Robots, AI, Automation, and Those Who Define Them

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Swoosh. The sound of traffic nearby as I was sitting outside a coffee shop with a can of La Croix sparkling water at the black iron grate patio table while talking with my advisor Dr. Chad Edwards. It was a warm Michigan summer before fall classes of my Master of Arts program in Communication. I was sitting there eager, a first-generation college student, excited for what being a master's student would be like. I sat there staring at my La Croix amidst the sound of a busy patio peppered with college students who stayed in town for the summer and other likely area community members enjoying the summer's day. I was excited about graduate school, but at the moment, I was eager to play videogames following my meeting.

That summer, I worked on a congressional campaign, and the week leading up to my meeting, I bought a new PlayStation 4. I bought it just for the game *Detroit: Become Human* because robots are cool. The night before my meeting, I had stayed up till the early morning of my meeting playing the game. Little did I know it would become part of a study I would carry out in the subsequent semesters. We had reached somewhat toward the end of our meeting time when Chad gave me a task to take home: think about what I want to research.

> "And so, what else have you been up to?" Chad asked.
>
> "Oh, I've been working on this congressional campaign, but I've also just bought a PS4."
>
> "That sounds fun, just wanting to play videoga — "
>
> I interrupted, "well, actually — it's funny you ask, because I bought it specifically for the game *Detroit: Become Human*, and the characters you play in it…let's just say the player faces a lot of moral and ethical dilemmas like if humanoid (human like morphology) robots should have human rights, and it's a butterfly effect game. You know, it's when each decision

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> you make affects the game's ending. When characters die — the game keeps going..." You could tell I was excited.
>
> "That's it then. Wow, that would make an interesting study," he said supportively.

In the beginning, I did not think my interests in *Detroit: Become Human* would amount to more than playing videogames in my limited spare time. The initial meeting with Chad offered a new perspective on how research can take form beyond the traditional run labs and do science-y stuff I initially thought of when going to graduate school. I open this essay with a memory of my first experiences as a graduate student planning a research agenda because sometimes the story of where research begins is accidentally left to dinner conversations or the halls of research conferences. Year one of graduate school brought me into a view of engaging with videogames to open up more in-depth discussion about our human connection with media characters (Banks and Bowman 1257-1276). *Detroit: Become Human* offers the player a chance to explore whether robots deserve personhood among concerns they are replacing human jobs. Specifically, the game presents a case example of using a videogame to explore questions surrounding ethics and machines, with the player taking on some of the responsibility of survival with their humanoid robot characters — a connection with media. The themes presented in the game bear a similar resemblance to prior narratives centered on self-aware robots taking on work as artificial servants founding pieces of popular culture such as Čapek's *Rossum's Universal Robots* (*R.U.R.*). The player is brought to the proverbial table to play with these different ethical dilemmas in their choices made to progress the game's plot, and likely coming from their perspective of what robots are or could be.

When we consider the public's conceptualization of what a robot is and the possible jobs they are taking, we cannot separate science fiction and the roboticist. Robotics, artificial intelligence, and automation are not unified subject areas but feature a cornucopia of intersections, cohesions, ethical dilemmas, and some great chasms that divide them. However, they do emerge from the influence of how robots are portrayed in popular culture, such as *R.U.R.*, for example. Actual robotics are influenced by these depictions (Meinecke and Voss 203), if not possibly led by science fiction and popular culture (Adams et al. 25). In this essay, I discuss how popular culture can invite conversation surrounding the concept of robot ethics and the portrayal of robot labor. Specifically, I will first bring an example of how robot ethics and labor are depicted in the videogame *Detroit: Become Human* (Quantic

Dream), by describing scenes from the game sourced from my experience playing the game, watching video footage (Red KoJack), and pulling from crowdsourced transcriptions of the game's dialogue (Weinzierl and Mou-lkkai), followed by a discussion of how culture has primarily shaped how we think about robot labor and their design.

D is for Detroit

Detroit, the Motor City, is considered changed by the cars they made and remains an icon of labor in the automotive industry. As a popular videogame, *Detroit: Become Human* takes place in a future version of Detroit, Michigan — a city now at the center of the robot manufacturing industry in 2038. Throughout the beginning chapters, the player becomes acquainted with some of the roles robots serve in the backdrop of Detroit's story as a new marker of industrialized culture. The game itself is a "butterfly effect game": a player's choices essentially change possible future interactions with other characters and plot lines. With options to play multiple robot characters who introduce their own narrative into the game's storyline, a character's death, for example, changes and/or remains incorporated as the game progresses.

One of the beginning scenes opens with the player taking on a humanoid robot's perspective, looking forward at the sight of a human store employee talking to the robot's owner about repairs. Florescent lights from a drop ceiling fill the small black tile sales floor with humanoid robots on a round display adjacent to the sales promotion cardboard boxes tucked in a corner. A little girl in a wet winter coat comes into view, looking at the player as it is waking up. To the right of this perspective are a humanoid robot giving a sales pitch to a human couple underneath a hanging sign that reads "Model KW500: Pre-owned" as the robot shows them around the store. "This is the top of the range household assistant. It cooks 10,000 different dishes,'' says the android employee. A woman wearing a fall coat and scarf comes into view from the left and pulls the little girl away toward the store exit, saying "come on, Zoe. Let's go." The Android employee still giving its sales pitch that it "speaks 200 languages and dialects and handles the kids' homework from elementary school up to university level." The imagery of robots selling robots sends a clear message that these machines are just like any other home appliance and speaks to some commercialized interests in the technology, that artificial servants destined to be part of the American human household. These new robots

are created by *Cyberlife*, the in-game company responsible for centering of a new industry in Detroit and selling the idea that domestic work can now be done by an artificial servant.

The humanoid robot's owner and the human employee come into the frame as they walk closer to the player (playing as the humanoid robot). "It was a bit difficult getting it back in working order. It was really messed up…what did you say happened to it again?" the human employee asks. The employee is wearing a top button opened plaid red dress shirt with a blue felt vest. He wears glasses that fit the stereotype of working at the computer store. The owner, Todd, carries a stocky build with slick back hair and mutton chops wearing a fall grey coat covering a green V-neck shirt with grease stains. Both are now standing in front of the robot. Clearing his throat, Todd begins that "a car hit it…stupid accident…"

"Oh, I see…anyway, it's as good as new now…except that we had to reset it. Meaning we had to wipe its memory. Hope you don't min — "

"That will be fine!" Todd says in an assertive tone.

"Okay, did you give it a name?"

"My daughter did…"

The employee steps in front of the player's view, directly looking at the robot. "AX400, register your name," he says, almost like talking to an Amazon Alexa or other smart home device we have today in 2021. Todd steps in front and looks at the robot "Kara."

The camera angle cuts to looking directly at Kara for the first time, fair skin, brown hair, blue eyes, feminine gender-presenting. All the humanoid robots in the game have a blinking round circle located on the side of its face on the temple, one the side of the face. The scene described represents some assertive ownership over the artificial servant, where Kara is like a google home or Amazon Alexa. However, rather than a cylindrical or cubic shaped device, Kara takes human form. These anthropomorphic features hint at the openness for social capacity and communication with the machine. "My name is Kara," it responds before the game proceeding into an opening credit montage.

Featuring clips that capture the full breadth of Detroit's scenery, the opening credit montage presents the player with the narratives of robot industry and work, all while still center around Todd driving home with his robot. In the first clip, we view commuters driving on a highway that resembles some of the central arterial bloodlines for entering the city with Detroit's city skyline in view. As Todd is driving on the highway, he passes a sign that reads "Welcome to DETROIT:

ANDROID CITY," featuring a masculine-presenting humanoid robot and a feminine presenting humanoid robot smiling forward in a robot uniform. No matter what clothes they wear, humanoid robots in the game feature a blue triangle and armband identification markers distinguishing them from humans. The game's setting is very relevant to the perspective of robots taking on a worker's role in society. With scenery depicting historical landmarks such as St. Mary Roman Catholic Church and the famous *The Spirit of Detroit* statue, the game encapsulates prominent elements of Motor City, reignited on all cylinders in vivid detail through realistic animation.

In one clip, the Detroit metro rail is featured with a city skyline view of the GM Renaissance Center with police drones overhead watching the city. We see a hustling and bustling motor city from a drone view, complete with new infrastructure built on the old. No, there aren't flying cars. However, several familiar technologies now show to be embedded in everyday life. Technologies such as simplistic modern crosswalks with light-up spaces and glass-like interfaces pepper the roads and sidewalk alongside separate waiting stations for humanoid robots — that similarly resemble bus shelters — to park and wait for their owners. Looking on the street, Humanoid robots in construction uniforms are working on roadside construction rather than human construction workers. A clear indication of robots incorporated into maintaining the city's infrastructure. Even with some of these new technologies, there are still issues of homelessness and blight in 2038. Camera shots featuring a once-blighted city's remanence as it begins to rain strikes a tone reminding the player of Detroit's iron forged industrious glory. In one frame, a homeless man is sitting against a cold concrete store exterior holding a cardboard sign that reads "I lost my Job Because of ANDROIDS!! Help me [sic]" as pedestrians walk by. The juxtaposition of blight to the bustling downtown combined with a camera focus on a homeless man foreshadows some current questions concerning automated technologies and their potential to replace human jobs. The opening credit montage ends in a sequence of clips focusing on Todd's truck as he drives down the street in a blighted neighborhood. A view of Kara staring out the passenger side window with an eye-level view of an abandoned, blighted home transitions to the perspective of Todd's truck passing over the camera, leaving the player with a view of an overpass cutting over blighted homes in immediate focus with the futuristic skyline of Motor City in the background.

In the following scene, there are several instances in which humans express the view that robots take jobs and should be banned. The scene begins with the player

playing as Markus and is tasked with walking across a large plaza to get to a paint shop running an errand for his owner. It is a cold November morning; the ground is still wet from rain the previous day. Markus's view, a masculine-presenting dark-skinned humanoid robot, comes into focus as he watches a small girl squeals as she runs up to what could be assumed their humanoid robot caretaker. The game brings the player into a third-person perspective as they are instructed to "Go to Bellini Paint Shop." Another humanoid robot is observed standing next to a presumably older gentleman sitting on a park bench. It asks the human, "would you like to go home now?" "Yes Rose, Yes I think that's enough for today," he replies as Rose reaches down to help him up. As Markus makes his way toward the park's exit to walk into the plaza, a human is seen jogging past him with another humanoid robot in tow, only to both stop as the human catches his breath. "Hey, Water!" he says commandingly amongst the sounds of raking by the surrounding humanoid robots taking care of the park and a baby crying in the distance. This beginning scenery as Markus enters the crosswalk toward the plaza resembles a city that not only has industry but is alive with humans who have incorporated technologies into their everyday lives. Coming from the perspective of the player, the game controls allow a toggle for a transparent overlay of instructions that map off the required direction toward a point of interest, orienting the player toward their necessary path of options while also indicating "BELLINI PAINTS IS NOT THIS WAY" in bright red letters if they want to walk back toward the park. Nearby in the path entering the plaza are humans protesting the adoption of robots into the workplace in front of a Cyberlife store. Other humanoid robots are observed in the street sweeping uniforms picking up trash on the ground around a fountain shown as a prominent centerpiece of the plaza. The sound of protesters can be heard alongside a street performer who is playing guitar and singing contemporary sounding folk song for tips who has a cardboard sign on the ground that reads "HUMAN MUSIC! $1 TO HEAR Music With SOUL."

Depending on the player's actions, Markus proceeds down an adjacent alleyway that features various shop storefront window advertising. Walking up to the door under a sign that reads Bellini Paints, the player is prompted to rotate their joystick on the controller to open the door. Inside are jars of various colors arranged, with different hues stored in wooden cubbies. Drawers line the front counter where a humanoid robot store clerk wears an apron where a distinct blue ID triangle is peeking out next to one of the apron straps on the employee's black dress shirt. The player is prompted to place Markus's hand on a glass plate

interface, presumably to transfer information to pick up the paint order. Markus's model ID flashes on the panel while the store clerk grabs the ordered box of paint from under the counter and announces that "identification verified. Here's your order #847. That'll be $63.99. Please confirm payment." The player is prompted to press a button to have Markus confirm. The blue circular LED light on both Markus and the store employee flashes yellow. "Payment confirmed," Markus replies. "Transaction complete," says the store clerk. The interaction itself between the two robots lacks social connection and reduces the shopping experience to a simple electronic payment. Now that Markus has the paint for his owner, his screen overlays to direct him to a bus stop to take the bus home. Exiting the alleyway and back onto the plaza, the player can control Marcus to walk in front of the protesters or walk around them. Depending on the player's choices, Markus is yelled at and even face the threat of physical aggression from the protester.

Walking in front of the protestors, a lead protester with a megaphone confronts Markus: "Where the fuck you going, tin can? Hm? No kiddin'…" Markus tries to move out of the way. "Hey guys, check it out, we got one of those tin cans here…" the protestor gets in Markus's face. The protesters begin to surround Markus, someone proceeds to shove him to the ground with the box of paints intact in the box falls to the ground. "Look at this little motherfucker. You steal our jobs, but you can't even stand up," says a woman protester. At this point, Markus is lying on the cold concrete, and the player is prompted to mash a button on their controller to help Markus stand up, only to be kicked by one of the protesters back to the ground. "Yeah! Yeah! Get him down! Get that bum! Yeah, take that on! Take it! Yeah, now you know what it feels like! Go on! Go on!" they shout. The player is prompted again to help Markus up. This time, the leading protester pulls Markus up, clenching onto his shirt, and says, "you ain't going anywhere. We're gonna fuck your bitch ass up," while protesters in the background can be heard yelling, "you job stealer!" and "yeah, waste it!" Luckily, a Detroit Metro police officer intervenes, asking the fight to be broken up, telling the lead protester, "leave it alone."

> "Let us teach this bastard a lesson," looking into Markus's eyes. His blue LED light on his temple blinking yellow.
>
> "You damage it, I'm gonna have to fine you," the officer says. The lead protester lets go of Markus, turning and pointing at the officer. "They're gonna take your job next…we'll see how you like it…"

The officer brushes Markus along, "let's go, move along." Markus grabs the box of paint and proceeds toward the bus stop as the lead protester glares at Markus with glaring eyes. The protesters' sound can be heard in the background as Markus waits for the bus: "androids are stealing our jobs! Yeah! Yeah! Ban androids! NOW! BAN ANDROIDS! NOW YEAH!" A protester shouts "we've got families to feed, and these androids are taking our place!" As the city bus pulls up, Markus faces a door with clear white lettering that reads "ANDROID COMPARTMENT," featuring a blue triangle, similar to the marker humanoid robots have to wear on their clothes. Other humanoid robots are inside, standing in organized rows staring forward toward the bus's front as the door opens. The scene ends with looking toward the bus's back at a transparent window that clearly separates the humanoid robots from human passengers as the bus pulls away. A final camera shot shows the bus driving along the street toward presumably Detroit's financial district featuring prominent skyscrapers like 150 West Jefferson and the Blue Cross Blue Shield of Michigan Building. This scene of protesters yelling and getting physically aggressive with Markus paints the picture for the player that there is this aggression toward humanoid robots and that the player bears responsibility for their humanoid robot character and their mishaps, including the work a robot performs. Various elements of Detroit scenery are observed as the player journeys through Greektown. Although not all scenery lines up directly with Detroit's city features, the city's elements are embedded in artistic detail to promote the setting's general narrative.

Elements of robot abuse and obedience come into play as the next scene features Kara and Todd arriving home. Overcast grey sky projects dark foreshadowing for the scene. I won't reveal the entire scene as it can be fairly traumatic, but the idea of treating robots as slaves to their owners and abusing them is clearly shown in this next excerpt. The player sees a dirty house with trash scattered in different places throughout the entryway, which features stairs leading into the second floor. "You've been gone for two weeks, so the place is a mess…You do the housework, the washing, you cook the meals, and you take care of…goddamit! Where the fuck's the brat gone now?" Todd looks around the room. The walls in the scene have discoloration and ripped wallpaper. A view into the living room shows empty beer cans and open prescription bottles with pills lying adjacent to the canisters — an off-kilter lampshade sheds light on the display of rubbish.

"ALICE! ALICE! Oh, there you are…" A little girl appears on the base of the stairs. A pink sweater, blue jean shorts with dark leggings, and a purple bracelet, the little girl holds a stuffed plush fox animal with her hair in a ponytail. She's

silent, unusual behavior for a child her age, yet it adds an effect to the scene that something is wrong. “That’s Alice. You look after her, homework, bath, all that crap…” Kara smiles at Alice, a welcoming expression, “got it?” he asks, the grease stains still on his shirt. “Yes, Todd,” Kara says in an obedient tone similar to Siri or Amazon Alexa. “Get started down here, then you do upstairs.” Kara turns back toward Alice and smiles, but Alice appears to anxiously run back upstairs. Cleaning the house, the player is tasked with pressing buttons while walking up to various things like the trash, dishwasher, table, interacting with objects, and carrying out chores. Todd taking a phone call, talks about meeting up with someone “yeah? Maybe… Depends on what you need… Yeah, yeah, I can get that. Yeah, yeah, I’ll bring it tomorrow. Yes, same place, you know, you know where. Right.” Moving into the laundry room Kara starts the washing machine, pulling down the soap canister to find a packet of red substance. Scanning it by sight reveals it is “Red Ice,” an addictive drug similar to crack created for the game. The camera cuts to looking directly at Kara as she is holding the packet with Todd standing now behind her, looking down. Kara turns around abruptly, sensing he’s there while Todd grabs Kara by the neck. “You shouldn’t mess around with my stuff…it makes me nervous.”

> “I’m sorry, Todd.” Her blue circular LED indicator is now blinking red. “You stay the fuck outta my business, unless you wanna piss me off…you wanna piss me off?” he barks. “No, Todd,” Kara responds (in machine-like tone) as he lets go and backs away. Kara’s indicator light slowly turns to yellow and then back to blue.

While the player’s character Kara is cleaning around the house, if the player accidentally steps in front of the TV as Todd is watching, he yells, “outta the way for fuck sake!” Kara replies, “I’m sorry, Todd. It won’t happen again.” The obedience of an artificial servant is on full display as Kara tries to appease her owner, but also amidst his glowing abusive anger. As the player progresses through the game, the plot thickens when robots are reportedly rejecting their abuse and becoming self-aware, ultimately leading the player to two distinct in-game perspectives amongst the public’s opinion, or at least what I gather from my gameplay anyway. First, robots are incapable of having genuine emotion and consciousness, thus not deserving of autonomy and human rights. A perspective that the robots’ consciousness is only an error or bug in its software and are *deviant* (the term for the bug) according to the manufacturer Cyberlife. The second perspective is the self-aware robots deserve personhood and can have emotions and,

therefore, autonomy because of their self-awareness. In other words, their consciousness isn't a fluke — they are alive.

The robot abuse elements are prominent sub-themes within the game's larger narrative that robots are becoming self-aware. When juxtaposition with some moral dilemmas, the player faces those, as mentioned earlier, two larger narratives (robots are people, or robots are just deviant), *Detroit: Become Human* presents a possible gaze into some ethical issues to face in the near future. Even in roles outside of the domestic sphere, robots on the street in gameplay are shown performing maintenance roadwork and shipping freight as blue-collar laborers. This is what makes the games setting in Detroit so conspicuous and fitting as we witness the city booming again as the center of the robot manufacturing industry, but also an element of hard work. Only, instead of human labor, work is done by robots that take human form. More importantly, although we might concern ourselves with "robot labor," the concept of labor insinuates some form of compensation for work completed. With robots effectively operating as slaves to their owners (i.e., robbed of personhood, lacking legitimized self-autonomy and compensation for work), players navigate the game with a choice of whether the robots deserve rights and autonomy, or their self-awareness is just a bug because a machine is just a machine. All the while having to make these choices, the game's scenes clearly try to evoke emotion concerning the robot characters and how they are treated. Outside of the game, the idea that machines are taking jobs is not an unfamiliar narrative concerning new technology and the workplace. Further, conceptualized robot laborers and their possibility to take human-like forms are found throughout popular culture's take on artificial servants.

Our Robot Overlords, Their Revolution, and Who Defines Them

Fear over automation in the workplace and its potential to redefine work is not a new occurrence. Amidst a robot revolution (Berg et al. 117-148; Byrnjolfsson and McAffee; Ford), ethics surrounding robotics, AI, and automation are important considering their future impact on our conceptualized idea of "labor." With the adoption of these technologies both in domestic and industrial work, current research shows automation and AI not only affecting a majority of occupations (with varying intensity) but that these changes in "the coming decades" vary across location and demographics (Muro et al. 4-9). Public opinion research has found a clear indication of anxiety about the idea that robots could take peoples' jobs. A

survey conducted by the Pew Research Center in 2017 found that one-in-five Americans feel the concept of machines doing a majority of human jobs to be extremely realistic, with 76 percent of Americans familiar with the idea expressing "some level of worry about a future in which machines do many jobs currently done by humans" (Smith and Anderson). Talking beyond the ivory tower about the topic of robot ethics proves to be difficult with public fear exasperated via perfunctory media tropes skipping the realities of where these current technologies exist in their functional abilities. From television news and radio talk shows, there are headlines in the current context of the COVID-19 pandemic (when this essay was written) that read, "Millions of Americans Have Lost Jobs in the Pandemic — and Robots and AI Are Replacing Them Faster Than Ever" (Semuels), and "Workforce Automation Soars as the Pandemic Rages On" (Henderson), leaving media consumers rife with concern. Robotics are often hyped in the press with eye-catching descriptions of tech we'd read or watch in science fiction. Best said by Meinecke and Voss:

> With robotics being a massively growing and even "hyped" technology field — promising solutions to societal problems (e.g. supporting the aging working population or replacing missing nursing staff) and at the same time threatening to bring along frightening economic and societal consequence (e.g. increasing robotization causing mass unemployment) — public interest is immense. Consequently, robotics is one of the most reported on technology fields in the news media. In this discourse, the enormous influence of science fiction on the perception and representation of robots is once again observable. Many of the fictional narratives and tropes described above are reflected in articles, reports, and commentaries on current or upcoming robotics technology. (210-1).

Meinecke and Voss make clear some of the interwoven connections between how sci-fi tropes emerge in some of the press that covers these technologies. *Detroit: Become Human*'s perspective of robots taking jobs carries a prominent resemblance to much of our earlier technologies that were feared. It is important to note, although yes, there indeed outside of this game is likely a robot revolution (Berg et al. 117-48), automation and advancing new technology are no stranger to the workplace, nor are recent phenomena. From a historical perspective (Akst), there was a fear of automation on the factory line. As new technologies are developed, there are concerns and anxiety about what they may do to our society. Further back in time, even the electric power line at one point was viewed as a contentious debate

on its influence on society (but likely for a good reason; Sullivan 8-16). *Detroit: Become Human*'s narrative of robots stealing human jobs is not a new sci-fi narrative but a remnant of previous narratives of people perturbed by technology advancements. This includes the idea of artificial servants revolting against their owners. For evidence of this in popular culture, look no further than at *Rossum's Universal Robots* (*R.U.R.*) by Karl Čapek, a play featuring android-like workers who carried out "unwanted and difficult jobs from their human creators and owners" (Linda Hall Library). Like *Detroit: Become Human*, the robots in *R.U.R.* look like humans and eventually revolt against the humans.

> (1). A robot may not injure a human being, or, through interaction, allow a human being to come to harm. (2). A robot must obey the orders given it by human beings, except where such orders would conflict with the First Law. (2). A robot must protect its own existence, as long as such protection does not conflict with the First or Second Law. (18)

The Three Laws by Asimov, in addition to Čapek's artificial human-like robots, are used in a variety of different films like *I, Robot* (Proyas), *Astro Boy* (Bowers), or even *Bicentennial Man* (Columbus), where robots are widely adopted taking form as robot laborers, and humanity remains protected by the laws. I highlight these depictions of robots in popular culture because they have such a strong influence on our conception of what a robot is and could be; researchers and developers constructed the idea of what a robot is "science fiction not only defines the boundaries of the conceptual playing field, but is the original source of the term" (Gunkel 15). Popular culture has historically played a significant role in how we view robotics and our expectations for what a robot should be (Meinecke and Voss 203-221), and part of this brings developers and researchers alike to be in conflict between our expectations, what human-robot interaction research looks to achieve, and meeting the needs of users (Sandoval et al. 54-63).

The representations of what robots do and how they are viewed in the context of *Detroit: Become Human* are essential for the discussion of how robots, in reality, are to be treated — and how popular culture wishes them to be treated. Robots being viewed as commercial objects is not a new narrative when discussing the ideas of whether they should or should not have rights — a perspective debated about in the game and existing literature today (See Gunkel). Robots in *Detroit: Become Human* are presented early on as objects who take on traditional domestic and blue-collar labor roles. However, in addition to taking on these roles, robots are offered as a subject of controversy. Indeed, robots are seen as taking jobs from

people — a narrative that is all too common in today's headlines, however, presenting the player with the choice of advancing the character plot to give rights to robots offers further moral and ethical exploration contrary to the typical popular culture where we may not interact with the story.

As a butterfly effect game, players observe similar narratives from prior artifacts of science fiction and popular culture (e.g., *R.U.R.*, *iRobot*, Asimov's Three Laws), except now get to make choices around these narratives and how to interact with them, and the players and their robot characters cannot remain completely separate. In a previous study, for example, colleagues and I explored how *Detroit: Become Human* players described their rationale for decisions and how their responses may coincide with elements of character attachment (Craig et al. 169-170). Players would express concern for their character and strategize their gameplay depending on how they thought things would unfold in real life or make decisions for what they thought was required for advancing the game's plot (Craig et al. 169-170). Our connection with media characters is important in this essay because as robots are portrayed as laborers, players of *Detroit: Become Human* also take on some level of attachment to their character. They make decisions as they engage with their character and face ethical and moral challenges in the game. Highlighting a quote from that earlier study that encapsulates the previous sentence:

> A clear example of objectification is seen in one participant's rationale for killing another android character to keep their character alive. They explained the robot was a machine and wasn't capable of emotion or pain thus "*it didn't really matter that I was taking their parts. I needed them and they weren't using them*." (170)

When playing the game, players are forced to make decisions concerning their robot character that rely on the player's conceptualization of what they think about these ethical dilemmas. The videogame allows greater connection with these narratives, or in other words, provides the player a playground to explore where they concern themselves with robot ethics, robotic personhood, and the perception of them replacing human jobs. Because of this, *Detroit: Become Human*, in addition to being a popular videogame, can serve as an invitation toward a conversation surrounding the concept of robot ethics and labor.

Some Last Thoughts…For Now

When I met with Chad at the local coffee shop patio the summer of my first year of graduate school, I was not expecting to come out from the conversation being encouraged to use *Detroit: Become Human* as a potential research topic. I came to the patio table wanting to do research related to robotics. But I think understanding the influence science fiction and popular culture can have on robotics is an important first step to that interest. Movies, books, plays, and videogames are a few examples of how we can engage with media agents and further understand their role in robot ethics. Specifically, rather than viewing these things as trivial entertainment, we can ask ourselves how the representation of robots acting as artificial servants and slaves fits in with the overall narrative that robots are stealing jobs. Further, how might the work they are replacing be different in ways other than compensation? *Detroit: Become Human* offers us a glimpse of a person's willingness to consider whether machines, if self-aware, are worthy of personhood. More importantly, as a videogame, *Detroit: Become Human* amongst the narrative of comeback Detroit in 2038 projects some of the historical concerns about automation in the workplace, the drive for industrial ingenuity, and lends some emotional concern for the ethical treatment of robots and the work they do while placing the player centrally to make decisions about the story's plot. As we journey through our new age of incorporating robots into our lives, how we treat these machines might speak more to the willingness to dehumanize the labor they perform. Popular culture's take on robotics' future gives us space to pause and reflect on what we want to see next concerning this technology. No one can predict the future, but we can dream. The impact science fiction has on our conceptualizations of robotics remains important to consider whether the next robots are truly what society wants and needs to envision — or if robotics, AI, and automation are just symbolically manifested in the context of popular culture.

Works Cited

Adams, Bryan, et al. "Humanoid Robots: A New Kind of Tool." *IEEE Intelligent Systems and Their Applications*, vol. 15, no. 4, 2000, pp. 25-31.

Akst, Daniel. "Automation Anxiety." *The Wilson Quarterly*, 2013, pp. 1-65.

Asimov, Isaac. "Guest Commentary: The Three Laws." *COMPUTE!*, 1981, p. 18, archive.org/stream/1981-11-compute-magazine/Compute_Issue_018_1981_Nov#page/n19/mode/2up.

Astro Boy. Directed by David Bowers, Summit Entertainment, 2009.

Banks, Jaime, and Nicholas David Bowman. "Avatars Are (Sometimes) People Too: Linguistic Indicators of Parasocial and Social Ties in Player-Avatar Relationships." *New Media & Society*, vol. 18, no. 7, 2016, pp. 1257-76.

Berg, Andrew, Edward F Buffie and Luis-Felipe Zanna. "Should We Fear the Robot Revolution? (The Correct Answer is Yes)." *Journal of Monetary Economics*, 2018, pp. 117-48.

Bicentennial Man. Directed by Chris Columbus, Touchstone Pictures, 1999.

Brynjolfsson, Erik and Andrew McAffee. *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W.W. Norton & Company, 2014.

Čapek, Karel. *R.U.R. (Rossum's Universal Robots)*. Translated by David Wyllie, The Echo Library, 2009.

Craig, Matthew J., Chad Edwards, and Autumn Edwards. "'But They're My Avatar': Examining Character Attachment to Android Avatars in Quantic Dream's Detroit: Become Human." *Companion of the 2020 ACM/IEEE International Conference on Human-Robot Interaction*, 2020, pp. 169-70

Detroit: Become Human. Playstation 4, 2018.

Ford, Martin. *Rise of the Robots: Technology and the Threat of a Jobless Future*. Basic Books, 2015.

Gunkel, David. *Robot Rights*. MIT Press, 2018.

Henderson, Tim. "Workforce Automation Soars as the Pandemic Rages On." *Government Technology*, 12 Aug. 2020, www.govtech.com/workforce/Workforce-Automation-Soars-as-the-Pandemic-Rages-On.html.

I, Robot. Directed by Alex Proyas, Twentieth Century Fox, 2004.

Linda Hall Library. "Robots: A History: Welcome- The History of Robotics." Linda Hall Library, 13 Dec. 2020, libguides.lindahall.org/robots_ahistory/overview.

Meinecke, Lisa and Laura Voss. "I Robot, You Unemployed: Robotics in Science Fiction and Media Discourse." Schafft Wissen. *Gemeinsames und geteiltes Wissen in Wissenschaft und Technik*, 2, 2018, 203-21.

Muro, Mark, Robert Maxim, and Jacob Whiton. "Automation and Artificial Intelligence: How Machines Are Affecting People and Places." 2019, www.brookings.edu/wp-content/uploads/2019/01/2019.01_BrookingsMetro_Automation-AI_Report_Muro-Maxim-Whiton-FINAL-version.pdf.

Red KoJacK. "*Detroit: Become Human*: The Complete Movie (No Commentary)." *YouTube*, 30 May 2018, www.youtube.com/watch?v=TbE4O7fZl5E.

Sandoval, Eduardo Benitez, Omar Mubin, and Mohammad Obaid. "Human Robot Interaction and Fiction: A Contradiction." In *Social Robotics*, edited by Michael Beetz, Benjamin Johnston and Mary-Anne Williams. Springer, 2014, pp. 54-63.

Semuels, Alana. "Millions of Americans Have Lost Jobs in the Pandemic-And Robots and AI Are Replacing Them Faster Than Ever." *Time*, 6 Aug. 2020, time.com/5876604/machines-jobs-coronavirus.

Shashkevich, Alex. "Stanford Researcher Examines Earliest Concepts Of Artificial Intelligence, Robots In Ancient Myths." *Stanford News Service*, 28 Feb. 2019, news.stanford.edu/2019/02/28/ancient-myths-reveal-early-fantasies-artificial-life.

Smith, Aaron and Monica Anderson. "Americans' Attitudes Toward a Future in Which Robots and Computers Can Do Many Human Jobs." *Pew Research Center*, 4 Oct. 2017, www.pewresearch.org/internet/2017/10/04/americans-attitudes-toward-a-future-in-which-robots-and-computers-can-do-many-human-jobs.

Sullivan, J. P. "Fearing Electricity: Overhead Wire Panic In New York City." *IEEE Technology and Society Magazine*, vol. 14, no. 3, 1995, pp. 8-16.

Weinzierl, Jason and Mou-lkkai. "Detroitbecometext." Detroitbecometext. GitHub, 01 Aug. 2020. github.com/detroitbecometext/detroitbecometext.github.io.