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(De)Humanized Androids as Monsters in Garland's *Ex Machina*

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Abstract

Ex Machina (2015) is a postmodern Gothic sci-fi movie by Alex Garland, implicitly illustrating the workings of humanization, dehumanization, and marginalization through its android character Ava. Ava's interaction with people reveals humanity's biased perspectives and problems. She enables the audience to see that inorganic anthropomorphic bodies mimicking human behaviors and cognitive skills converge on humans and become strangely humanized. Yet creating uncanny sensations in humans, these bodies become a new group of "others" who belong outside the boundaries of humanness so much so that they exist on the threshold of monstrosity. Furthermore, due to their anthropomorphic appearance, they cannot avoid human hierarchies of race and gender. However, once they become perceived as humans, they learn to use human methods to survive including the wicked ones. *Ex Machina* thus demonstrates that the process of dehumanization not only creates injustices to dehumanized groups but results in the dehumanization of those that apply it to Others, for it is they that become "less than human" by their inhumane acts.

Keywords

Gothic
Science Fiction
Ex Machina
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About Article

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Garland'ın *Ex Machina* Adlı Eserinde Canavarlaştırılan İnsan(dışı)laştırılmış Androidler

Özet

Ex Machina (2015), android karakteri Ava aracılığıyla; insanlaştırmanın, insanlıktan çıkarmanın ve marjinalleştirmenin işleyişini ortaya koyan, Alex Garland tarafından yönetilmiş bir postmodern Gotik bilimkurgu filmidir. Ava'nın insanlarla etkileşimi, insanlığın önyargılı bakış açılarını ve sorunlarını ortaya çıkarmaktadır. Ava, insan davranışlarını ve bilişsel becerileri taklit eden inorganik antropomorfik bedenlerin insanlarla birebir benzeştiğini ve garip bir şekilde insanlaştığını izleyicilerin önüne serer. Fakat bu bedenler, insanlarda tekinsiz duyumlar yaratarak, insanlığın sınırlarının oldukça dışına ait olan yeni bir "ötekiler" grubu haline gelirler ve varlıklarını ancak canavarlığın sınırlarında sürdürürler. Ayrıca, antropomorfik görünümleri nedeniyle insan ırk ve cinsiyet hiyerarşilerinden kaçamazlar. Ancak, insan olarak algılandıkları anda, hayatta kalmak için, kötücül olanlar da dahil, insani yöntemleri kullanmayı öğrenirler. Bu süreçte insanlıktan asıl çıkmış olanların bu kötücül örnekleri onlara öğretenler olduğu ortaya çıkar. Böylece, *Ex Machina*, insandışılaştırma sürecinin sadece insanlığın dışına itilmiş gruplar için adaletsizlikler yaratmadığına, Öteki'ler yaratarak onları insanlığın dışına itenlerin insandışılaşmasına yol açtığına işaret etmektedir çünkü insanlık dışı eylemleriyle "daha az insan" haline bürünenler aslında bu kişilerdir.

Anahtar Kelimeler

Gotik
Bilim Kurgu
Ex Machina
Alex Garland

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Introduction

Ex Machina (2015) is a movie by Alex Garland, which is, on the façade, about the testing process of an android Ava, created by a scientist named Nathan Bateman. However, at its gothic depths, the movie offers controversial perceptions on humanness and otherness and a unique critique of social norms and monstrosity.

The story begins with Caleb, an employee at Nathan's company, winning a special prize to stay in Nathan's private estate where he does scientific experiments. It is gradually revealed that Caleb is there to be a part of somewhat a Turing Test in which he needs to interact with Ava, a robot with a complete human face but a body yet uncovered with human-like skin. In time, Ava gradually humanizes her appearance further with clothing, hiding most of her visible robot parts and becoming indistinguishable from humans. Meanwhile, Ava mimics human seductiveness and manipulation so perfectly that Caleb starts developing romantic feelings towards her. At some point Caleb becomes so attracted to Ava that he collaborates with her to free her, believing that she is a captive, the act of which alone totally humanizes Ava. In the end, aware of Caleb's plan all that time, Nathan announces to him that thus far Ava has been taking advantage of him to escape. However, Nathan cannot stop the long-started plan from being executed. Finally, with her totally humanized body, Ava escapes the facility to be lost among other humans.

The movie, with its complicated layers, brings a number of different but interrelated social critiques into matters of monstrosity, dehumanization, and otherness. With the intrusion of the Gothic not-quite-human Ava into the human domain, humans throw off their masks and reveal that humanness is not something to be revered as it is displayed. The movie strongly suggests that the most monstrous acts are performed by humans, not Others. Ava serves as a means of shedding light on not only how humans discriminate against and disdain non-human Others but also how they tend to hierarchically categorize human individuals. Moreover, the movie complicates and problematizes the concept of humanness, which is demonstrated to have no clear-cut definition. Ironically, it is Ava, the monsterized android, who reveals the true monstrosity that informs human perceptions. All things considered, Ava's story brings a direct criticism to biases operating behind social norms. By drawing attention to the concepts of dehumanization through Gothic not-quite-humanness, this paper aims at demonstrating via the movie *Ex Machina* the extension of monstrosity and otherization to androids. Historically, non-human animals, non-whites, women, and non-Europeans have all fallen under the category of the Other and the monster. While *Ex Machina* introduces a new category to these otherized and monsterized beings, namely androids, it also complicates, problematizes, and undermines the categorical differences between humans and non-humans as mere habits of heart and social constructions.

(De)Humanization and Androids

Simply put, dehumanization is "The denial of full humanness to others" (Haslam, 2006, p.252). It has been so dynamically conceptualized that it has been applied to a wide range of beings that look and/or act differently than humans such as animals to automata (252-258). Furthermore, the dehumanization process denies Others' emotive capacities, for only humans can possess "secondary, or complex, emotions such as pride, guilt, and remorse" (Over, 2020, p.4). It is, in other words, a practice of considering the Others as not-quite-human or less-than-human, seeing them as lacking in "essentially human" physical and mental capacities and

characteristics. Haslam and Loughnan indicate that there are at least four theories of dehumanization (2014, p.402), and research into this relatively new field is developing as we speak, continuing to find new ways to theorize "what is thought to be 'missing' when a group is considered less than human" (Over, 2020, p.4).

Dehumanization requires a dominant social group determining its codes and norms. By placing itself at the top, the dominant group becomes the reference in defining social hierarchies and privileges. On many occasions, as its values become norms, it defines itself as the epitome of the human model. In the Western world, this norm-setting full human figure is often regarded as no other than the white man (Rothschild, 1989, p.98), and the rest are considered as outer rings around the white man, occupying differing lower positions relative to their proximity to him. In other words, minorities, outcasts, or anyone considered outgroup members always face dehumanization. They simply are perceived as less-than-humans who fail to meet the definition of the ultimate human of the West. These *creatures* are defined by the lack of some human traits and feelings.

Evidently, racial profiling, ethnicity, and gender play a crucial role in determining the ultimate human standards. However, they are not the only determinants in defining the qualities of full humanness because ingroups are countless and different circumstances trigger different values to prevail. For instance, sexual orientation, class, criminality, etc., may sometimes be taken into consideration as determinant qualities of full humanness (Haslam & Loughnan, 2014, p.408). All in all, there must be a high standard set by ingroups to determine the ultimate values of human hierarchies. Anything other than this full-human can potentially become dehumanized as an Other. The most prominent example of dehumanization in Western society is the one experienced by minority ethnic groups, who may become dehumanized due to their racial and cultural differences. Similarly, women may sometimes be dehumanized by patriarchy as "lacking human nature" (408). Likewise, working-class people might as well be dehumanized because their social and economic failure is assigned to their lack of mental and social capacities. As such, examples of dehumanization are endless and extremely common because in societies where hierarchies and categorizations exist, it is inevitable that Others, people with undesired characteristics, or outcasts, will also exist.

Dehumanization stems from the concepts of ingroup superiority and outgroup inferiority. Regardless of who they are, those who are perceived as Other people are naturally not associated with ingroup people. Whatever qualities by which the dehumanizing ingroup people define themselves should most likely be lacking in the dehumanized Others: If ingroup members are intelligent, Others are doomed to be perceived as short of intelligence; if ingroup are humane, Others must seem closer to be inhumane; if ingroup are humans, Others shall be a form of a beast, some kind of monster, less-than-human. For being perceived as less-than-human, the inferior naturally becomes exposed to discrimination, segregation, xenophobia, and any other type of otherization one can think of. Attributing no dignity to the inferior, the superior oftentimes resort to these practices and leave those Others outside the protection of moral responsibility. Thus, the superior "presumably justify the exclusion of outgroups from moral consideration, facilitating inhumane acts of discrimination such as genocide and/or slavery" (Costello & Hodson, 2009, p.4). Obviously, the superior's inhumane behavior is a direct result of the dehumanization of the Other. While doing this, however, they lose their human qualities such as compassion, empathy, and pity. This is probably one of the most ironic dilemmas of dehumanization, questioning the human(e) status of the dehumanizer.

Setting categories, such as *humanness* causes further binaries to be formed. A human requires the non-human, such as the animal or the machine, or even rarely the plant. Not-quite-humanness is a category involving randomly established lesser degrees of humanness, *mostly* amalgamated with animality or machinery. Subhuman, for instance, is a form of not-quite-humanness verging on animality. Cyborg, on the other hand, is a part human, part machine amalgamation of not-quite-humanness. However, not-quite-humanness is not limited to such categories. There are essentially non-human entities such as androids, which/who are anthropomorphic robots capable of imitating human behaviors. In the real world, they might not be perfectly advanced to mimic humans *yet*, but in science fiction, they are portrayed as so fully endowed with human qualities that one cannot distinguish a biological human from an android, which might be a foreshadowing for a future yet to come. The question then is where to locate them in the human and not-quite-human hierarchy and what criteria to employ in determining this location.

A possible answer to this question can be found in binaries of humanization and dehumanization, the former constituting the counter force against the latter. For example, androids are made so human-like that they can function more and more as humans do. In about the last twenty years, not only are they given anthropomorphic bodies and human faces, but are also programmed to *act* and *behave* like humans so much so that they show emotional responses increasingly closer to those of humans (Giger et al., 2019, p.111). They are expected to fulfill not just the hard labor work but also the complex operations that require high qualifications such as surgeries. They have in fact become *the* machines with which humans can interact in uniquely human ways. In a way, they have become "humans," for humans humanize them in a dramatically increasing way. Yet, upon humanization, they might face dehumanization.

Androids hold an extreme position in their convergence to humanness. With cyborgs, they converge with humans from a different direction than subhumans. Whereas subhumans are animal-human amalgamations, cyborgs, somewhat similar to the androids, are machine-human hybrids. Androids, however, are not essentially humans, but cyborgs are. In other words, cyborgs are upgraded human beings with embedded machine works, while androids are robots who do not necessarily have organic embeddings. Despite lacking organic parts, androids are humanized due to their capacity to imitate humans in form and behavior, "including the display of humanlike cognitive and emotional states" (Giger et al., 2019, p.111).

Notwithstanding their humanization, androids are treated as not-quite-humans, next to cyborgs or subhumans, potentially pictured or perceived as Others. Thus, despite their constituted humanness, androids are denied a place among the definitions of humanness.

Theoreticians and Andriod Otherness

Since the field of robotics is relatively new and the involvement of other fields in this area is still developing, there are theories coined by various researchers as we speak, trying to explain why people are prone to show negative reactions to humanized androids. It is worth mentioning some of the most prominent and pertinent theories to date, giving insight about how humanized androids are intended to stay not-quite-humans.

First of all, Masahiro Mori and his long-debated essay, "The Uncanny Valley" deserves mention, explaining why the humanlike androids trigger a feeling of uncanniness. Mori indicates that as robots become more human-like, they cause in humans an "eerie sensation"

towards them (2012, p.99). He exemplifies this situation with humans' interaction with a "prosthetic hand" in motion. He claims that once people become aware of the *imperfection* of the hand, they feel uneasy and possibly "startled" as it has no familiar life inside despite its "quite human-like" mimicry. As a result of such interaction with that inorganic cold hand, something at once familiar and unfamiliar, "we lose our sense of affinity, and the hand becomes uncanny" (99). Yet, the hand here is just an example, and this very reaction is likely to appear through interaction with anything that converges with humans. According to Mori, this is a reaction people show as "self-preservation" (100), which could be, in this case, the result of experiencing a suspenseful sensation for being unable to maintain an empathetic connection with a not-quite-human, an android that is more or less human. Thus, in order to preserve themselves from alien entities, humans demarcate their boundaries against their convergent not-quite-human agents and eventually cast them away.

Mori does not satisfactorily clarify the underlying reasons behind uncanniness, so the validity of his approach is still being questioned. This explanation is provided by Keysers, who extends Mori's approach to uncanniness and relates it to disgust. He correlates disgust to avoiding the threat, specifically of pathogens, and indicates that "the perceived imperfections in a human replica elicit disgust because the pathogen avoidance mechanism 'interprets' these defects as harbingers of transmissable diseases" (Wang, Lilienfeld & Rochat, 2015, p.395). Such avoidance and detestation of the uncanny allow humans to extricate themselves from what they are not. In the case of encountering androids, humans take refuge in their "ability to 'impute animacy'" (Eberle, 2009, p.177) and concentrate on being full of life and being organically alive rather than being successful at imitating humans. For this reason, coming across perfectly humanized robots causes humans to falter about their own identity. In other words, such interaction would call into question what it means to be a human. Therefore, androids *must* represent being something humans are not, such as being inanimate and inorganic.

Approaching androids as something we are not, nonetheless, recalls the Kristevan concept of abjection, the distasteful sensation, the dramatic reaction of the self, witnessing the collapse of categorizations and coherency of clean-cut definitions. As a consequence of such collapse, one loses "the distinction between subject and object or between self and other" (Felluga, 2015, p.3). Kristeva elucidates it with the aversion felt upon seeing a corpse. With that sensation, the mechanism of self-preservation becomes triggered, and the corpse becomes a reminder to its beholder that s/he is alive as a subject. Traumatically, however, the corpse too was alive once upon a time, has now turned into a disgusting abject, that is, "neither subject nor object" (Kristeva, 1982, p.1). Kristeva, says that "corpses show me what I permanently thrust aside in order to live" (3). There, the corpse, which is supposed to *be on the opposite side*, breaks free from the threshold and threatens the beholder's "condition as a living being" (3). Abject, then, causes the self to be traumatized as s/he falters about distinctions and categorizations, realizing an in-between state where the borders between being dead or alive, subject or object become lost. Thus, the abject must be kept away from the self in order to remain to function and to avoid ambiguity. The abject, in that regard, is "what disturbs identity, system, order" (4). Having some qualities of humans and machines simultaneously, humanized androids, likewise, represent a type of abjection and challenge the categories and definitive boundaries of the self.

To sum up, Mori's approach focuses on the uncanniness of androids, indicating that humanized androids are both familiar and unnerving for humans because of their liminal position between human and non-human. Keysers further strengthens this idea of uncanniness through connecting it with the potential feeling of disgust against such humanized androids. All in all, the more androids become humans, the more awkward humans feel about them. Androids, in that regard, share the perception of other not-quite-humans. In various fictional stories globally, for instance, people come across similar uncanny reactions portrayed by humans when they interact with other (traditional) not-quite-humans such as vampires or lycanthropes; and the same applies to humanized androids. Common to all not-quite-humans (Others) is the disturbance and uncanny feeling caused by their human likeness. Thus, humans tend to stay away from and interact with such entities. Humanized androids may, in other words, pose a threat for humans since the more an entity is closer to humans the more abjected it becomes.

The second prominent approach that depicts why people tend to show negative reactions to humanized androids is called the "Mind perception hypothesis". In their research, Gray and Wegner demonstrate that uncanny sensation occurring when interacting with an android "stems from perceiving mind in" them (2012, p.126). In other words, humans attribute to androids not only a "capacity to do" but also a "capacity to feel and to sense" (126). Confirming Mori's approach, they conclude that "we are happy to have robots that do things, but not feel things" (129). Consequently, in order to avoid ambiguity and violation of their category-bound order, humans consistently try to preserve their unique human prerogatives for themselves and refuse to share them with Others.

When such theories are taken into consideration, it becomes evident that since androids' convergence to humanness causes humans identity confusions, the possibility of designing more humanized androids is the essential reason why androids are perceived as potential threats that must be avoided. These not-quite-human or almost-human entities, therefore, might be pictured as the new vampires or zombies of the future, and, representing the fears and horrors of postmodern mankind, they might replace these traditional monsters. In literature and cinema, it is already possible to come across such androids as we speak, which are perceived as monstrous entities that make us feel insecure about our identities and trigger our anxieties about the violation of our norms and order.

The Function of Not-Quite-Humans in the Gothic

Especially in literature and movies, it is now very ordinary to see humanized robots and their interactions with humans. Depending on the genre and tone of the narrative, being not-quite-humans, they are not necessarily pictured as threats or violators. They might, just like any other not-quite-humans such as the animal-human hybrid Master Splinter in *Teenage Mutant Ninja Turtles* (1990) or the human-machine hybrid Robocop in *RoboCop* (1987), be fancy heroes or favorable characters. In the Gothic, however, not-quite-human entities are oftentimes regarded as monsters and threats. Traditionally, Gothic monsters embody various social fears. As monsters not-quite-humans, with their uncanny existence dwelling in obscurity, evocate humans' deepest anxieties. Not-quite-humans, in general, are suitable representations of these anxieties because these uncanny entities possess somewhat human characteristics and make it troubling for us to draw the boundaries of humanness. Because "the Gothic is often concerned with the limits of humanity and its transgression" (Germanà, 2012, p.57), "[it] involves confrontations between us and the uncanny, between us and the other" (Olson, 2011, p. xxvi).

The Gothic stories, with their monsters, bring sometimes implicit and sometimes explicit social criticism because Gothic monsters as Others and abjects play a key role to reveal not only the norms, but also hypocritical and biased attitudes entrenched in society. These monsters direct attention to controversial issues, frequently, sneakily and disturbingly bringing their often-ignored aspects into question since the "Gothic describes a discursive strategy which produces monsters as a kind of temporary but influential response to social, political, and sexual problems" (Halberstam, 1995, p.95). Thus, the Gothic monster is not just a superficial representation, but rather of something that is feared or avoided. It "represents many answers to the question of who must be removed from the community at large" (1995, p.3).

Gothic monsters are almost always not-quite-human characters with their form and/or behavior. They are Others, some entities converging to or diverging from humans or humanness. Nevertheless, they are not always vile or dreadful, at all. Some of these Others are vilified as monsters, usually as soon as society disapproves of their presence within its sphere of influence due to their (often fabricated) norm-violating differences. Regardless of how the monster is perceived, however, it remains as the Other and eventually becomes exposed to various practices of otherization/marginalization. Thus very often, these monsters reveal that the real monstrosity is not necessarily limited to the marginalized. In other words, thanks to Gothic monsters, the ones who otherize prove to be essentially monstrous. This is the underlying recurring criticism in Gothic stories.

Otherization in the form of dehumanization is very common in Gothic stories. Gothic not-quite-humans, regardless of being essentially humans or not, often become exposed to the dehumanization of some sort. Androids, especially those anthropomorphic entities that mimic human emotions almost flawlessly, receive their share from this attitude. In this case, however, the biggest challenge set forth for humans would be how they could differentiate between androids and themselves. In the case of perfectly anthropomorphic androids it might be impossible for humans to detect the Others who live among themselves, blurring the borders of humanness and intermingling categories. Yet once spotted, these androids face the danger of dehumanization. Ironically, it is the humanization of androids that eventually causes their dehumanization. This dehumanization, like all others, originates from the real or imagined violation of a norm set by the dominant. Although such cases of otherization are not very common with androids—because anthropomorphic androids are not yet parts of daily lives, Gothic science fiction provides us with its projections, the movie *Ex Machina* (2015) by Alex Garland, being a case in point.

Otherness, Humanness and Human Hierarchies In *Ex Machina* (2015)

In Garland's movie, of the many android figures, the story focuses mostly on Ava, the almost-perfectly-designed female android, and her interaction with humans. Ava has magnificent cognitive abilities and facial expressions, which make people perceive her as a human at first interaction. Her robot body is gradually disguised to flawless perfection, and thus she automatically becomes completely humanized physically as well. Therefore, it would become next to impossible for laypeople to detect her otherness once she mingles freely with the crowd. Towards the end of the movie, we see the foreshadowing of Ava's possible mingling with humans as she roams outside among people while no one seems to pay attention to her. Even the helicopter pilot who transports Ava to the outside world seems not to sense anything unusual about her. In other words, she is so ultra-humanized that in order for her to fall into

the "Uncanny Valley," people first need to be told of her being a robot. Thus the movie questions how to define human and humanness.

Apparently, Ava's perfect anthropomorphic construction blurs the boundaries of humanness. However, despite Ava's humanized existence, there are people, such as Caleb and Nathan, in possession of the knowledge of Ava's not-quite-humanness. Nathan here is the creator of this uncanny robot, but Caleb is the tester who develops romantic feelings for Ava during his interactions with her.

At first, Caleb seems surprised to see such a humanlike figure. When Ava asks her whether he has seen anyone like her, Caleb says "none like you" (Garland, 2015, 00:13:12), for Ava is something uniquely *different* from other androids. Later, however, we learn that Caleb was chosen deliberately, and Ava is designed with exactly the most suitable female features to Caleb's liking thanks to his monitored internet search history looking for porn. That is why Ava represents a soft spot for Caleb. Moreover, Nathan makes it clear that Ava is implanted an artificial vagina, which would make her—at least seemingly—enjoy sexual intercourse. Ava is also so completely humanized that in order to facilitate her plan to escape, she successfully imitates the ways of a seductress, adding further to Caleb's attraction to her. Eventually, Caleb's more-than-a-robot-human interaction with Ava is revealed to be deliberately pre-planned by Nathan.

Meanwhile, Caleb learns more about Nathan's facility and comes across various *female* android bodies yet to be started and also Kyoko, an android with an Asian physiognomy, whom Caleb initially thinks was a real human abused by Nathan. Eventually, upon being exposed to these androids, Caleb feels uncanny sensations and calls his own humanness into question so much so that he thinks he could also be a robot in this facility. He cuts himself to see whether he is organic or not. Kyoko and especially Ava, are so humanized that they fundamentally destabilize reality and categories in Caleb's mind by making him question *his* humanness and forcing him to confirm his existence via self-harm. In other words, Ava's and Kyoko's human-likeness is so complete that even the people who *know* their android-ness falter about who is a human and who is a robot. This is a nightmare for humans since, on the one hand, making people doubt their own human status destabilizes all the constructed human superiorities upon which Western science, philosophy and religion, in short civilization, rest. It is, on the other hand, an indirect indication that androids are ultimately positioned as Others, and Caleb fears falling into that category because, among other things, it would mean losing his position at the top of human hierarchies as a white male human. In that sense, androids might be perceived as vilified monsters because they *dare* to test the mind of the hierarchically highest ranking human, the norm-setting white male, let alone any other human.

In the end, Caleb confirms his own organic-ness, but becomes so engaged with Ava that he wants to save her from Nathan's facility. His motives may be manifold. On the one hand, it might be because, Caleb sees Ava as a *robotic representation* of an ideal female image of his fantasies, and with a selfish motivation he might want to be the hero to give her her freedom. On the other hand, Caleb's ultra-humanization of Ava might have caused Caleb to empathize with her as a captive and eventually to set her free. However, in both cases, "[Caleb] dismisses the possibility of liberating other female" androids, neither the motionless ones, nor Kyoko, even though he knows that they are also captives like Ava (Musap, 2018, p.410). Furthermore, despite seeing Nathan abuse Kyoko, he does not interfere with her situation at all. Caleb's exclusive care for Ava is traceable to her being the most advanced android that mimics (white)

humanness whereas his apathy towards Kyoko is the result of her lack of one of the most distinguishing human characteristic: possession of language. In that sense, Caleb might just see her as an inorganic and soulless Other and thus cleanse his conscience. Yet another reason for his indifference to Kyoko might be found in Caleb's response to her physiognomy as an Asian woman, who, even as a human, is racially dehumanized and stereotyped, therefore, fit for being a captive and a slave. Nathan's treatment of Kyoko as his sex slave and maid confirms these racial and gender-related biases towards Asian women stereotyped as silent geishas while Ava, an android with a white female physiognomy, is created to interact with "humans." In other words, once Western standards of human hierarchies are taken into consideration, Ava has always been relatively privileged in her own creation. Therefore, seeing Ava as belonging to the same racial profiling with himself might have guided Caleb's motivations to save her. This story, in that sense, "depicts the liberation of Ava, an imprisoned white female robot, and the Asian and black female robots whose abuse, enslavement, and destruction work in the narrative service of Ava's freedom" (Rhee, 2018, p.87). This biased attitude of ignoring or exploiting Kyoko indirectly indicates that human hierarchies exist even when people pretend to be saviors of their chosen downtrodden groups or individuals. Androids here play an important representational role to bring out such biased hierarchies.

Gender and Robots

Creating robots in various racial traits is unusual enough on its own, but just as unusual is creating them by gender. Rather than granting robots race, this is what Caleb questions . In his discussion with Nathan, he says "Why did you give her sexuality? An AI does not need a gender. She could have been a grey box" (Garland, 2015, 00:46:01-00:46:10). In his reply to Caleb, Nathan defends genderization by indicating that "Actually I do not think that is true. Can you give an example of consciousness, at any level, human or animal, that exists without a sexual dimension?" (00:46:10-00:46:17). At first sight the gendering of an anthropomorphic android may seem to help humanize and save it from being considered a non-human Other. Since they are made in the image of humans, it seems perfectly normal to Nathan that they should also come in gendered forms. However, since this will consequently blur the boundaries that define humanness and become a challenge to detect humanized androids once they mix with natural humans, it will eventually cause androids to be perceived as threatening to become humans and their ultimate dehumanization.

What, then, does it serve to create androids as gendered? To humanize or to dehumanize them? In the movie, humanized androids are obviously captives to be exploited as test subjects, like Ava, or as servants, like Kyoko. While discussing Karel Čapek's play *R.U.R. (Rossum's Universal Robots)*, a somewhat similar robot narrative to *Ex Machina*, Rhee indicates that humans have an innate "propensity for exploiting others," and they tend to dehumanize these Others, that is, "construct otherness *in order to exploit*" them (2018, p.19; emphasis added). Therefore, humanized androids must be dehumanized just so that they could be exploited. In the early stages of *Ex Machina*, this might be the case for Ava because her robot corpus is pretty obvious, and she seems to be deliberately left incomplete or non-human in order to be perceived as an exploitable not-quite-human. However, human exploitation obviously extends to anthropomorphic robots. For example, despite her perfectly humanlike appearance, Kyoko is constantly exploited. One might argue that this is solely because she is designed with an Asian physiognomy. But that does not seem to be the only determinant for such a game of exploitation because even after Ava hides her incompleteness with white skin and clothing,

she is also expected to remain a captive. Keeping in mind that binary logic of gender is also a part of human hierarchies, gendering a robot also places it in the midst of human gender hierarchies. Just like the other androids in the movie, Ava is a woman vulnerable to being dehumanized, exploited, and kept as a captive due to patriarchal society's prevailing gender roles and expectations. This might be the reason why androids in the movie are all females because as Rhee discusses, "the robots' human appearance also signify [*sic*] practices of dehumanization that deny certain humans their humanness" (2018, p.20). Therefore, the exploitation of the female androids might represent the own society's norms of exploitation based on gender. Alternatively, if androids were designed as males, and precisely as white males, it would be the *ultimate* challenge to human hierarchies. To be captives, or to be exploited as servants like Kyoko, the otherness of androids must be openly visible, their perfect human appearance must be deliberately deteriorated/dehumanized. This will also deliver a sense of secureness to humans exposed to them, about the boundaries of humanness.

Thus, bestowing genders, like bestowing race, to androids means exposing them to (gender) categories and so-called hierarchies. Once androids are gendered, they do become humanized, but they also become burdened to assume the gender roles present in society. To a female android, in this case, would be attributed everything related to femininity except fecundity, which is not a capacity desired by her creators anyway. Other than that, they have fully functional female bodies. Ava, for instance, even has an artificial but sensitive female genitalia that enables her to experience intercourse as a woman. Since she is given a female face and body, her sexual experiences reflect the heterosexual norms that dominate patriarchal societies. As such, humanization of androids subjects them to human gender categorizations, norms and expectations. Ava's gendered creation does humanize her, but in society, she and androids like her might be facing the danger of dehumanization and discrimination due to their genders rather than their almost impossible-to-spot robot Otherness.

Alternatively, Musap interprets Ava's creation as a woman as "displaying [the] masculine power" of her creator (2018, p.408). In that sense, Ava's creator Nathan, as a white male, is considered to be the norm-setting full human individual. As a "paragon of masculinity" (408), he boasts the highest-level and unmatchable mind to think, create and rule. Therefore, by creating a female android whom he keeps captive, he performs his superior role in human hierarchies. Above all, as a creator, he declares his godlike status with all his self-legitimized hubris.

To sum up, that all captive androids have female bodies should come as no surprise to viewers especially when their human creator is a male member of a predominantly patriarchal society. In society, it is a fact that androids—once detected—are considered Others. Granting them gender (and race other than white male) would put them into lower subcategories, which might dangerously double and even triple their otherness.

The Vulnerable Yet Manipulative Human

Androids are designed by their creators as entities mimicking humans and humanness. Ava is a wonderful example of this human imitation not only bodily but also mentally. She is programmed algorithmically to capture human reactions and ideas, elaborating on them in order for her imitations to reflect human ways most truthfully. She knows humans so well that she even knows their weaknesses, vulnerabilities and secret agendas, eventually taking advantage of them by sneakily and deliberately misguiding them. Ironically, since she is

programmed to act in human ways, such malicious tactics she resorts to are actually indicators of the behaviors common among humans. That is, she is reflecting back to humans what they do.

In order to reach her purpose to escape the facility, Ava uses certain human tactics manipulating and tricking the people around her. Most interestingly, Ava is familiar with stereotypical female roles, and thus she knows that she can manipulate the opposite sex with seductiveness. In other words, she knows that, to end her imprisonment, she has to be "performing gender" (Musap, 2018, p.406). She tries to seduce Caleb so that she can force him to empathize with her and believe that she is a captive who needs to escape the facility. Ava constantly manipulates Caleb during her meetings with him. She deliberately cuts off the facility's power possibly to deactivate their surveillance by Nathan and talks with Caleb secretly during the power outage without being observed. During those conversations, Ava tells Caleb not to trust Nathan. She earns his trust convincing him that the power outages are not Nathan's test of Caleb's loyalty but her doing in order to facilitate their secret meetings. She seems to be perfectly acting "the damsel in distress" in order to succeed in her goal.

Unaware of Ava's final plan, Nathan mistakenly thinks that "Ava was a rat in the maze and I gave her one way out. To escape, she'd have to use self-awareness, imagination, manipulation, sexuality" (Garland, 2015, 01:24:53-01:25:05). Ava initially seems to make his plan work flawlessly, but she unexpectedly punishes Nathan for standing in her way to freedom, *her goal*, and kills him with the help of Kyoko. She beats her master at his game of manipulation. Yet Ava's manipulative behavior has some justification, for hers is a struggle for survival.

Ava does become successful in escaping thanks to help provided by Caleb, who ends up being the real subject of the test because Ava manages to escape by taking advantage of his weaknesses, manipulating him through sexuality and playing for sympathy. In the end, in order to go undetected outside as a robot, she locks Caleb, the only human who knows her robotness, inside the facility. That she is capable of activating her intriguing and destructive plan reveals the dangerous being she has become. Since she does everything through imitating humans, she might be considered as a projection of the atrocious nature of mankind. In fact, this is a social criticism the film brings through Ava, the Gothic intruder.

Consequently, Ava embarks on her journey in the world among humans as an android undetectably disguised as human. We do not certainly know whether reaching freedom was part of her programming or whether, after meeting Caleb, she developed a taste for merging into human crowds of her own accord. Garland leaves the epilogue in an open-ended fashion. It is also uncertain if she would ever be detected, or what kind of an impact her mingling in the crowd would make. The detection of her robotness, however, would most possibly make humans feel uncomfortable since, regardless of her being harmless or not, humans would then question further what it means to be human. In short, as a not-quite-human, she has been designed as a challenge for the mankind.

Divine Creation and Dangers of Playing God

In an interview Bostrom indicates that "If we create a machine intelligence superior to our own, and then give it freedom to grow and learn through access to the internet, there is no reason to suggest that it will not evolve strategies to secure its dominance, just as in the biological world" (Adams, 2016). In that regard, creating intelligent, self-learning and mobile androids that are indistinguishable from humans such as Ava, and releasing them into the

world, could result in one of the worst-case scenarios—if not the worst. We do not know what the future consequences of creating such intelligent androids yet, but it is likely that something like Ava created perfectly to resemble humans could go out of control and turn monstrous. Therefore, playing God may have catastrophic consequences for humans.

In the movie, Nathan appears to play God since he creates gendered, conscious and functioning androids made in the image of humankind. Caleb confirms Nathan's omnipotent position by saying that "If you've created a conscious machine, it's not the history of man. That's the history of gods" (Garland, 2015, 00:11:10). Nathan, in the end, seems to become punished for undertaking such a role because what he creates kills him in return. Nonetheless, on the one hand, creating such androids might be a glorious scientific achievement, but, on the other, it might also let loose monstrous doom-bringers through the gates of hell.

In fact, recent human history has witnessed catastrophic results of some scientific achievements such as the A bomb, to which the movie indirectly refers a number of times. When commenting on Nathan's accomplishments, Caleb quotes Oppenheimer's—the inventor of the atomic bomb—references from the Sanskrit, who says "I am become death, the destroyer of worlds" (01:06:31). This reference specifically might foreshadow the destructiveness of androids because apparently it is used in the movie to form an analogy between the creation of androids and the atomic bomb. As if confirming Caleb and admitting the gravity of his creation, Nathan then starts quoting a poem from the Gita, which was recited and translated by Oppenheimer (Bird & Sherwin, 2005, p.305). Drunkenly he quotes: "In battle, in forest, at the precipice in the mountains… In sleep, in confusion, in the depths of shame / The good deeds a man has done before defend him" (Garland, 2015, 01:07:25-01:07:55). Repeating the final line a few more times to himself, Nathan seems to be trying to soothe his guilty feelings for creating a machine that has the potential to destroy the world. He knows the possible catastrophic results his work might cause, and thus, murmuring that he did it for the good, he cleanses his conscience. Consequently, he pushes all the blame aside.

Finally, however, Nathan admits his inadvertent complicity in a future where androids reign is indeed striking. He considers that humans are doomed to be supplanted by androids and says, "One day the AIs are going to look back on us the same way we look at fossil skeletons on the plains of Africa. An upright ape living in dust with crude language and tools, all set for extinction" (01:06:10-01:06:27). In fact, humanizing them might give androids the excellent opportunity to supersede human beings in the long run. One must keep in mind that Ava represents only one of the possibilities of android futures. But looking at Ava, one might fear the possibility of manipulative androids using intriguing human tactics without being wholly detected among humans whom they will supplant. This could be the reason why Ava-like androids recall the destructiveness of the atomic bomb to Caleb and Nathan: Both are created by humans, both are neutral on their own, but both end up being destructive.

The viewers do not know the full extent of the destruction Ava may potentially bring to humanity. Granted, Ava did kill Nathan, most probably in order to save herself, and left Caleb to possibly die. However, she has not done anything displeasing in society yet. Garland ends the story in an interpretable fashion. But especially with Nathan and Caleb's anecdotes and with Gothic anxiety dominating throughout the story, it is safe to say that Ava, possibly the new A bomb, embarks on a not-very-pleasing journey.

All in all, Ava, a human creation that copies human behaviors including violence, is ready to use any human means at her disposal. In that sense, she represents the destructiveness of humans, not only because she is a human creation but also she *becomes* a human (as a not-quite-human) with all the attributes of humanity, good or evil.

Conclusion

With its intricately interwoven layers of social criticism, the story of Ava deserves to be counted among the most successful postmodern Gothic stories of our decade. It is safe to say that, in many ways, Ava's is a *critical* Gothic story. Through its not-quite-human android character, it raises a wide array of questions on concepts such as humanity, humanness, destructiveness, dehumanization and otherization.

Firstly, the story makes it obvious that androids, which are so indistinguishable from humans, are to be eventually deemed as destroyers of social codes and norms that define humans, for they make people question what is human. In other words, they show us that the definition or the concept of humanity is loose, arbitrary, and open-ended. If a robot is ultimately humanized and perceived as a real human/person—regardless of its given gender or race, then the supposedly self-defining categories of biological humans lose their loosely held coherence and are revealed to be no more than social constructions.

Secondly, the story makes us realize that social life is filled with categorizations, some of which are covert but ready to surface. Intruding upon the human world, androids, as not-quite humans, cause a tightening of categories, pushing them to the margins as absolute Others, oftentimes to be regarded as uncanny monsters. It is impossible to say whether undetectably humanized androids will be a destructive force for human existence or not; just as they may be the death toll for humanity, they may live without doing any harm to humans. Yet, in case of being spotted, there is no doubt that *they* will be in danger of facing otherization for merely being not-quite-humans. Thus, regardless of the harm they may do, they are prone to become dehumanized and vilified as monsters.

Thirdly, and as a sequence to the second point, androids brutally reveal that categorizations and hierarchies exist among humans themselves, and almost any group categorized as human may be arbitrarily dehumanized. In other words, the categorization faced by androids reveals further social hierarchies among humans. Interestingly, all the androids in the movie are captives, and ironically, all are designed as females, who are already very prone to face otherization and dehumanization by the norm-setting patriarchal order. Not to mention, even the actual servant android is designed as an Asian female. As the outgroup of the Western white, heterosexual, non-criminal male human, all women, especially women of non-white races are always in danger of being dehumanized and regarded as less-than-human. Therefore, depending on who the ingroup is, people such as racial minorities, homosexuals and even females might be dehumanized and otherized in society. Therefore, the androids which are designated in non-white bodies might be in danger of being dehumanized even without being spotted as androids. The choice of captive female (and Asian female) robots, in this case, is not a coincidence because in society, submission and inferiority are rather correlated with females and/or other races.

Fourthly, for humans, androids are simply robots (Others) supposed to exist to serve humans, not to minaciously take over humanness. In this case, the purpose of humans who create such humanlike figures is to exploit them rather than giving them human rights and free will.

Attributing human qualities to a robot and then dehumanizing that anthropomorphic entity via slavery is a concrete revelation of how dynamics in society work: Humans tend to exploit what is perceived as Other or inferior. In this context, androids are merely mediums that enable people to direct their dehumanizing behavior to artificial Others rather than biologically human Others. Otherwise, creating robots in anthropomorphic form is not a requirement for robots to function and serve humans.

Finally, androids, as scientific experiments, may be real danger for the future, potentially able to punish humans, their creators, for playing God. As implied previously, androids, with their intrusion upon the human world, can reveal the deceptiveness of this world and its so-called commitment to values such as equality, solidarity, peacefulness, compassion and dignity, for as soon as androids enter the human social environments all these values are overshadowed by a strong sense of othering and violence employed to keep all otherized beings deprived of human privileges. As such, androids become catalysts to demonstrate that humans are not necessarily benevolent, and humanity is not necessarily a very natural and innocent concept. Humans may be creating destroyers via creating androids, since the robot that converges on humanness might also attempt to imitate it with all its good and bad sides. Hints of such catastrophic tendencies, for instance, can be observed in the references to the atomic bomb in the film. It is possible that by creating androids, humans may actually be creating monsters, but the monstrosity of the android comes not from an outside and alien source but from the humans that they attempt to impersonate. In this context, the monster is not only a human creation but also essentially human. That is, androids, as Gothic (and sometimes vilified) monsters, reveal how destructive and atrocious humans can be.

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