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Exploitation and Social Reproduction in the Japanese Animation Industry

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Japan's decision to use famous Anime characters as its 2020 Tokyo Olympics ambassadors¹ is a testament to the global appeal of anime, the country's top creative export. The visages of characters from properties that are beloved worldwide beckon their fans to experience the land of their birth for an international sports celebration, an event that seemingly has nothing to do with anime, save for the fact that these characters are held up by the state as something quintessentially Japanese. Once an industry maligned by the Japanese government, and even large portions of society, anime is now considered a considerable force in the country's post-industrial economy. This industry saw 1,825 billion yen in revenues of Anime and Anime-related merchandise globally in 2015 (AJA), and is a key part of the government of Japan's development of soft power² through the state funded 'Cool Japan Project'. Anime is only a part of a multitude of cultural industries that are used to project a softer and friendly image of Japan towards others abroad to encourage domestic economic growth while combating any ambivalence or enmity towards the Japanese nation, but it is one of the most identifiable. This form of animation has disseminated across the globe through its export (Clements, 2013) and has developed multiple strands of transcultural connectivity in the form of consumer communities that exist in both geographic and digital space (Denison, 2011; Eng, 2012; Tamagawa, 2012). It also embodies a vast overseas network of production that extends across East and Southeast Asia (Mori, 2011; Yamamoto, 2010; Lewis, 2018; Clements, 2013; ANN). Like with most production processes, the constituent elements and structure are not necessarily hidden, but

¹ <https://www.olympicchannel.com/en/playback/the-supporting-cast-of-tokyo-2020/>

² Joseph Nye's concept through which states use appeal and attraction to shape perception.

information concerning production is not generally volunteered freely, or made easily available to the average individual.

The Japanese Animation worker advocacy groups known as the Japanese Animation Creators Association (JAniCA), formed in 2008, released reports in 2009 and 2015 based on surveys concerning the demographics of the animators in the industry. Within the online English speaking fan community, a large emphasis was placed on the wage levels of animators as well as their working conditions, as fans came to the realization that certain animator roles within the industry had the highest hours worked per day of any profession in Japan, along with extremely high rates of burnout. As consumers, there is a belief that the only solution available to help these individuals is to support these studios financially by watching Anime through legitimate platforms and purchase legitimate anime related merchandise; the boost in profits will then trickle down to animator wages. Counter to this idea, I plan to identify the primary stakeholders in the industry, review the current state of animators in the anime industry, and observe the historical circumstances that lead to the creation and dissemination of Japanese television broadcast animation. From this I argue that the depression of animator wages is a structural element of the industrial process of producing animation, and the holders of intellectual property in the anime industry crafted it in such a way as to maximize profits at the expense of one of the most integral and labor-intensive parts of the production process, while also exploiting consumers' affective labor by cannibalizing it for new intellectual property as well as new, young, and ultimately replaceable talent. The intention of this report is to bring greater attention not only to the plight of these animators, but highlight the structure through which this exploitation takes

place within not only the industrial process, but also through the development of affection towards fictional characters, worlds, and their aesthetics by asking the question, ‘How is value extracted from the Japanese Animation industry?’

Theoretical Framework

The theoretical framework of this report begins with Maurizio Lazzarato’s theory of immaterial labor, where he explains the way in which labor has been reorganized to accommodate the new neoliberal economic paradigm. This shift requires laborers to become equipped with informational and cultural skills to participate within the labor marketplace, leading to an alteration in the way labor functions; manual and intellectual tasks become combined, in contrast to the distribution between strictly manual/material and strictly intellectual/immaterial labor. An important aspect to this new structure of labor is that it involves a series of activities that had not been previously associated with industrial style labor. In this reorganization, workers receive a sense of agency through the way informational/cultural skills are applied to a task, instead of performing routine, repetitive industrial tasks such as the type of labor that is found within the 19th-20th century industrial factory, which was performed solely for monetary gain. For this organization of labor to function, the worker must be convinced in some way of this agency within their understanding of the world; it is through this persuasion that a worker’s identity becomes subsumed by their work in the form of a self-managed labor. This form of labor is generally cooperative, drawing on various intellectual, physical, and enterprising skillsets of workers. The products of immaterial labor instead of being consumed, propagate through a

connection to consumers, as well as between them, creating a 'social relationship', where reception itself is considered a creative act (Lazzarato, 1996).

Michael Hardt takes Lazzarato's conception of labor, and from it, and names the movement from material to immaterial production 'informatization'. From this informatization, two strands of immaterial labor emerge: the computer face, through which the constant usage of technology in the workplace has altered the ways in which we perceive labor, and the way in which labor functions within its economic reality. A computer is considered a general-purpose machine, and thus can be changed to accommodate different operations. These machines are always on, and always connected to one another, with constant streams of communication flowing through and between each machine. Workers that are able to manipulate computers to identify and solve issues and create new forms of communication are highly sought after, while lower level work is associated with navigating through these communication networks and adding manipulatable data to them. The second strand would be what Hardt refers to as an affective face, which contains the labor of contact and interaction; the examples of these forms of labor Hardt gives are the healthcare industry, and the entertainment industry. The products of these industries are not concrete objects anchored in reality, but an impression left upon the affected individual's psyche. This emotional connection does not have to be 'real', as long as the receiver accepts the connection, the affects generated within the individual are not any less 'real' than other forms of affect in terms of intensity of feeling. This face of immaterial labor also develops networks in the form of communities, which in turn produces worldviews that can be both susceptible to capitalist exploitation and

resistant to it. Hardt notes that this type of labor is not new, but the reorganization of the economy around it is a new phenomenon, unlike earlier forms of production the human psyche is not produced through contact with agriculture or industrial production, but through ‘cybernetics and affect’ (Hardt, 1999). Both of these faces of immaterial labor exist within all types of labor, at larger or smaller frequencies depending on the work; there are also intersectional dimensions and divisions of immaterial labor, which fall along lines of ethnicity, race, class, gender, and place. Hardt (1999) identifies three types of immaterial labor that drive this new economic system, which he defines as (1) informatized manufacturing, in which the industrial manufacturer is in direct communication with consumers, shifting production based on their tastes and whims; (2) the computer face, described previously, which consists of analytical and symbolic tasks like software engineering, which is a codification of the rules and laws which can be seen in the development of computer operating systems and massive information networks, along with their associated lower echelon work such as data entry; and (3) the affective face, which entails the creation and manipulation of affect through real or virtual connection. Hardt (1999) also touches on Foucault’s formulation of biopower, describing affective labor as a biopolitical force from below, in opposition to Foucault’s top down approach to the concept.

Laikwan Pang’s (2009) explanation of creative labor also stems from Lazzarato’s immaterial labor, but instead of seeing immaterial and material labor spreading between each other, she identifies the contradictions between both conceptions of labor and their intensification, particularly as it pertains to creative industries, the affective face of Hardt’s

elaboration on immaterial labor. The intensification of these logics is produced by their contradictory natures interacting, which serves to produce new forms of capitalist exploitation. Pang (2009) pinpoints the ideological basis of creative labor as nonwork (as identified by Lazzarato, but not elaborated on), between (1) the idea of the auteur, or artist-genius, who with their particular talents and skills, are able to bring to life their unique creative vision. This idea is in opposition to both (2) the factory worker, who has zero creative input in regard to the commodity their labor helps bring to fruition, and the uncultured populations unable to participate, or even understand the creative act. Pang (2008) notes that this idealized dichotomy is not a reflection of the reality within the creative economy – art is personal, while creative commodities are designed for mass appeal. The creative laborer does not have the freedom of the artist-genius, as they are forced to operate under strict divisions of labor. The romanticization of the artist-genius developed out of the commodification of European art in the 17th century and continues to this day; the creative worker has accepted this discourse, while being forced to operate in a distinctly different reality, one in which the creative worker faces forms of labor flexibilization and casualization that places the worker's current and future livelihood in a precarious position. To understand the way in which the creative economy works, Pang (2009) turns to the classic Marxist interpretation of the chain of industrial production and applies it to the creative economy. Immaterial creative labor(CL1) develops the intangible feelings of affect, and material creative labor(CL2), along with technology fashion it until an intellectual property is created. As with the traditional chain of production, the immaterial creative labor(CL1), like a raw material, is not the starting point, but is

embedded within the continuous chain. There is no absolute origin for immaterial labor(CL1) – as a finished good is considered a raw material in the fashioning of a new link in the chain of production, so too does an intellectual property become part of the ‘raw material’ for a new property. Material creative labor(CL2) represents the work of the creative laborer whose material skills are required to give birth to the intellectual property, which also profits from a form of dead labor concerning the technology utilized in producing the intellectual property.

The creative worker also consumes creative works and is a trendsetter. Popular style is decided by workers who both create and consume their own creative products, defining it for the masses. Pang (2009) defines this as ‘peer regard’ by which works are judged and raised onto pedestals by fellow creative workers. This peer regard also develops creative hierarches of workers, ranked by their creative works. Both of these concepts relate back to Lazzarato’s ‘satisfaction through agency’, and Hardt’s ‘affective face’ of immaterial labor. Pang (2009) also highlights the fetishization of the creative hierarchy, through figures that have climbed the hierarchy of the creative industry, gained popularity and acclaim, and are worshipped for it; fans desire to achieve the same position within the highest levels of the hierarchy, mirroring the creative industry itself.

Methodology

The methodology for this report is bibliographic research of academic literature concerning the working conditions of animators in Japan and the historical development of the Japanese Animation industry. Starting from official documents from international and organizations, The United Nations Educational, Scientific, and Cultural Organization and United Nations Conference on Trade and Development, this report identifies Japanese animators as creative workers. This report also uses the white paper released by The Japan Institute for Labor Policy and Training to understand the distinction between regular and non-regular work in the Japanese legal context. Moving to two industry organizations, the Association of Japanese Animations, the Japanese Animation Creators Association, this report observes the current industry outlook, and the working conditions of animators. This report also utilizes academic publications split between ethnographic research of the anime industry and secondary sources reviewing primary historical documents to understand diachronically the exploitation of Japanese animators, and the social reproduction of their labor. Acquiring this information proved to be more difficult than first imagined; much of the literature concerning Japanese animation focuses on textual analysis or on the top positions of the creative hierarchy, and not the material conditions of all the workers throughout the production process. Within the body of research concerning Japanese animation, a wealth of information concerning the development of fan cultures in domestic and transnational spaces exist, which help to understand the intensity of affect that develops within the consumer. There is also distinct a lack of published academic information concerning animation production committees and overseas subcontracting from the

animators' perspective in English, although these are both major elements concerning the financing and production of Japanese Animation. In lieu of academic evidence, my report turns to popular English language anime-oriented websites for information. This report also utilizes academic research that looks at social and labor issues that Japan has faced over the past thirty years, and continues to face, concerning employment status, wages, and tax law, and social relations.

Literature Review and Findings

Due to the complex nature of the Japanese animation industry, and implementation of this report's analysis concerning its theoretical framework, the integration of the literature review and findings is an effective form concerning the structure of this report. According to the United Nations Conference on Trade and Development, and the United Nations Educational, Scientific, and Cultural Organization, the creative worker can be a worker who develops creative material that may be exchanged as a finished good or used as creative inputs in another form of production. Workers who work within the creative industry but do not participate in creative development are still considered creative workers. Creative workers are generally young, highly productive, and entrepreneurial (UNCTAD, 2008; UNESCO, 2015). Through this definition, animators within the Japanese animation industry can be identified as creative workers.

There are two structures of employment in Japan, regular employment and non-regular employment. In public perception, and government classification, regular employment is (1) full-time at 40 hours a week, (2) directly employed, and (3) works for an

open ended, or non-fixed duration. Through regular employment, workers gain access to social insurance schemes such as ‘workers’ compensation, unemployment, health care, and retirement pension’ (Asao, n.d.). Animators in Japan reside in the legal category of fixed-term contract employment, which is considered a type of non-regular employment, which does not share the same benefits of regular employment.

Animation with a frame count of twelve to twenty-four frames per second is considered full animation and gives the animated subject the illusion of fluid motion as presented to the viewer. The higher the frame count, the more fluidity that can be perceived (Whittaker, 2009). Limited animation, on the other hand, is a type of animation that economizes the frames used per second, with Japanese television broadcast animation averaging around eight to ten frames per second (Clements, 2013). Key frames are specific pairs of frames of animation that are used to define the motion within a particular scene. In between frames are the frames of animation that create motion between one key frame and another (Lasseter, 1987).

Tezuka Osamu’s *Tetsuwan Atomu* (1963-1966) is generally considered to be an implementation of limited animation for television by his studio Mushi Production, with a specialized production process that made it the first instance of ‘Anime’ (Clements, 2013; Oguma, 2015; Mori, 2011; Hu, 2010; Steinberg, 2006; Steinberg, 2012), as opposed to the full animation films created by industry rival Toei Douga, which imitated Disney features and was a studio with whom Tezuka had previously had worked for as a director.

According to Steinberg (2006), there are seven elements specific to the limited animation

process, now called Anime, that was utilized by Mushi Production. These were (1) using an image for multiple frames, instead of changing every other frame, as in full animation; (2) the use of static images when movement did not need to be conveyed; (3) movement is conveyed by shifting foreground and background images; (4) loops of movement and action were used; (5) only the essential part of a character moves, such as the mouth when speaking; (6) creation of an image bank to re-use previously drawn images; and (7) series of short shots are used to convey movement.

There are four primary elements within the industry currently are: the production committee, the primary contractor, the professional subcontractor, and the consumer. These elements are porous, and individual actors move between and share overlapping existences within these elements at various times throughout their lives and careers. The production committee generally consists of television broadcasters, publishers, distributors, advertising firms, and merchandisers. This combination of capitalist entities allows each of them to minimize their risk on an animation production, and maximize profits based on licensing/distribution agreements and tangential goods. (Mihara, 2018; Nishino, 2011; Yamamoto, 2010). The primary contractor is usually a large, established animation studio from whom a production committee orders a set episode count of a production (Okeda, 2010; Yamamoto, 2010). Professional subcontractors are smaller studios, or freelance animators who are hired on contract per production run (Mihara, 2018; Morisawa, 2015; Yamamoto, 2010). The actors that move within this space are the production staff, which is made up of individuals who participate in the industrial process and follow a fairly strict division of labor. It consists of animators, who are further divided into groups of key frame

animators, whose drawings are the main visuals of a 30-minute program and are the illustrations that are used by the in-between animators as a basis to draw the frames that go in-between key frames, that provide the illusion of movement (Morisawa, 2015). Production assistants, voice actors, sound effect creators, editors, 3D animators, and the senior production staff which includes the director, the layout artist, and the character designer are also integral to the production process, but for the extent of this paper I will be focusing my attention on the animators. The fourth element within the structure of the industry is the consumer base that is fully immersed within the commercial culture surrounding anime, made up of actors who move into the other elements due to intensity of affect felt for fictional characters and worlds (Otsuka, 2010; Azuma, 2007; Tamagawa, 2012; Ortabasi, 2014; LaMarre, 2013; Lewis, 2018).

Regarding the current state of the industry, the Association of Japanese Animations paints a fairly upbeat picture, in which Japanese Animation has overturned the assumption that animation is just for children, increasing overseas sales, the expansion of digital content to make up for falling sales in the physical goods market, and record high production of TV animation series broadcast during 2015 (AJA, 2015). The Japanese Animation Creators Association (JAniCA), through its 2009 & 2015 Animators surveys, and several researchers who have analyzed the JAniCA reports along with other corroborating research, paint a more precarious picture of the industry from the perspective of the animator (Oguma, 2015; Okeda, 2011; Mori, 2011; Ristola 2016; Lewis, 2018; Morisawa, 2015). 47% of the workforce is in its twenties, with an average career experience of 3.7 years. By occupation, the average career experience for an in-between

animator was 4.1 years. Most of the animators work under a fee-for-service scheme, in which they are paid per completed frame drawn, with the rate ranging from 186-200 JPY (2-2.5 USD) per frame. 73.3% of animators live with an income under 1 million JPY, which is lowered than the minimum wage mandated by the Tokyo Municipal Government. 80% of the animation workforce works for over eight hours a day, with fifty percent of the animators, mostly in-between animators, working an average of ten and a half hours a day, the longest average of all employment across Japan. 89.5% of in-between animator careers are less than five years, indicating low upward mobility within the industry (Ristola, 2016; Okeda, 2010; Oguma, 2017; Mori, 2011; Morisawa, 2015). In spite of long working hours and low pay, Animators are dedicated to their craft and desire to work in the Animation industry, with respondents replying to the 2009 JAniCA survey question “Why do you continue working as an Animator” with answers ranging from liking to draw, enjoyment/fulfillment due to the job, to being a purpose for living, even while they were dissatisfied with income, schedules, working hours, and lack of job security (Okeda, 2010). Affection, desire, and admiration of characters and their creators is instrumental in recruiting young talent, which the industry helps to develop through the idea of the prosumer, an individual who is both a consumer and producer of content (Mori, 2011; Steinberg, 2012; Lewis, 2018). These feelings that serve to retain workers is indicative of Lazzarato’s subsumption into capital through the satisfaction of agency and Pang’s logic of the artist-genius: Animators, struck by the affective power of characters drive their desire to remain in the industry, in spite of low wages and excessive working hours.

This report did not anticipate the emotional labor that Morisawa (2015) identifies through the labor of the production operator, whose job it is to ensure animation cuts are retrieved from animators, so they can be moved to the next part of the production line. Morisawa (2015) discusses the lack of power production operators have in maintaining the schedule developed to ensure that the entire production remains on target for TV broadcast, although they are charged with maintaining the efficiency of a production, they are unable to do so, due to lack of what Pang refers to as 'peer regard'. Because of their inability to contribute to an animation production artistically, production operators are forced into a position of deference when dealing with animators, directors or anyone else with creative contributions working on the production.

Clements (2013), Kim (2014), Hu (2010), and Lewis (2018), look at the employment structure of Toei Douga, the predecessor to Toei Animation, currently one of the larger animation studios in Japan. The company original's mission was to create full animation features similar to Walt Disney Film's for global export. As one of the first commercial animation producer in Japan, Toei Douga set the stage for both the explosion animation talent within the industry, as well as the exploitative nature in which workers were treated through the company's payment and employment practices. Clements (2013) is the only author who covers the work environment from both the managerial perspective, which focuses on the reproduction of labor through an internal training regime with the intent of continuously developing and maintaining a competent workforce, and the animator perspective, which saw this practice as exploitative due to the stratification of wages by gender and education, with the lowest paid employees unable to afford

maintaining a balanced diet. The excessive working hours also lead to fatigue and health problems among the staff.

Clements (2013) also provides background information concerning the anti-union atmosphere that permeated through postwar Japan, which helps to explain Toei Douga's lockout of employees after the formation of an animator's union to fight for better wages and working conditions. After the lockout, the company pioneered hiring freelancers and contract workers instead of salaried employees as a majority of its production staff, a mode of employment that has become the predominant method of employment within the industry. Lewis (2018) explores the role of women workers within Toei Douga's labor framework, which shows the way in which legal frameworks such as tax law and labor contracts were utilized to limit the upwards mobility of women in the company, by not just Toei Douga, but society at large, relegating these workers to lower skill positions of coloring and tracing with no hope of climbing the creative hierarchy that their male counterparts began to ascend.

Lewis (2018) provides a historical overview of the division of labor, and how its condition, and the industry itself, is based on the material properties of the animation cel. With the advent of the Animation cel, a transparent thermoplastic sheet, separate images could be stacked upon one another to create a composite image. This allowed for the division of particular elements of a single frame, resulting in the division and economization of animators based on their varying skillsets. With the ability to tailorize animation through the use of cels, the higher skilled cognitive worker with a creative vision

could leave the menial tasks to lesser skilled employees. Morisawa (2015) provides insight into the current division of labor in the animation industry, which is very similar to the process which Lewis describes; while cels are no longer used in the production process, their legacy has dictated the way in which the animation process has continued to flow in the present day.

Mushi Production, the studio founded by Osamu Tezuka, not only animated what is considered the first anime through its techniques of economization, but also trailblazed the tight bond between anime and merchandise. This bond was a result of the low price per episode offered by Tezuka to ensure its television broadcast, which would help to mold the structure of the anime industry into its current state (Mori, 2011; Lewis, 2018; Steinberg, 2012; Oguma. 2017). Mushi Production's advertising deal with confectionary producer Meiji Sanka and overseas distribution deal with an NBC affiliate gave the company enough capital to produce *Tetsuwan Atomu*, but due to this financing scheme, the investors became a dictating voice in the development of the series (Clements, 2013; Steinberg, 2012). The eventual bankruptcy of Mushi Production as well as Toei Douga's labor restructuring brought the unsustainability of this industrial entertainment to light for different reasons, yet the financiers reliance on these characters to move their own commodities was undeniable (Steinberg, 2012).

This report did not expect that productions considered with an emphasis on quality through increased frame counts and other expenses could not succeed, as was the case with *Arupusu no Shoujo Heidi (1974)*. The frame count of this production is staggering in

comparison even to productions today. The average TV broadcast animation of today has roughly 5000 frames, while Heidi would have upwards of 8,000 per episode. Today Heidi is considered an artistic success by animators, but its emphasis on animation quality as well as its inability to capitalize financially through tangential goods due to its content led to the demise of Zuiyo Eizo, the primary contractor that produced it. (Clements, 2013)

Galbraith (2009), Azuma (2007), Otsuka (2010), LaMarre (2013), and Ortabasi (2014) illuminate the affective power produced by products within the, and the intensity of that affect that fans of the medium feel for virtual characters and worlds, from which developed a fan subculture that emerged from the commercial consumer base. Lewis (2018) defines Otaku as a fan culture that ‘values discernment, knowledgeability, and attention to detail’, and notes that Otaku-turned-company president-turned-scholar Toshio Okada regards Otaku as the ‘vanguard of information capitalist society’. Otsuka (2010) describes the development of otaku his theory of the grand narrative, which he claims was the basis of the commercial aspect of the culture; by receiving a tiny slice of the hidden grand narrative through a form of media, the consumer would strive to fully construct this narrative through acquisition of commercial goods. Azuma (2007) builds off Otsuka with his own social theories concerning otaku culture, which observed the collapse of grand narratives into what he terms the ‘grand database’, which houses various qualities of characters previously created, and are constantly recycled until they generate a ‘Pavlovian Response’ to certain affective characteristics, and refers to tropes that are ubiquitous in anime, cat ears and maid outfits (Azuma, 2007). Galbraith (2009) explores Azuma’s theories on otaku further when defining the Japanese term ‘moe’, which is the vocalization

used by otaku to verbalize the intense affect that they feel for a character; one of the primary aspects of the otaku mindset is the ability to disassociate deeply emotional experiences from a more expansive understanding of the world. Otaku subculture also has the ability to ‘Anthropomorphize objects into objects of desire. Otaku turn cats, war machines, household appliances, and even men of historical significance into beautiful little girls to trigger moe’ (Galbraith, 2009).

The term ‘Media-Mix’, refers to the various forms of media in which fictional characters and the worlds that they belong to are represented in anime, manga [Japanese comics, generally published in low price serialized weekly or monthly anthologies with multiple authors. This form of visual commercial culture can be traced to the pre-war years, but truly came into prominence during the 1950’s as a form of cheap entertainment for a highly literate population. Manga is a medium accepted by society at large, with various genres to appeal to a variety of different consumer groups. Manga generally utilizes extreme exaggeration to express the subjective reality of the actions in the story to the consumer (Ito, 2005; Schodt, 2012; Oguma, 2017)], light novels [A body of young adult literary fiction that share imagined settings, tropes, and character attributes that can also be found in anime, manga, and video games. These works do not attempt to portray reality, but ‘anime and manga-like realism’ (Kacsuk, 2016)], music, and magazines, with each representation serving as advertising for its related media product, creating advertising ecosystems made up of different interpretations of intellectual properties. The Media-mix was a realization of the ability to create goods that would generate more demand not only for other media products associated with an intellectual property, but also physical products

such as videos, toys, and apparel (Steinberg, 2012). Okeda (2010) points out that many of the characters and worlds prevalent in modern anime productions do not originate from the animation studios that physically produce the anime, but are intellectual property developed from other media sources. Intellectual property owners of character designs are some of the most powerful actors when it comes to the media mix and production committees (Allison, 2006; Steinberg, 2012; Clements, 2013; Condry, 2013; Hu, 2010; Mihara, 2018). These eclectic financial interests bear the risk of anime production, and thus they generally have the final say on all aspects of an animated project. The primary contractor is usually not included in the production committee, unless it happens to have developed a popular original intellectual property, and therefore is not given a share of the profits generated through other revenue streams within the media mix of the intellectual property. Even if a studio participates in the production committee, none of the animators who belong to small studios where much of the in-between work is subcontracted out to see increased pay, even if they had participated in the creation of a popular show.

Condry (2013), Allison (2006), and Steinberg (2012) explore the holders of intellectual property and the merchandisers that they partner with intimately. At times, these parties will merge or purchase companies to solidify their control over particular intellectual properties. Condry (2013) highlights this through looking at the toy company Bandai, which is the manufacturer of plastic models for one of the most popular and longest running anime franchises, *Mobile Suit Gundam*. This company purchased Sunrise, the animation studio who originally held the intellectual property rights to this series as well as similar properties within its catalog in order to secure its ability to profit off of the

merchandise developed from giant robots that appeared in the studio's animation. Steinberg (2012) observes another party that cultivates media-mixes, Kadokawa Shoten, which holds the intellectual property rights of many popular characters from manga and light novels that the company. The intellectual property that Steinberg (2012) focuses on as an example of the media-mix is *The Melancholy of Suzumiya Haruhi*, a light novel that gained such immense popularity in the mid-2000's that it spawned a number of anime series, manga, and videogames, all of which were produced by subsidiaries of Kadokawa Shoten's parent corporation. As an older title, this intellectual property highlights a concept Steinberg (2012) discusses called the 'echo strategy', where the reverberations of popularity generate demand for different products associated with the intellectual property universe, and even subsequent media-mixes through their repetition, remediation, and recontextualization of themes and tropes of previous works, yet are stratified through a perceived differentiation – characters and worlds may be similar, but they are ultimately regarded as new and desired by the consumer.

Mori (2011) and Ristola (2016) touch on the romanticism and the affective motivation of animators positioning them as artists and not workers in an industrial process, while Hu (2010), Steinberg (2012), Condry (2013), and Tamagawa (2012) explore one of the well-springs of this idealization through the observation of Comic Market, a massive convention spread out over three days with an attendance of roughly 500,000 people, this event was originally focused solely on the distribution of fan-made products, primarily comics known as doujinshi, but has created a second space within the convention in which the commercial industry is able to seep into this fan space. It is here that the affection

towards characters and the universes that they inhabit crosses over into the physical domain, as many of the products sold are literal labors of love, with many of these fan publishers coming out of the convention at a financial loss. It is here that intellectual owners not only draw fans to consume official merchandise, but also search for the newest trends and possible new intellectual within the community, as well the recruitment of talent from the fan circles that developed within this secondary market, as at least a third of the fan publishers that participate are looking to financially gain from their venture into this independent creative market (Tamagawa, 2012).

This report did not expect the historical development of creative products shifting in 80s-90s from the creation of stories based on narratives, to creations that were designed to elicit and intensify the feelings of affect that consumers felt for characters. Through this refinement of affect, characters became so appealing that a narrative was no longer required. This shift, along with technological advancement in creative production resulted in an explosion of fan created works, in which these characters are recontextualized, flattened, and utilized as a canvas for the projection of desire (Azuma, 2007; Galbraith, 2009). The relevance of mostly women creators at social-commercial fan communities like Comic Market (Tamagawa, 2012) can be viewed through their relegation to non-regular work and being constricted to lower echelons of the creative hierarchy. Due to their inability to advance in social standing through mainstream Japanese society by being relegated to non-regular work or motherhood and being denied their rightful places in the creative hierarchy as well, Comic Market allows women to unleash their creative ‘pure fantasies’ in place of the unattainable ‘realistic fantasy’ (Galbraith, 2009).

While most of the literature I have curated makes note of subcontracting as a continuing practice that began in the 1970s (Clements, 2013; Morisawa, 2015; Mori, 2011; Kim, 2014; Hu, 2010; Oguma, 2015, Lewis, 2018; Tschang, 2010; Tschang, 2004; Yamamoto, 2010), the authors Mori, Kim, Hu, Tschang, and Yamamoto go into some detail concerning China (Mori, 2011; Yamamoto, 2010), South Korea (Kim, 2014; Choo, 2014; ILO, 2016), Taiwan & the Philippines (Hu, 2010; Tschang, 2004; Tschang 2010; ILO, 2016). Kim (2014) is the only author who hones in on the devalorization of the technical skill of drawing frames of animation consistently when he describes the dichotomy between the mechanical and intellectual work, although the presence of this truth can be gleaned from each article that discusses the low wages of domestic animators and the offshoring that occurs--it is primarily the low skilled, labor intensive in-between frames that are drawn by subcontracted workers, whether they be domestic Japanese freelancers or animators in export oriented studios.

This report did not anticipate the immense geographic overseas production network that facilitates the Japanese animation industry through cheap, high skilled labor throughout East and Southeast Asia in South Korea (Kim, Choo, 2014; Yamamoto, 2010; ILO, 2016), China (Mori, Yamamoto), the Philippines (Tschang, 2010; Clements, 2013; ILO, 2016), Taiwan (Hu, 2010), and Vietnam (ANN). It is in these locations that 80-90% of the lower echelon animation work is produced (Lewis, 2018), which continues to put downward pressure on the wages of the lowest level domestic animators in Japan. A majority of the research did not look at the labor or wages of the animators of the overseas subcontracting regime, Tschang's (2010) description of the organization of labor in Toei Animation's

Philippine studio is reminiscent of its previous corporate iteration's domestic labor regime from the 1960s, which was organized around permanent workers and in-house training, with a stratification of wages based on skill and seniority. One of the most fascinating aspects of this overseas production network would be the historical development of the South Korean animation industry, which was not simply a site of commercial subordination; parallel South Korean animation was made using the creative assets produced for Japanese animation and consisted of movies that were celebrations of South Korean nationalism (Choo, 2014). The distinct lack of information regarding animation outsourcing to Vietnam is surprising, with research merely amounting to entries of Vietnamese studios a popular English language anime-oriented news website (ANN).

This report also explored literature that gave a greater understanding of the economic and social organization of Japan in a national context, which highlighted the precarity of women workers and young workers entering a field of employment that is similar to the structure of the domestic Anime industry: Heavy reliance on subcontracting and non-regular workers to resolve labor shortages at the cheapest possible price (Gordon 2017; Hommerich, 2012; Sugimoto, 2010). Lewis' (2018) focus on government legal structures that enable exploitation of women workers within the industry points to a larger framework of structural inequality within Japanese society. This historical inequality has only been highlighted within the past thirty years through Japan's post-bubble media discourse as a disparity society; but it has begun to encroach on the locus of Japan's national employment structure, the population of male workers with regular employment. This disparity continues to be exacerbated by government policy concerning taxation and

labor laws, resulting in weakened redistributive functions (Inoue, 2017; Kojima, 2017; Sugimoto, 2010). Gordon (2017), Hommerich (2012), and Allison (2009) discuss the labor restructuring that occurred, observing the dual structure of Japanese labor split between regular employment, a form of employment in which workers are employed full time and receive company benefits, and non-regular employment, which consist of workers who face temporary, insecure employment. This non-regular labor force was 38% of the employed labor force in 2014 (Gordon, 2017). Though labeled non-regular, the duties and hours of these workers is virtually the same as those within the sphere of regular employment but earn lower wages and are stifled in terms of career advancement by their firms. (Gordon, 2017; Sugimoto, 2010).

Analysis

This report analyzes the aspects of Lazzarato's self-management within animators, Hardt's three facets of immaterial labor embodied within the production of anime, Pang's intensifications of contradictory logics between the artist genius and the industrial worker, and Pang's concept of the Marxist creative chain of production. This report recognizes four strands of self-management that draw in consumers and retain them as animators. The first strand is the intense affect animators feel for the intellectual properties that they consume, being attached to the otaku subculture, as well as the affect for the properties they personally animate. Mori (2011) shows this strand of self-management through the explanation for their initial acceptance of meager wages upon entry into the industry as an animator and can also be seen through the participation of members of multiple creative

industries, including animators, at fan events like Comic Market (Tamagawa, 2012). The second strand is the need to for animators to maintain their material conditions, a requirement of all individuals living in advanced capitalist societies. To meet these requirements of subsistence, animators must bear heavy workloads under the fee-for-service scheme (Morisawa, 2015) until they can move up the creative hierarchy or leave the industry due to physical work-related illness (Clements, 2013), mental and emotional burnout (Okeda, 2010; Mori, 2011; Oguma, 2017), or a total depletion of financial resources (Lewis, 2018). The third strand is what Pang (2009) refers to as ‘peer regard’, from which develops meritocratic network and hierarchy that exists among industry professionals (Mihara 2018, Yamamoto, 2010). To obtain continual employment, low level animators must produce consistent high-quality work. The animators, along with the rest of the production staff work on short term temporary contracts and are judged primarily by the work the produce. The final strand regards time. Due to the way in which labor is divided in the industry because of the requirements of weekly broadcasts, low level animators are not supplied with enough frames per single episode of animation that they are able to subsist on a single series alone (Oguma, 2017; Ristola, 2016). This forces animators to juggle work from multiple productions, which air concurrently in the same broadcast cycle for just the possibility of subsistence. The animator is forced to carry a heavier load on multiple productions due to time management issues on each of the production lines, which can force animators to work for up to twelve to eighteen hours a day to ensure an episode makes its broadcast time (Mori, 2011).

While Hardt developed three facets of immaterial labor, the production of anime seems to embody each of them. (1) Animation production is an informatized industrial process which is represented by its extremely short life-cycle. Production committees can quickly capitalize on the popularity of intellectual properties from lower labor cost creative sources with a pre-created media mix, such as the *Melancholy of Suzumiya Haruhi* ecosystem that Steinberg (2012) mentions. The minimum number of episodes in a production order is 12-13 running weekly episodes in three-month blocks, the fastest and cheapest way to gamble for a successful return. This rush to cash in on new trends in creative works takes a toll on animators though; forcing them to work on timetables in which episodes must be completed in 4-5 weeks (Sevakis, 2018). The remaining facets (2) the creation and codification of symbols, and (3) the creation and manipulation of real or virtual affect collapse into one another. This can be viewed through Azuma Hiroki's (2007) theories concerning Otaku subculture; this culture emerged from the disintegrating grand narrative of an all-encompassing economic middle class in Japan, delivered through the modern patriarch of the salaryman, which was powered by a culture wholly unique from the rest of the world. Azuma (2007) points towards the end of the cold war and the advent of the internet to the fall of this grand narrative, which this report does not refute, but also seeks to include the alteration of traditional social ties, such as the three-generation household (Hommerich, 2012), and the erosion of the modern social ties of the nuclear family and the corporation in following Japan's 1991 economic recession (Allison, 2009). Without these social supports, the otaku creates new ones through the virtual affects of a multitude of different fictional characters. These characters are used to develop an identity,

which can then connect with like-minded individuals to form communities that relish in the actualization of their identities through material objects wholly unconcerned with social and political matters (Galbraith, 2009; Azuma, 2007).

The strands of Lazzarato's self-management, as well as overseas subcontracting in South Korea, China, Taiwan, The Philippines, and Vietnam are sites of Pang's (2009) intensification of contradictory creative logics: both the drive for material sustenance and artistic satisfaction/advancement within the creative hierarchy subsume the animators' subjectivity within the logic of the artist-genius, while carrying out the logic of the effaced industrial worker. The differentiation of intellectual property in media-mixes can be understood through Azuma's (2007) social theory of databasification which helps to explain anime within Pang's (2009) conception of the creative chain of production: Characters' attributes are drawn from an ever-growing community 'database' of affects, derived from previous intellectual property, developed in a way to maximize the intensity of affect. The affect felt for a character is not a result of their narrative or background story, but an amalgam of these tropes and attributes to elicit an intense, affective outburst; this creative work is Pang's (2009) immaterial labor, or (CL1). Once an intellectual property with these characters becomes popular enough, publishers will form production committees to place an order from a primary contractor to be animated. It is here that the material side of creative labor, (CL2), is manifested as subcontracting work that low level domestic Japanese animators perform, as well as the animators who belong to the overseas subcontracting production network.

While this report's theoretical framework highlights the modality of labor organization that Japanese animators exist within and are subsumed by, it is inadequate in exploration past the local/national context. The marriage of liberal policies of subjective freedom with the traditional constraints of Japanese gender roles can be explained through Aihwa Ong's (2007) understanding of neoliberalism. Viewed as a technology that can be customized to fit any spectrum of political state apparatus, it is used to govern populations through self-management in the context of each specific state depending on the assemblages, or dispositifs that the individual state's power is built upon in the pursuit of profit maximization within its purview. Government labor, social, and tax policies since the 1980s operating for profit optimization through all aspects of life led to the collapse of previous networks of social relations, plus the development and creation of segmented markets for niche consumer goods helped to create the sociality of the otaku subculture as it exists today; individuals subsumed by capital, who develop an intense connection with an expanding multitude of virtual characters through commercial purchases which acts as a source of support and identity in place of the traditional social relations of friends, family, and work. This connects to Hardt's (1999) observance of the affective face of immaterial labor as a biopolitical force from below is manifest within otaku subculture, but as a biopolitical force in alliance with Ong's (2007) mobile technology of neoliberalism.

Conclusion

Through the course of my research this report has discovered the exploitative practices that animation studios and production committees have used to extract value from

animators and consumers since the inception of the Japanese animation industry which continue to persist through to present day, utilizing autonomist Marxist theories on the postmodern reconfiguration of labor as well as Aihwa Ong's conception of Neoliberalism. This theoretical framework highlights the ideological underpinnings that have convinced both creative worker and consumer to accept the structural exploitation of animators within the industry, the emergence of commercial fan cultures due to social alienation, the role members of commercial fan cultures play in propagating exploitation through the act of consuming, and the asymmetrical power that combinations of capitalist entities, as well as consumers, have in industries with no collective bargaining. It also points to the discriminatory practices that women have faced in the anime industry historically, and Japan as a whole, which is similar to neoliberal trends globally that have led to the continued marginalization of women's labor. As an individual who sees themselves as immersed within this commercial fan culture, I see this project as my first step towards helping to shift the industry towards compliance to international labor standards concerning gender, age, and standard of living for low level animators; towards creating a strong organization of collective bargaining that can fight against worker exploitation; and towards broad acknowledgement of this form of limited animation as not a uniquely Japanese cultural product, but a global creative creation through its production, distribution, and consumption.

References

- Allison, A. "The Cool Brand, Affective Activism and Japanese Youth." Edited by Shunya Yoshimi. *Theory, Culture & Society* 26, no. 2–3 (March 2009): 89–111. <https://doi.org/10.1177/0263276409103118>.
- Allison, A. (2006). *Millennial monsters: Japanese toys and the global imagination* (Vol. 13). Univ of California Press.
- ANN (n.d.) Nam Hai entry in ANN Encyclopedia. Retrieved from: <https://www.animenewsnetwork.com/encyclopedia/company.php?id=11316>
- ANN (n.d) Son My entry in ANN Encyclopedia. Retrieved from: <https://www.animenewsnetwork.com/encyclopedia/company.php?id=12564>
- The Association of Japanese Animators. (2016). Anime Industry Report 2016. Retrieved from: <http://aja.gr.jp/english/japan-anime-data>
- Asao, Y (n.d.). Overview of Non-regular Employment in Japan. The Japan Institute for Labour Policy and Training. Retrieved from: http://www.jil.go.jp/english/reports/documents/jilpt-reports/no.10_japan.pdf
- Azuma, H., LaMarre, T., Furuhata, Y., & Steinberg, M. (2007). The Animalization of Otaku Culture. *Mechademia*, 2(1), 175–187. <https://doi.org/10.1353/mec.0.0023>
- Clements, J. (2013). *Anime: A history*. Palgrave Macmillan.
- Condry, I. (2013). *The soul of anime: Collaborative creativity and Japan's media success story*. Duke University Press.
- Choo, K. (2014). Hyperbolic Nationalism: South Korea's Shadow Animation Industry. *Mechademia* 9, 144-162. University of Minnesota Press. Retrieved May 1, 2018, from Project MUSE database.
- Denison, R. (2011). Transcultural creativity in anime: Hybrid identities in the production, distribution, texts and fandom of Japanese anime. *Creative Industries Journal*, 3(3), 221–235. https://doi.org/10.1386/cij.3.3.221_1
- Eng, L., ITO, M., OKABE, D., & TSUJI, I. (Eds.). (2012). *Fandom Unbound: Otaku Culture in a Connected World*. Yale University Press. Chapter 7. Anime and Manga Fandom as Networked Culture Retrieved from <http://www.jstor.org/stable/j.ctt1npg9q>
- Galbraith, P. W. (2009, October 31). Moe and the Potential of Fantasy in Post-Millennial Japan [Text]. Retrieved April 9, 2018, from <http://www.japanesestudies.org.uk/articles/2009/Galbraith.html>

Gordon, A. (2017) New and Enduring Dual Structures of Employment in Japan: The Rise of Non-Regular Labor, 1980s–2010s, *Social Science Japan Journal*, Volume 20, Issue 1, 1 February 2017, Pages 9–36, <https://doi.org/10.1093/ssjj/jyw042>

Hardt, M. (1999). Affective Labor. *Boundary 2*, 26(2), 89-100. Retrieved from <http://www.jstor.org/stable/303793>

Hommerich, C. (2012). The advent of vulnerability: Japan’s free fall through its porous safety net. *Japan Forum*, 24(2), 205–232. <https://doi.org/10.1080/09555803.2012.671842>

Hu, T. Y. G. (2010). *Frames of anime: Culture and image-building* (Vol. 1). Hong Kong University Press.

International Labor Organization. (2016) Sectoral Studies on Decent Work in Global Supply Chains: Comparative Analysis of Opportunities and Challenges for Social and Economic Upgrading. Sectoral Policies Department, International Labor Office – Geneva, retrieved from: http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_485367.pdf

Ito, K. (2005), A History of *Manga* in the Context of Japanese Culture and Society. *The Journal of Popular Culture*, 38: 456-475. doi:[10.1111/j.0022-3840.2005.00123.x](https://doi.org/10.1111/j.0022-3840.2005.00123.x)

Kacsuk, Z. (2016) From “Game-Life Realism” to the “Imagination-Oriented Aesthetic”: Reconsidering Bourdeiu’s Contribution to Fan Studies in the Light of Japanese Manga and Otaku Theory. In *Kritika Kultura* . 2016, Issue 26, p274-292 retrieved from: <https://journals.ateneo.edu/ojs/index.php/kk/article/view/KK2016.02615/2083>

Kojima, S., North, S., & Weathers, C. (2017). Abe Shinzō’s Campaign to Reform the Japanese Way of Work, 17. *The Asia-Pacific Journal: Japan Focus*

Kim, J. Y. (2014). South Korea and the Sub-Empire of Anime: Kinesthetics of Subcontracted Animation Production. *Mechademia* 9(1), 90-103. University of Minnesota Press. Retrieved November 29, 2017, from Project MUSE database.

Lamarre, T. (2013). Cool, Creepy, Moé: Otaku Fictions, Discourses, and Policies. *Diversité urbaine*, 13(1), 131. <https://doi.org/10.7202/1024714ar>

Lasseter, J. (1987). *ComputerGraphics*, Volume 21, Number4, July 1987, 10. Retrieved from: <https://courses.cs.washington.edu/courses/cse457/02au/projects/animation/lasseter.pdf>

Lazzarato, M. (1996). Immaterial labor. *Radical thought in Italy: A potential politics*, 1996, 133-47.

Lewis, D. W. (2018). Shiage and Women’s Flexible Labor in the Japanese Animation Industry. *Feminist Media Histories*, 4(1), 115–141. <https://doi.org/10.1525/fmh.2018.4.1.115>

- Mihara, R. (2018) Involution: a perspective for understanding Japanese animation's domestic business in a global context, Japan Forum, DOI: [10.1080/09555803.2018.1442362](https://doi.org/10.1080/09555803.2018.1442362)
- Mori, Y. (2011). The Pitfall Facing the Cool Japan project: The Transnational Development of the Anime Industry under the Condition of Post-Fordism. *International Journal of Japanese Sociology* 20. Doi:10.1111/j.1475-6781.2011.01146.x
- Morisawa, T. (2015). Managing the unmanageable: Emotional labour and creative hierarchy in the Japanese animation industry. *Ethnography*. 16(2) 262-284. <https://doi.org/10.1177/1466138114547624>
- Nishino, N. & Kawabe, Satoshi. (2011). Game Theoretic Analysis of Production Structures in the Japanese Animation Industry: Comparison of Conventional and production Committee Systems. APMS 2011, IFIP AICT 384, 99-106.
- Oguma, E. (2017). An Industry Awaiting Reform: The Social Origins and Economics of Manga and Animation in Postwar Japan. *The Asia-Pacific Journal: Japan Focus*. 15(9).
- Okeda, D. & Koike, Aki. (2010). Working conditions of animators: The real face of the Japanese animation industry. *Creative Industries Journal* 3(3), 261-271. Intellect Ltd Practitioner's Papers. Doi: 10.1386/cij.3.3.261_1
- Ong, A. (2007), Neoliberalism as a mobile technology. *Transactions of the Institute of British Geographers*, 32: 3-8. doi:[10.1111/j.1475-5661.2007.00234.x](https://doi.org/10.1111/j.1475-5661.2007.00234.x)
- Ortabasi, M. National History As Otaku Culture: Satoshi Kon's Millenium Actress. Chapter 13. Macwilliams, Mark W., and Mark W. MacWilliams. *Japanese Visual Culture : Explorations in the World of Manga and Anime*, Routledge, 2014. ProQuest Ebook Central, <https://ebookcentral.proquest.com/lib/csumb/detail.action?docID=1900027>.
- Otsuka, E. (2010.). "Ōtsuka Eiji and Narrative Consumption: An Introduction to 'World and Variation,'" in *Mechademia* 5 (2010).
- Pang, L. (2009). The Labor Factor in the Creative Economy: A Marxist Reading. *Social Text* 99. Vol. 27, No. 2. Summer 2009. 55-76. DOI: 10.1215/01642472-2008-022
- Ristola, J. (2016). Blood, Sweat, Ink, and Tears: Exploitation of Labour in the Japanese Animation Industry. GLRC Graduate Student Symposium, October 27-28, 2016.
- Schodt, F.L. (2012) *The World of Japanese Comics, A Thousand Million Manga*. New York, Kodansha USA. Pg. 12-27
- Sevakis, J (2018). Answerman: How Long Does An Anime Episode Take To Make? Anime News Network. Retrieved from: <https://www.animenewsnetwork.com/answerman/2018-03-16/.129066>

Shin, I. (2017). Inequality and Precarity in Japan: The Sorry Achievements of Abenomics, 13. *The Asia-Pacific Journal: Japan Focus*

Sugimoto, Y. (2010). Class and Work in Cultural Capitalism: Japanese Trends 文化, 13. *The Asia-Pacific Journal: Japan Focus*

Steinberg, M. (2006). Immobile Sections and Trans-Series Movement: Astroboy and the Emergence of Anime. *Animation: an interdisciplinary journal*. 1(2), 190-206. Sage Publications. <https://doi.org/10.1177/1746847706068903>

Steinberg, M. (2012). *Anime's media mix: Franchising toys and characters in Japan*. U of Minnesota Press.

Tamagawa, H., ITO, M., OKABE, D., & TSUJI, I. (Eds.). (2012). *Fandom Unbound: Otaku Culture in a Connected World*. Yale University Press. Chapter 5. Comic Market as Space for Self-Expression Retrieved from <http://www.jstor.org/stable/j.ctt1npk9q>

Tschang, T. (2004). Production and Political Economy in the Animation Industry: Why Insourcing and Outsourcing Occur, 22

Tschang, F. T., & Goldstein, A. (2010). The Outsourcing of "Creative" Work and the Limits of Capability: The Case of the Phillipines' Animation Industry. *IEEE Transactions on Engineering Management* , 57 (1), 132-143.

United Nations Educational, Scientific, and Cultural Organization, EY, & The International Confederation of Authors and Composers Societies. (2015) *Culture Times: The first global map of cultural and creative industries*. International Confederation of Authors and Composers Societies, 2015. Retrieved from https://en.unesco.org/creativity/sites/creativity/files/cultural_times_the_first_global_map_of_cultural_and_creative_industries.pdf

United Nations Conference on Trade and Development (2008). *Creative Economy, Report 2008: The Challenge of Assessing the Creative Economy: towards Informed Policy Making*. United Nations, 2008. Retrieved from: http://unctad.org/en/docs/ditc20082cer_en.pdf

Whitaker, H., Halas, J., & Sito, T. (2009). *Timing for Animation*. Elsevier/Focal Press. Retrieved from <https://books.google.com/books?id=QdOZkS6eJl8C>

Yamamoto, K. (2010). The Agglomeration Structure of the Animation Industry in East Asia: A Case Study of Tokyo, Seoul, and the Shanghai Region. *The Science Reports of the Tohoku University, 7th Series, Geography*. Volume 57. Retrieved from: https://tohoku.repo.nii.ac.jp/?action=pages_view_main&active_action=repository_view_main_item_detail&item_id=11739&item_no=1&page_id=33&block_id=38