōnishi, Kōji. “Shibuya-kei (Shibuya Sound) and Globalization” *Popular Culture: Intercultural Interpretations*. Edited by Tōru Mitsui. Hōyū Printing: 1998.

Oshima, Ken Tadashi. “Den-en-chōfu: Building the Garden City in Japan.” *Journal of the Society of Architectural Historians*. vol. 55, no. 2, 1996, pp. 140-151.

Ōtsuka, Eiji. *Monogatari shouhi ronteihon* [*A Theory of Narrative Consumption*].Kodansha, 1991.

Ōtsuka, Eiji and Marc Steinberg. “World and Variation: The Reproduction and Consumption of Narrative.” Translated by Marc Steinberg. *Mechademia*, vol. 5, no. 1, 2010, pp. 99–116.

Ōyama, Ken. *Dokomade Tokyo?* [*How Far Does Tokyo Go?*] Hatena Blog, 2009. dokomadetokyo.hatenadiary.org/archive/2009. Accessed on 29 Nov. 2020.

Parish, Jeremy. “Making a Game in the World’s Busiest Crosswalk: The Story Behind 428.” *Polygon*. Vox Media, 2018. polygon.com/features/2018/12/17/18138523/spike-chunsoft-428-shibuya-scramble-making-of. Accessed on 28 Nov. 2020.

Phillips, Amanda. *Gamer Trouble: Feminist Confrontations in Digital Culture*. New York University Press, 2021.

Plante, Chris. “The Last of Us 2 Epitomizes One of Gaming’s Longest Debates.” *Polygon*. Vox Media, 2020. polygon.com/2020/6/26/21304642/the-last-of-us-2-violence. Accessed on 23 Nov. 2020.

Prince, Gerald. *Dictionary of Narratology*. University of Nebraska Press, 1987.

Propp, Vladimir. *Morphology of the Folktale*. Translated by Laurence Scott. University of Texas Press, 2010.

Prosser, Ashleigh, "No Place Like Home: The Chronotope of the Haunted House in Peter Ackroyd’s The House of Doctor Dee." *Aeternum: The Journal of Contemporary Gothic Studies*. vol. 2, no. 1, June 2015. pp. 1-19.

“Rakugaki NO! [Shibuya wa OK] gaikokujinra gokai” [No Graffiti! Foreigners mistakenly think ‘It’s OK in Shibuya’”]. *Nihon Keizai Shinbun,* 2016. nikkei.com/article/DGXLASDG11H6L_S6A011C1CC0000 Accessed on 11 Nov. 2020.

Rambukpota, Angeli. “Sophie Calle and the Shibuya Crossing Takeover.” *Metropolis*. 2019. metropolisjapan.com/sophie-calle. Accessed on 26 Nov. 2020.

“Report for Selected Countries and Subjects: October 2020.” *International Monetary Fund.* 2020. imf.org/en/Publications/WEO/weo-database/2020/October. Accessed 21 Nov. 2020.

Reynolds, Simon. *Retromania: Pop Culture’s Addiction to Its Own Past*. Faber & Faber, 2011.

Richarz, Allan. “Carefully, Japan Reconsiders the Trash Can.” *Bloomberg CityLab*. Bloomberg, 2019. bloomberg.com/news/articles/2019-05-23/where-are-all-the-trash-cans-in-japanese-cities. Accessed on 27 Nov. 2020.

Roberts, Martin. "'A 'New Stereophonic Sound Spectacular': Shibuya-kei as Transnational RoberSoundscape." *Popular Music*. vol 32, no. 1, 2013, pp. 113-123.

Ross, Jeffrey Ian. "History, Types, and Writers/Artists of Graffiti and Street Art." *Routledge Handbook of Graffiti and Street Art*. Edited by Jeffrey Ian Ross. Routledge, 2015.

Rowlands, Timothy. *Video Game Worlds: Working at Play in the Culture of Everquest*. Left Coast Press, 2012.

Rowley, Ian and Kenji Hall. "Japan's Lost Generation." *Bloomberg*. 2007. bloomberg.com/news/articles/2007-05-17/japans-lost-generationbusinessweek-business-news-stock-market-and-financial-advice. Accessed on 27 Nov. 2020.

Ryan, Marie-Laure. *Possible Worlds: Artificial Intelligence and Narrative Theory.* University of Indiana Press, 1992.

--"Possible Worlds." *The Living Handbook of Narratology*. University of Hamburg, 2012. https://www.lhn.uni-hamburg.de/node/54.html. Accessed on 23 Nov. 2020.

Saito, Asato. "Global City Formation in a Capitalist Developmental State: Tokyo and the Waterfront Sub-Centre Project." *Urban Studies*, vol. 40, no. 2, 2003, pp. 283–308.

Saito, Mari. "Kurdish Case Becomes Rallying Cry for Japan Protest Against Police." *Reuters*. 2020. reuters.com/article/us-minneapolis-police-protests-japan/kurdish-case-becomes-rallying-cry-for-japan-protest-against-police-idUSKBN23D0JG. Accessed on 26 Nov. 2020.

Saladin, Ronald. *Young Men and Masculinities in Japanese Media: (Un-)Conscious Hegemony*. Palgrave Macmillan, 2019.

Sand, Jordan. *Tokyo Vernacular: Common Spaces, Local Histories, Found Objects*. University of California Press, 2013.

Kawana, Sari. *Murder Most Modern : Detective Fiction and Japanese Culture*. University of Minnesota Press, 2008.

"Shibuyaekimachiku kiban seibi hōshin" ["Shibuya Station Area Infrastructural Development Plan"] *Shibuya City*. Shibuya City Office, 2012. city.shibuya.tokyo.jp/assets/detail/files/kurashi_machi_pdf_shibuya_houshin201210n.pdf. Accessed on 28 Nov. 2020.

"Shibuyaku kokumin hogo keikaku" ["Plan for The Protection of Shibuya's Citizens"]. *Shibuya City*. Shibuya City Office, 2016. city.shibuya.tokyo.jp/assets/detail/files/anzen_bosai_kokumin_h_pdf_kokuminhogokeikaku201611.pdf. Accessed ib 27 Nov. 2016.

"Shibuyaku kōtsu anzen keikaku: heisei 23-heisei 27nendo"["Shibuya Traffic Safety Plan: 2011-2015"]. Shibuya Ward Department of Civil Works and Sanitation. 2008.

Shupe, Anson D. *Wolves Within the Fold : Religious Leadership and Abuses of Power*.

Rutgers University Press, 1998.

Simons, Jan. “Narrative, Games, and Theory.” *Game Studies*. vol. 7. no 1. August 2007. gamestudies.org/0701/articles/simons. Accessed on 23 Nov. 2020.

“Smart Card Primer.” *Secure Technology Alliance*. securetechalliance.org/smart-cards-intro-primer/#:~:text=A%20smart%20card%20is%20a,remote%20contactless%20radio%20frequency%20interface. Accessed on 26 Nov. 2020.

Song, Jiewon. *Global Tokyo: Heritage, Urban Redevelopment and the Transformation of Authenticity*. Springer, 2020.

Sorensen André, et al. “Urban Renaissance as Intensification: Building Regulation and the Rescaling of Place Governance in Tokyo's High-Rise Manshon Boom.” *Urban Studies*, vol. 47, no. 3, 2010, pp. 556–583.

Spaskovska, Ljubica. “The Yugoslav Chronotope: Histories, Memories, and The Future of Yugoslav Studies.” *Debating the End of Yugoslavia*. Edited by Florian Bieber, et al. Ashgate, 2014.

Steinberg, Marc. “8-Bit Manga: Kadokawa’s Madara, or, the Gameic Media Mix. *Kinephanos*. vol. 5, no. 1, 2015. kinephanos.ca/2015/8-bit-manga. Accessed on 25 Nov. 2020.

--. *Anime’s Media Mix: Franchising Toys and Characters in Japan*. University of Minnesota Press, 2012.

--. “Delivering Media: The Convenience Store as Media Mix Hub.” *Point of Sale: Analyzing Media Retail*. Edited by Daniel Herbert and Derke Johnson. Rutgers University Press, 2019.

--. *The Platform Economy: How Japan Transformed the Consumer Internet*. University of Minnesota Press, 2019.

Steinberg, Marc, and Alexander Zahlten, editors. *Media Theory in Japan*. Duke University Press, 2017.

Tamura, Keisuke. *Mayoimayotte Shibuyaeki* [*Lost in Shibuya Station*]. Kobunsha, 2013.

Taylor, Laurie. “When Seams Fall Apart: Video Game Space and the Player.” *Game Studies*. vol. 3, no. 2. 2003. http://www.gamestudies.org/0302/taylor/. Accessed on 23 Nov. 2020.

Teodorescu, David. “Gamification: A Guide for Designers to a Misunderstood Concept.: *UX Collective*. Medium, 2017. https://uxdesign.cc/gamification-aguide-for-designers-to-a-misunderstood-concept-4de5bef0c5d9 Accessed on 23 Nov. 2020.

“TEPCO Amuseum.” *TEPCO*. tepco.co.jp/en/customer/amuseum/amuseum-e.html. Accessed on 27 Nov. 2020.

Thornbury, Barbara E. *Mapping Tokyo in Fiction and Film*. Palgrave Macmillan, 2020.

Toh, Weimin. *A Multimodal Approach to Video Games and the Player Experience*. Routledge, 2019.

"Tokyu Group: 2016-2017 Group Guide." *Tokyu Group*. Tokyu Corporation, 2016. tokyugroup.jp/about/pdf/en_pamph_2016.pdf. Accessed on 29 Nov. 2020.

"Tomohiro Kato Sentenced to Death over Tokyo Stabbings." *BBC*. 2011. bbc.com/news/world-asia-pacific-12844673. Accessed on 27 Nov. 2020.

"Toki no kōsa" ["Shibuya Vernacular"]. *MyAnimeList*. myanimelist.net/anime/37784/Toki_no_Kousa. Accessed on 26 Nov. 2020.

"Tokyu Group: 2016-2017 Group Guide." Tokyo, Tokyu Corporation, 2016. tokyugroup.jp/about/pdf/en_pamph_2016.pdf. Accessed 21 Nov. 2020.

Ueno, Toshiya. "Piracy Now and Then." *nettime*. 1998. nettime.org/Lists-Archives/nettime-l-9810/msg00105.html. Accessed on 24 Nov. 2020.

Uranaka, Taiga. "Shibuya Residents Furious with Graffiti Seen as Art." *The Japan Times*. 2000. https://www.japantimes.co.jp/news/2000/09/10/national/shibuya-residents-furious-with-graffiti-seen-as-art. Accessed on 24 Nov. 2020.

"Urban Development in Tokyo." *Bureau of Urban Development*. Tokyo Metropolitan Government, 2011. toshiseibi.metro.tokyo.lg.jp/pamphlet/pdf/udt2011english.pdf. Accessed on 28 Nov. 2020.

"Urban Planning Proposal for Areas Surrounding Shibuya Station (Plan)." Tokyu Corporation, 2013. tokyu.co.jp/ir/upload_file/ENtop_01/9005_2013032817342804_P01_.pdf. Accessed 21 Nov. 2020.

Valverde, Mariana. *Chronotopes of Law: Jurisdiction, Scale, and Governance*. Routledge, 2015.

Verhoeff, Nanna. *Mobile Screens : The Visual Regime of Navigation*. Amsterdam University Press, 2012.

Waley, Paul. "Tokyo-As-World-City: Reassessing the Role of Capital and the State in Urban Restructuring." *Urban Studies*, vol. 44, no. 8, 2007, pp. 1465–1490.

Wardrip-Fruin, Noah. *Expressive Processing: Digital Fictions, Computer Games, and Software Studies*. MIT Press, 2009.

Wolf, Mark J.P. *Building Imaginary Worlds: The Theory and History of Subcreation*. Routledge, 2014.

"The World Ends with You: Summary." *VGChartz*. vgchartz.com/game/16116/the-world-ends-with-you/summary. Accessed on 26 Nov. 2020.

Yamakoshi, Hidetsugu and Yasumasa Sekine. “Graffiti/Street Art in Tokyo and Surrounding Districts.” *Routledge Handbook of Graffiti and Street Art*. Edited by Jeffrey Ian Ross. Routledge, 2015.

Yoder, Robert Stuart. *Deviance and Inequality in Japan: Japanese Youth and Foreign Migrants*. Policy Press, 2011.

Yoneyama, Shoko. *The Japanese High School: Silence and Resistance*. Routledge, 1999.

Yoshida, Mitsuhiro and Sekimoto Hiroyuki. *River City Ransom*. Technos, 1989.

Yoshimi, Shunya. *Toshi no doramuturugi* [*Dramaturgy of the City*]. Kobudon, 1987.

Yukawa, Kō. “A Cluster of Internet Companies in Tokyo: Review of Bit Valley.” *Fujitsu*. Fujitsu Research Institute, 2003. fujitsu.com/downloads/JP/archive/imgjp/group/fri/en/economic/no3.pdf. Accessed on 26 Nov. 2020.

Zagal José Pablo, and Sebastian Deterding, editors. *Role-Playing Game Studies: Transmedia Foundations*. Routledge, 2018.

Zahlten, Alexander. “1980s Nyū Aka: (Non)Media Theory as Romantic Performance.” *Media Theory in Japan.* Steinberg, Marc, and Alexander Zahlten, editors. Duke University Press, 2017.