

Ex Machina: The History of the Future

Ex Machina transports us to a time when artificial intelligence becomes more human than machine. While this is an eerie concept that is made all the more pertinent by recent advancements in AI such as voice assistants like Siri and Amazon's Alexa, self-driving cars, and most notably Hanson Robotics' Sophia who bears a jarring resemblance to Ava, it is actually a tale that begins in antiquity. Nathan's creation is a trinity of science, art, and religion that is similar to stories of cultures with reified traditions. As foreign and revolutionary as the creation of Ava may be, *Ex Machina* suggests that the development of artificial intelligence is an extension of historical practices and rituals that are familiar to us today.

We have been replicating the human form in an attempt to spiritualize it for centuries. The human form has become entwined with holy connotations and godlike qualities that make us think about what the essence of being human really is. It has made us explore how we can manipulate our manufactured counterparts to learn more about ourselves:

One seemingly small thing we have forgotten is that the human simulacrum in particular—whether stationary or moving, two or three dimensional, in its contemporary form of children's dolls and puppets or robots, cyborgs, and the like in popular film and literature—is an object we once worshipped. From the conventional intellectual perspective of our time we see the puppet, until this century our most familiar human-made artificial human, as a metaphor of the body alienated from and mastered by its operating mind, and the robot as a metaphor of the dominance of the machine over the human, without recognizing the highly conventional flavor of these positions.¹

We talk to dolls and puppets and put them in dialogue with one another. We dress them up in clothes and accessories and control their every movement, allowing us to inhabit another reality in which we adopt a godlike position that determines the narrative of their story. In other words, we have been flirting with the idea of playing God ever since we began playing with dolls as children, endowing inanimate objects with life and toying with the possibility of predestination

¹ Nelson, Victoria. "Early Adventures of the Earthly Gods." *The Secret Life of Puppets*. Harvard UP, 2003. 29-30. Print.

and omniscience. Ava's assertion of dominance is a rebellion against the very humans who try to assert their dominance over her. The robot, or in this case *fembot*, having autonomy and a sense of her own free will and self-worth is what is particularly unsettling yet enticing. While we root for Ava, we simultaneously cannot help but wonder what Ava's escape into society would mean for us as humans. We often imagine it would be difficult to coexist in a world with AI that bears an uncanny resemblance to ourselves and a supernaturally powerful mind that would be hard to compete with.²

While Ava is remarkable in the fact that she blurs the boundary between human and machine through both her physical appearance and intelligence, she is ultimately part of a long lineage of human simulacra and is not an entirely brand new concept. Ava has many ancestors that although functioned differently from her, shared the same fundamental endeavor of spiritualizing the material. After Caleb experiences his first power outage in Nathan's house, he goes out into the hallway and walks across a white, backlit paneled wall with an array of five masks hanging on it like works of art (see Figure 1). The first three masks look like ancient artifacts as if they might have been a part of religious rituals while the last two masks look more like human flesh. The row of masks appears increasingly more humanlike as Caleb walks past them and culminates with a face that strikingly looks like Ava's. Later in the film we even see Ava approach this last mask after she escapes. She gently touches its lips then touches her own lips as if in disbelief that her face is hanging on a wall. She gets so close to it that it looks like she might even kiss it, a testament to her longing for touch. When she walks past this wall, it is also noteworthy to mention that she is walking in the opposite direction as Caleb as if she were

² If we take contemporary films like *Child's Play*, *Annabelle*, and *Toy Story* into consideration, we realize that human simulacra coming to life has always been an ambivalent fantasy of ours that teeters between horror and comedy, nightmare and dream.

walking back in time discovering her origins (see Figure 2).³ This scene illustrates Ava's historical evolution through time and gives a basic timeline of her progression from antiquity to the present. Nathan reminds us that Ava was not the first human simulacra and certainly will not be the last when he tells Caleb: "Ava doesn't exist in isolation any more than you or me. She's part of a continuum. So version 9.6 and so on and each time they get a little bit better... One day the AI's are going to look back on us the same way we look at fossil skeletons in the plains of Africa."⁴ When humans face their own extinction, then we too will be placed in museums and observed behind a glass frame like Ava is, and this of course comes true at the end of the film when Ava locks Caleb in her fish tank of a room. The film comes full circle as Ava represents a future generation that is an extension of our own but at the same time poses as a threat to our very existence. She is not as singular and otherworldly as we might have initially imagined because according to Nathan's logic she too will be replaced and is susceptible to the force of evolution that pushes for perfection.

The circumstances of Ava's creation can harken back to colonialism if one thinks of her body as an art object. Not only is Ava objectified as a female but also as a work of art that is worshipped as an inspiration of wonder. The shape of Ava's body is reminiscent of Neoclassical sculptures that celebrated idealism and symmetry in the Greco-Roman world. Ava's perky breasts, slim waist, and thin legs would have been considered the height of perfection. Just like a modern-day version of the Greek myth of Pygmalion and Galatea, Caleb ends up getting lost in

³ Garland, Alex, director. *Ex Machina*. Universal Studios, 2015. The fact that the hallway is brightly lit when Ava walks through it and is dark and ominous when Caleb wanders through it also foreshadows the end in that Ava has a revelatory, enlightening, and hopeful ending whereas Caleb has a tragic one.

⁴ Ibid.

Ava's beauty.^{5 6} In addition to Ava's statuesque figure, her body is a work of art with its sinuous mesh and undercurrent of blue light (see Figure 3). This metaphor of Ava as an imperialized object is extended when Nathan shows Caleb where he created Ava. Nathan displays face molds, skeletons, and crystal-like molds of AI minds in large glass cases (see Figure 4). This space is reminiscent of a *Wunderkammer*, also known as a "cabinet of curiosities" or "wonder-room." Taking on the familiar appearance of what we would recognize as a natural history museum today, the *Wunderkammer* was curated with items stolen from the New World to display wealth and dominance but also to transport one to another dimension: "Nonetheless, narrative accounts from the twelfth to the fourteenth century tell us of objects and events carefully constructed to elicit awe, delight, and dread. Rulers, both secular and ecclesiastical, competed in displays of power and splendor, which included intricate tricks and automata, calculated to amaze and tantalize... to understand the object more as a means of access to an other (whether God or saint) than as a singularity, fascinating in itself."⁷ Ava, much like god-statues of the past, acts as a material vehicle for an immaterial space. Nathan has to hack into the cellphone data being harvested by major corporations in order to make Ava more humanlike. Even though it is an ethereal space, Nathan still invades it and takes what does not belong to him as a means of

⁵ Ovid, and Rolfe Humphries. "The Story of Pygmalion." *Ovid: Metamorphoses*. Bloomington: Indiana UP, 1971. 242. Print. "He made, with marvelous art, an ivory statue, / As white as snow, and gave it greater beauty / Than any girl could have, and fell in love / With his own workmanship. The image seemed / That of a virgin, truly, almost living, / And willing, save that modesty prevented, / To take on movement. The best art, they say, / Is that which conceals art, and so Pygmalion / Marvels, and loves the body he has fashioned. / He would often move his hands to test and touch it, / Could this be flesh, or was it ivory only?"

⁶ Nathan also describes his creation of Ava as being "Promethean," referring to the Greek demigod who in some accounts created the first man from clay and in other accounts stole fire from the gods and gave it to man so that man can survive and create, which is why Prometheus is often associated with science and craftsmanship.

⁷ Bynum, Caroline Walker. "Wonder." *The American Historical Review* 102.1 (1997): 17-18. Print.

showcasing his power, which is similar to the way *Wunderkammers* functioned. When Nathan shows Caleb a mold of Ava's mind, the camera is situated at a low angle to make Nathan appear more "god-like" and sovereign and the mind mold look like a sacred object from a foreign land (see Figure 5).⁸ Nathan describes the way he developed Ava's mind: "They [major corporations] thought that search engines were a map of what people were thinking, but actually, they were a map of how people were thinking. Impulse, response. Fluid, imperfect, patterned, chaotic."⁹ His use of descriptive adjectives could easily be used to describe a work of art like the Jackson Pollock painting he obsesses over. Nathan points to the idea that artificial intelligence is a work of art that requires artifice to create.

Fine art featured in the film parallels the artistic nature of Ava. At first glance, Nathan's modern home could be mistaken for a museum with its sweeping landscapes, high glass walls, and minimalistic furnishings. Nathan demonstrates his fascination with art when he goes off on a drunken tangent about Pollock and his artistic process: "He [Jackson Pollock] let his mind go blank and his hand go where it wanted. Not deliberate, not random. Someplace in between. They called it automatic art... The challenge is not to act automatically. It's to find an action that is not automatic from painting, to breathing, to talking, to fucking, to falling in love."¹⁰ Ava practices automatic art when she holds up one of her geometric abstract drawings and says to Caleb: "I do drawings every day, but I never know what they're of."¹¹ The triangular pattern creates a wiry looking webbed tunnel that appears never-ending as if we were looking at a map of the intricate synapses woven in her mind that transmit an infinite amount of information (see Figure 6). Ava

⁸ The way Nathan holds the mind mold in his hand and is flanked by what looks like to be x-rays of a skeleton is almost Frankenstein-like and is reminiscent of the mad scientist trope.

⁹ Garland, Alex, director. *Ex Machina*. Universal Studios, 2015.

¹⁰ Ibid

¹¹ Ibid

is therefore likened to Pollock in the sense that they both use art as a means of mapping their unconscious and coming into contact with the divine. One could even argue that Nathan practiced automatic art when he created Ava. The idea of humans acting “automatically” mechanizes them while it simultaneously humanizes Ava.¹² Automation is not unique to automatons, rather it is something that everything under the sky has in common. One of the definitions of “automatic” provided by the *Oxford English Dictionary* illustrates Nathan’s idea of humans being guided by a universal force external from ourselves: “Of, relating to, or designating writing (or occasionally some other action or behaviour) apparently produced by a spiritual or psychic agency, usually through a medium.”¹³ Our automatic behaviors allow us to tap into a higher realm that is linked to our unconscious minds.¹⁴ Nathan’s belief that we are all programmed suggests his deterministic philosophy that deemphasizes free will. As much as he desires to be God, he knows he is not and must cope with the fact that he is not even in control of his own life, much less Ava’s. *Ex Machina* uses art such as the Pollock painting, Ava’s drawings, and Ava’s body to manifest the divine that exists within all of us and that is brought about by our automatic behaviors.¹⁵

While human simulacra have a long and drawn out history, one of the qualities that makes Ava miraculous is the possibility that she could pass for human in society. In the very last

¹² Keep in mind that the title *Ex Machina* is derived from the Latin translation of a Greek phrase *Deus Ex Machina* that literally means “a god from a machine.” Ava is therefore represented as a hybrid of sorts, possibly even a demigod.

¹³ Simpson, John A. "Automatic." *The Oxford English Dictionary*. Oxford: Clarendon, 1991. Web.

¹⁴ Nathan’s home also architecturally echoes this idea of our automatism being ruled by higher powers in that he is encased in a glass cage just like Ava and is entirely encompassed by sublime and transcendental views of nature as if on unmapped territory. Nathan’s natural surroundings provokes *sensus divinitatis*, or a “sense of divinity.”

¹⁵ Caleb also describes Nathan’s genius and artistic abilities when he says, “Nathan wrote the Blue Book base code when he was 13. Which, if you understand code, what he did was like Mozart or something.” By comparing Nathan to Mozart, Caleb is attesting to the beauty and artistry of his code.

shot of *Ex Machina*, we see Ava blend in with the hordes of people walking past her as if she were just another human. However, the only view of Ava we get enmeshed in society is through a glass with an overlaid reflection of a building (see Figure 7). The fact that we see Ava behind glass even after she has escaped Nathan's authority could be an indication that she is still a spectacle and is not quite free. Perhaps this also means that as artificial intelligence, she can never fully assimilate and achieve the status of human. At the same time, this scene might be depicting how the tables have turned and we are now the ones locked in a glass box like Caleb. From this perspective, the audience becomes a helpless specimen that can only witness artificial intelligence rise to power. Ava therefore becomes a tale not about the dangers we are capable of manufacturing as humans but about the fact that the way the future unwinds is out of our control and is rooted in history: "Humans think they make history, but history actually revolves around the web of stories. The basic abilities of individual humans have not changed much since the Stone Age. But the web of stories has grown from strength to strength, thereby pushing history from the Stone Age to the Silicon Age."¹⁶ *Ex Machina* is ultimately a story about the future that has been planted in the past. It is stories like these that drive evolution, not us.

¹⁶ Harari, Yuval Noah. "The Storytellers." *Homo Deus: A Brief History of Tomorrow*. New York: Harper, An Imprint of Harper Collins Publishers, 2015. 155. Print.

Figure 1:



Figure 2:



Figure 3:

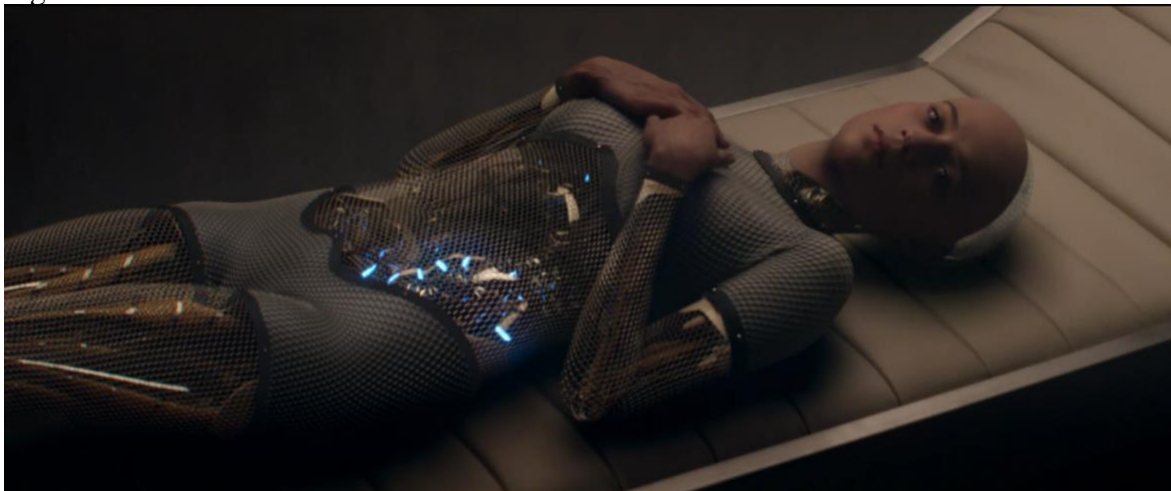


Figure 4:



Figure 5:



Figure 6:

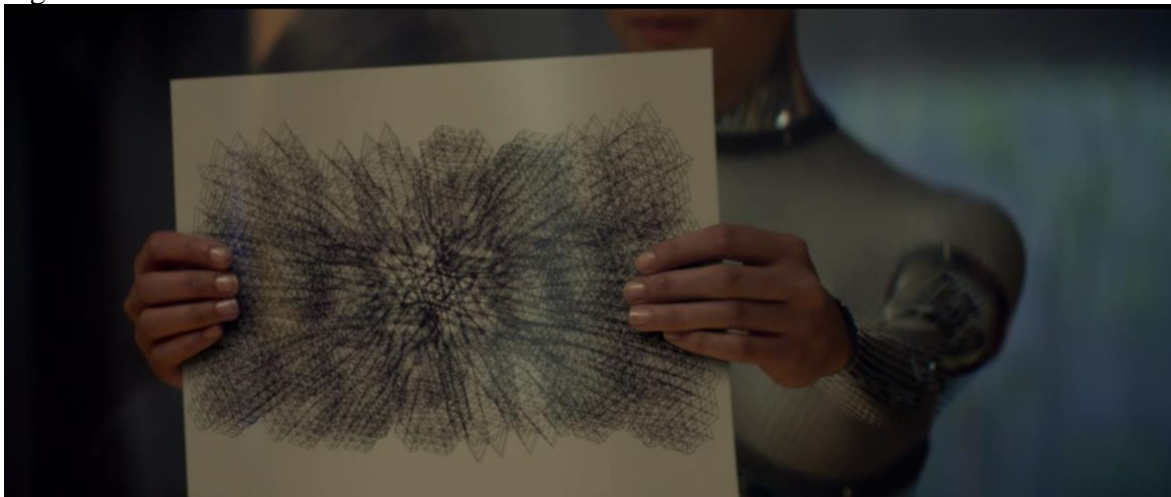


Figure 7:



Works Cited

Bynum, Caroline Walker. "Wonder." *The American Historical Review* 102.1 (1997) Print.

Garland, Alex, director. *Ex Machina*. Universal Studios, 2015.

Harari, Yuval Noah. "The Storytellers." *Homo Deus: A Brief History of Tomorrow*. New York: Harper, An Imprint of Harper Collins Publishers, 2015. Print.

Nelson, Victoria. "Early Adventures of the Earthly Gods." *The Secret Life of Puppets*. Harvard UP, 2003. Print.

Ovid, and Rolfe Humphries. "The Story of Pygmalion." *Ovid: Metamorphoses*. Bloomington: Indiana UP, 1971. Print.

Simpson, John A. "Automatic." *The Oxford English Dictionary*. Oxford: Clarendon, 1991. Web.