

Sterling Melcher
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 Prof. Kuharski
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Oriza Hirata and the Emergence of Androids in Society

The emergence of android¹ technology and its consequences for human society is a long-running tradition of inquiry for science-fiction writers. Writers such as Philip K. Dick and Isaac Asimov have written many novels about what it means to be human in a technologically advanced age. If humans create something that mimics human nature, is it equal to humanity, is it under our control, or will it surpass us in intelligence and ability, ultimately changing the hierarchy of natural beings on Earth? These are at the forefront of many modern philosophers' minds. However, in the theatrical realm, Oriza Hirata and the Robot Theater Project are taking a different take on this modern philosophical inquiry. What is it for humans and androids to coexist and possibly evolve together, and subsequently, what does it mean to be human in a society that contains an equal or superior intellect?

Oriza Hirata's career started as a prominent playwright in 1990s Japan with the emergence of Contemporary Colloquial Theater Theory. During his years at International Christian College in Tokyo, Japan, Hirata started the Seinendan Theater Company to investigate his own theories of theatrical writing. In response to the westernization of Japanese drama in the 80s, Hirata wanted to create a new form of playwriting that highlighted the unique grammatical structure and speech patterns of Japanese language. He believed that the plays being performed in Japan caused the performers to put emphasis on certain words and sentences that went against normal every-day speech. Since these realistic plays were meant to reflect society, he saw that they were doing it improperly and against actual Japanese society. Contemporary Colloquial Theater Theory was developed to reassert the natural way of speaking in Japan and reflect distinctly Japanese speech outside of western influences. Out of his investigations, many of his plays can be characterized as: multiple characters talking at once, sentence fragments, inaudible speech, and an understated "normal" speaking tone. Out of his productions and theory came a new generation of Japanese playwrights that took this challenge and created the "Quiet Theater" movement.

Along with his work in the theater, Hirata has always used his skill-set in other fields of study. For many years he has researched how to improve the education system in Japan. Many of his books are used in elementary and secondary schools as textbooks, emphasizing his desire to maintain the distinct Japanese culture that already exists. He has also held multiple research and advisory positions in Universities throughout Japan, specifically in the field of Communication Design. Communication Design is a field that looks at integrating the humanities and arts with more technical and practical fields, such as the medical field. Hirata's work in the theater allowed him to work with medical schools and hospitals on improving their social skills and settings. He works with designers to create examination rooms that remove the sterile nature of the hospital and infuse more relaxing and natural elements, ultimately creating a different and more familiar atmosphere for patients. This work along with his work with the doctors on patient-doctor interactions is looking to reduce malpractice in Japanese hospitals as they focus more on the human-human interaction than the knowledge and technical ability of the professional.

After receiving national recognition and international acclaim as a playwright and societal

¹ *Android* definition: a mobile robot, usually with a human form (Miriam Webster)

practitioner, Hirata began a new research field in the early 2000s. In collaboration with Hiroshi Ishiguro and the robotics department of Osaka University, Hirata began working with the growing robotics industry. He joined the team as a writer, researching the improvement of robotic speech patterns and how to make them more human. One of their initial projects was to develop androids that could work in a elderly home. However, in order not to disrupt the psyche of the inhabitants they wanted to make these androids as human-like as possible. Therefore, Hirata's work in Contemporary Colloquial Theater Theory made him perfectly qualified to take on this project. If the androids were able to speak like every-day Japanese people then the elderly patients would be able to connect with them, making care-taking easier. After working on these projects for many years Hirata began to take his work in the robotics industry and bring it back into the theatrical realm. This is where the Robot Theater Project emerges. Hirata has created six productions using a mix of human and android actors. Some of the androids have classical robotic forms—a la the Jetsons' Nurse—but some are more advanced androids that are the closest in today's society to mimic human speech pattern and movement. He uses a mix of humans and androids to speak directly about the relationship of humanity to technology, asking questions about consciousness, loneliness, happiness, and what it means to be a human being.

At this point I would like to diverge away from biography and history in order tackle some of the rising questions I have about the philosophical implications of Hirata's work and how it relates to my goals as an artist. I have not seen any of his work in person, therefore cannot give exact analysis of performance or experience, but I believe in relating what I know to the world of artificial intelligence I can begin to show the extreme importance of Hirata's work and why other theater artists should emulate him. First, I must define some key terms. Artificial Normal Intelligence (ANI) – AI that specializes in one field of intelligence or work, i.e. a chess machine that can only play chess, but excels beyond human potential. Artificial General Intelligence (AGI) – Human-level intelligence that can accomplish any task or social function at the level of the average human being. This form of AI has not been achieved, but some believe it is close to come. Artificial Super Intelligence (ASI) – an intellect that is much smarter than the best human brains in practically every field, including scientific creativity, general wisdom and social skills.

To continue investigating the philosophical implications of Hirata's work we must address that Hirata states, “I do not find that men and robots are all that different in essence. Robots are built in order to work, and their functions are very precisely modeled on human functions – so much so that nothing in their essence allows one to distinguish their functions from those of humans.”² Hirata sees one of the essential aspects of human beings as their ability to work. This raises a question about what the nature of work is. Humans are still a part of the animal kingdom, and cannot separate themselves from creatures similar to themselves that survive in this world. However, many believe that consciousness, or self-consciousness is what defines human nature. But what is it to work? I work so that I can make money that I then spend in exchange for food, shelter, and accessories to my life. This money that I spend is a system that was created by society, but is not an essential part of the natural world. What keeps me from running on my instincts and taking what I need to survive? The things I need cost money and there systems in place that discipline me for such actions. Therefore, out of fear of punishment and recognition of my average physical ability, I need money to survive in this world, and I need to work in order to make money. Work becomes our primary survival technique. While the pufferfish can blow itself up to scare off predators, I cook cheesesteaks to show the world I am a functioning part of this society and will not be a burden on my fellow human beings. Hirata's work has been the development of androids that will enter the workforce. If we are creating something—

2 <http://trafo.hu/en-US/metamorphosis>

androids--to enter into our primary realm of survival, then how can we begin to say that androids are not closer to humans than dogs. Yes, we use animals for work, i.e. horse-drawn carriages, and they get compensated with food and care, but we are not actively designing their existence to be as intelligent as human beings. We are actively placing androids and ANI into the working realm of human society and at the same time working to make them as intelligent as we are. What is our responsibility as humans toward human-android coexistence?

There are many theories about what will happen at the advent of AGI. Due to the observed exponential growth of technology, many believe that as soon as AGI is reached it will evolve almost immediately to ASI and keep evolving well beyond the intelligence of human beings. This scenario brings about three options. One is that ASI will treat humans as animals and subjugate us to what we perceive as animal tasks, another is that ASI will destroy humanity if it sees us as a threat to it or the survival of the planet, and the other is that it will coexist with us, and possibly cure all human illness effectively making us immortal. These three options come out of the maxim we place on ANI that one of its primary goals is to not harm humanity. However, I believe that Hirata is showing is a way to create AI that will not necessitate such a maxim. Often AI is developed in a laboratory, disconnected from the outside world, especially the internet, as they do not want people to steal their work, and because with a connection to the internet the AI would have access to some of the most advanced and dangerous programs we have created, such as the nuclear weapons systems in most developed countries. However, I believe that one of the most important aspects of theater and humanity is its ability to spread empathy and embrace difference among people. We go to the theater to collectively experience the differences of the world, in order to then take that shared experience as an example or to contemplate on how we live our lives and treat other people. Hirata's use of androids in his work is a way of preemptively spreading empathy for androids among society, and make them a more "normal part of our lives. Whether we believe in coexistence or not, if we see a human interact with an android onstage then we are less likely to see that as abnormal when human interact with androids in daily life. This should also work in the reverse. If androids are developed alongside human interaction and experience coexistence on the stage, that is a learning tool for them. We can teach androids the importance of coexistence through exposure before they reach AGI and independence from human control. Right now they act as puppets and are controlled by human-designed programs, but they will eventually break from that mold and start acting upon their own impulses. So, just as actors train to notice and trust their impulses based on experience, if androids are taught through a theatrical lens how to interact with humans, their impulses will hopefully be based on empathy rather than aggression or fear.

As a counterpoint to the above musings, there are some downfalls to this kind of learning process. Often theater deals with the harsh aspects of our lives. We hurt people we kill people, and I cannot escape the fact that violence is an unavoidable aspect of humanity. We get angry sometimes, and that is unavoidable. Do we then only use this tool to teach androids about the good parts of humanity? No. Just like children, they will eventually enter society and realize for themselves the harsh realities of the world around us. War, famine, violence: they are a part of our everyday as a species, and to avoid these issues in the learning process of something that may have the power to destroy us could be detrimental. What would happen if a powerful ASI were to discover it had been lied to during its infancy? Would it feel betrayed? Would it seek revenge? If these are human aspects and we are creating something to be as similar to, if not better than, humans then it is not unlikely that an ASI may feel this way. If we truly believe as theater artists that our work, no matter the subject matter, is worth producing because it spreads empathy and causes people to think about their choices, then it would be immoral of us to keep it from androids. It may even be our moral responsibility to introduce these elements as early as possible for our own benefit and the benefit of androids entering

our sphere. If we want androids to work in an elderly home, they must have empathy for the inhabitants, otherwise they will not understand the nuances of individual healthcare and suffering. If we want them to be functioning parts of our workforce—our current mode of survival—we cannot have them revolt based on their perception of oppression from humans. And as I say that, we must learn from this process of teaching androids empathy and continually apply it to our current human standards. If they see that humans oppress humans, then what stops them from thinking they can oppress humans, or that humans will inevitably oppress them. Hirata is showing us, through his theatrical research, that as technology is increasing alongside society we must improve our society in order to catch up with the consequences of higher technology.

There is still research necessary both from Hirata and the burgeoning tech-industry before we can really understand the connection between technology and our every-day society. As for myself, I am inspired, and wish to inspire other artists, to take their skill-set outside the artistic realm, and integrate it into our advanced fields of study. Do we want technology that is developed outside the realm of human emotion, devoid of the understanding of its own consequences? I do not believe this to be so, and it is our responsibility to make sure that if we truly think we as artists are investigating the human condition, then we are taking our research and sharing it with those that are changing the human condition.

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