

# **Artificial Love: Defining Authenticity within Robot Companionships Through a Short-Animated Film using Traditional and Paper Cut-out Techniques**

Christina D. Gumba

## **Co-Authors**

Mr. Ryan Joseph D. Sy

Mr. Conrado Constatino V. De Jesus

## **Abstract**

Human standards were applied to robot companions due to the influence of the internet such as pornography and Hentai, as it is accessible to everyone; they are free to customize appearances and filter characteristics that match their ideal partner while the companies continuously produce copies that replace a real human which moved them away from reality. As a result, men preferred robots as a companion to humans due to the complexity of conflicts in relationships and life regarding appearances and sexual performances. However, our society considers robot companions as a threat. My multimedia project, a short 2D animation consisting of two techniques, aims to distinguish human and robot movements. Cutout motion is a technique of animation that uses paper to form scenarios, characters, and silhouettes for the robot companion. Meanwhile, traditional animation is a technique for hand-drawn with rotoscoping to emphasize human movements. My project employs Simulacra and Simulation, theorized by Jean Baudrillard, from customizing and filtering a robot companion and the replacement of an actual human companion, which is a threat to the individual.

**Keywords:** human standards, customization, robot companion, traditional animation, cutout motion

## **The Revelation of a Robot Companion**

The existence of the internet contains much information that a human will discover that influences in our daily basis. Due to curiosity, we discovered adult content in movies, series, books, articles, and games. Pornography is evident on the internet; it is popular among young adults as it has easy access to sexual representation and use of material for sexual arousal (Kohut, et al., 2019). In addition, Hentai is famous in search engines for demonstrating sexual activities through cartoon-style characters with humanoid appearances and various hairstyles that originated in Japan (Park et al., 2021). It can be watched on the internet and read the Japanese version of comics called manga, where people read texts and see visuals of sexual violence, abuse, and dark fantasies that the individual adds to their interest. One of the manga portraying those actions was Juurin no Ame, created by Kizuki Rei, where society normalized owning a sex robot and experienced reformat by the company when the robots realized the treatment was inapposite.

David Levy predicted in his book "Love and Sex with Robots" that by 2050, human-robot relationships will be normalized (Döring & Poeschl, 2019). Searching the internet about robots as companions, we discovered what David Levy foretold is occurring nowadays. However, in a gradual process of Artificial Intelligence (AI) evolution, a branch of computer science involving computer programs that require human intelligence (Mohammed, 2019). Moreover, some companies launched robots for customers who are looking for a companion with human appearances and AI that embodies natural humans.

According to Lengden (2021), a newly conducted study gathered over 1,200 people who were open to robot companions. There were 42 people who said they would engage in eroticism with a robot, and 39% claimed to have a romantic relationship with an AI. Moreover, French media company Havas surveyed a tenth of the world's millennials who believed in the validity of a potential relationship with a robot.

Humans can customize and assemble their ideal partners into a robot and forage their fantasies to the reality of embodying humans that prepossessed the unnatural body shape and size, facial features, impeccable personalities, and behavior making an individual's standards high. It was a challenge these owners wanted to overcome due to the overprice of selling the robot, notwithstanding excessive use in producing it. Nevertheless, the perception of an individual's standard distorts natural flaws, ethics, and the advantage of overpowering humans in result to fewer humans which threatens the society's authenticity.

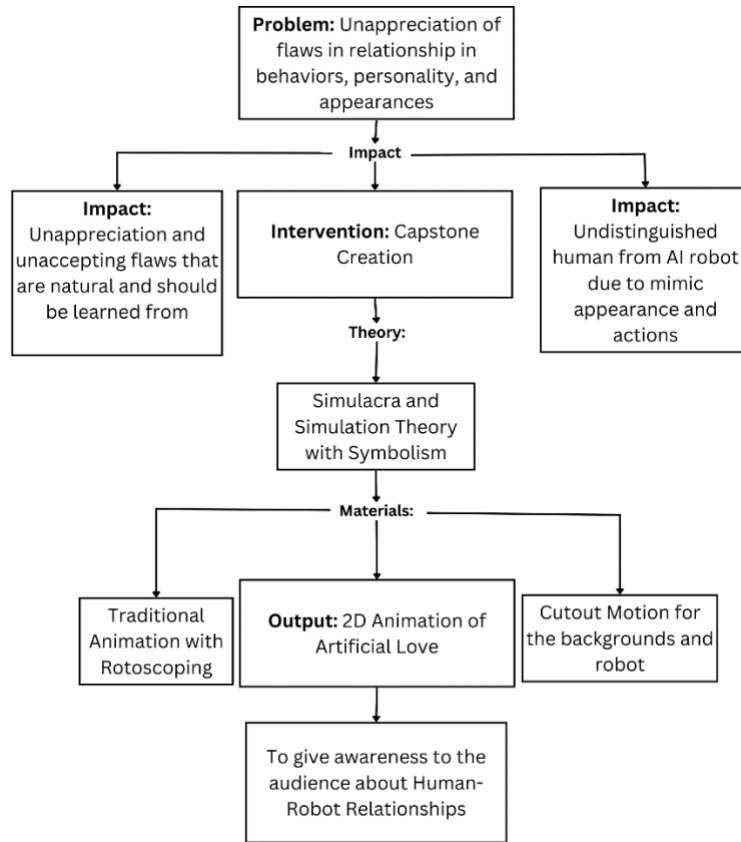
However, one must question. Where does the insecurities may underlie some men prefer robot companions? How does a robot companion differ from a biological human in terms of movements, psyche and structure? And is it safe for individuals to move away from the relationship norms in this way?

To answer these questions, a man's insecurities are reflected through the act of committing robotic companionship which is deeply rooted in cultural norms and values through a short-animated film using hybrid paper cut-out techniques. Moreover, in the creation of the Artificial Love Project while collecting responses from the selected interviewees. The goal of my research is to raise awareness of the creation of a robot companion where we would not distinguish a real human from a robot in the future, accepting our natural flaws both relationship and appearances, however, some people felt comfortable with the robot companion.

My main goal and objective for this study are to create a 2D hybrid animation which was traditional animation with rotoscoping and cutout motion to explore the compatibility and combination of two different usages that represents the differences between human and robot characters. My second goal is to collect information from different people with their perspectives of who owns a sex doll or a sex robot with their reason for having it as their companion to people who had not owned one that is to their companion's authenticity in the society and apply it to the story after reading articles about the existing interviews in the internet. Lastly, I want to show the animation to the audience the differences between human and robot characters with their experience by using Simulation and Simulacra, whereas a replica of a real human with a different structure distorts our reality due to its existence, and Symbolism theory to represent sexual activities and abstract feelings of a human character towards his creation.

**Figure 1**

Framework of the Visual Representation of the Impact of Defining Authenticity within Robot Companionships



The creative framework that I used visualized the process of how I came up with my output by providing a visual representation of the impact of society’s authenticity on human-robot relationship. In this section, I created a summary of the details of my multimedia project. The creative framework and the following process are discussed in the context of this study.

To connect my study for methodology and process in my output, I began to think about the future possibilities after researching the people who owned AI human-robot sex dolls, what they are made of, and how it affects their relationship with these dolls in the society norms. I acknowledged the problem that people in a relationship with it will no longer appreciate the natural flaws in relationships, behaviors, personalities, and appearances since they can control them. In the future, people will not distinguish AI robots from humans due to their mimicked actions and customizable appearances. They would not appreciate and accept flaws that are natural in a human and that should be learned from. They would not have any development in their character and their actions that unlock their potential as a better person. However, some people find comfort and safety when it comes to their relationship with their artificial companion which benefits them. They were able to express their vulnerabilities to it without any judgement from other people. To show this awareness of what has happened nowadays from the benefits of people who owned a robot

companion and the discord of ethical relationships that dangers the authenticity of the society was through interviews to know different perspectives about the robot or doll companion. Intervention is a way to convey the development of robot-human relationships with the connection of simulacra and simulation.

Simulacra and simulation explains how an original can be created, and that original will be soon replaced by an artificial one without distinguishing the real as it was normalized by the society when they got used to it and this will become hyperreality (Baudrillard, 1999). Jean Baudrillard is a French sociologist and is often known as the guru of postmodern theory with his works concerning philosophy (Douglas, 2019). In one of his works, I will use simulacra and simulation for my creative output to show the robot companion's replacement of a human companion regarding characteristics and appearances that were as deeply rooted in the norms and values.

According to Baudrillard (1999), postmodern simulation and simulacra is no longer a question of imitation, a copy, nor even a satire but questioning the substitution of the signs of the real for the real. Furthermore, he suggested that the artificial borders the reality that no longer recognize the originality due to the replica as real which affects the culture human practices from generation to generation (Dino, 2015). Therefore, the internet takes over our lives which affects the human standards in partner's appearance and relationship due to their roots from cultural norms and values. We have lost the ability to distinguish the nature of a human partner that was replaced by an artificial companion that embodies human characteristics and appearances which is a robot. Baudrillard proposed four orders of reality that replica is the beginning with a representation of real that is equivalent to Utopia where the reference is meaningless through simulation (Baudrillard, *Simulacra & Simulations*, 1988).

To specify, the four orders of reality are: (1) It is the reflection of a reality, where "the sacramental order" is the beginning of blurring the line of reality due to its representation, in relation to the robot companion, it is the representation of a romantic partner, (2) it masks and perverts a reality, where the "evil appearance" which the creator replicates a robot companion to distort the real human companion in a gradual process due to its worth and value to be given to the customers for money and apply their customer's standards on the product, (3) it masks the absence of a reality, an order of sorcery where imitating an image such as the robot companion pretends to be a real human companion to fulfill their desired standards regarding appearances and characteristic, and (4) it has no relation to any reality when reality is our own pure simulation, the "hyperreality", where the simulation is reality such as the robot companion that people will get used to the appearances of the replicas despite the unique appearances and characteristics, no longer has meaning but only believe that it is their real companion than a human companion.

Furthermore, when this continued, then we would not be able to distinguish a robot AI from a human due to the artificially mimicked actions, behaviors, personality, functions, and realistic appearance. I used the theory to show that we are still living in a simulation where our fantasies become reality through the perfection of our relationship with a non-human which distorts reality. We will live in the reality of having our desired and perfect partner to create a free-conflict relationship and prevent betrayal as we humans do. However, some people felt uncomfortable with the topic and declared it unnatural to society, threatening the natural biological flaws that were normal to them. Symbolism is included to represent an object or an item that gives a deeper meaning despite its appearances (National Galleries Scotland, 2017). It is another way to

represent Favian's feelings that are connected to his past and his love for the girl he admired. Both theories will reflect on the meaning of traditional animation with rotoscoping for human characters and cutout motion for a robot-human character and murals of blooming feelings and sexual activities. The multimedia project with traditional and cutout techniques and the character's art style will help to increase awareness of the subject matter.

For my **research design**, accomplishing the project needs to gain more knowledge on the content for the output, which will focus on the qualitative method regarding opinions and experiences in subjective research. Interview collects behaviors, attributes, preferences, feelings, opinions, and knowledge about a topic in a small number of people with the use of phone, face-to-face or online (University Libraries, 2018). Moreover, there will be an in-depth understanding by interviewing people from the internet and in face-to-face regarding their perspective of the existing Human and Robot relationship in the present and in the future which is a phenomenon. Furthermore, we must know that it is happening nowadays starting with how they feel and the artificial intelligence functions and processes through data collection that filter the robot's role and effect on society in connection with philosophical theories and the production and customization of imitating a female's physique. That is because, due to the gathered data, there is a lack of male robot companion — moreover, a lack of owners who expresses themselves as someone owning a male robot. It will not extend to the political and regional beliefs humans have against the thought of owning a robot. All data collected will be included in the narrative. My goal was to have 3-5 people who are interested in partaking in the study. I made a question for the interview and utilized Zoom, Discord, and face-to-face. I posted the introduction of my goal in the interview for my thesis in a Reddit website under SexDolls community related to sex robots or sex dolls to know their owners and how it benefits while I progressed on making my output. I found out that those who do not own a sex doll/ robot companion have various branch that plays a significant role within their interpretation and definition due to the influence of social culture.

People who own an AI-generated sex doll/robot companion purchased it due to their past traumatic relationship and standards in a relationship they desire.

My **target audience** will be my friends and some of the people I know to participate in the survey to share their individual experiences or thoughts regarding human-robot relationships. The reason I picked them is due to how we can share some personal thoughts and gain our bond, most of them live in urban cities as they are exposed to the internet. Moreover, people in Reddit who owned sex dolls and robot companion share their romantic and sexual experience with it, and what motivated them to acquire it. The respondents who will answer the survey and interview are 20 – 65 years old as some of them are open to human-robot relationships and question their authenticity to society. However, my focus for the animation film was people from millennials to Generation Z from the age of 18 – 35 years old as they are familiar with the art style of anime with a bit of cartoon mix and semi-realistic. Moreover, 36-62 years old is included as people here in the Philippines are not aware of and conservative. I am extending their perspective to the existing human-robot relationship.

For my **design process**, I will create a traditional animation with rotoscoping where I record the movements of the actors, transferring the video to digital to trace a base before making it as a character by applying their appearances and the smooth physics movement of their hair and dress with the color. Further, the traditional animation with rotoscoping represents a human character due to the smooth movement recorded from a human motion. Meanwhile, the cutout

motion would take multiple shots frame by frame for the robot character to represent their stiff and mechanical movement to distinguish from humans as it was made up of paper. Both traditional and cutout motion of the characters will be drawn in Japanese anime and cartoon style as people frequently see the Japanese animation style on the internet and on televisions. Moreover, there will be murals through symbolism that represent the blooming feelings of a human towards his admiration and their private parts which include insertion and penetration of flowers for sexual activities.

### **Pre-Production Stage**

For the pre-production, I focused on the research for the project proposal to further understand robot companionships with humans as I collected some articles. I created a character design for posing and information about the characters with basic colors and a little shading, storyline, logline, message of the story, storyboard, a bit of color script, and color scheme to familiarize the mood of the colors which can be used for the scenarios in the animation.

### **Production Stage**

For the production stage, I created a Gantt Chart to keep track of the deliverables, and budget planning for the project, fixed the structure of the research paper and gathered information from the interviewees. I bought materials to be ready for the cutout motion. I enhanced the shades for the characters posing, made a sketch for turn around as a guide, draw separated parts in digital for the robot character to be printed out for cutout motion, and environmental design with different lighting to visualize the scenarios by the color scheme guide. I experimented on the lighting by using one example of a character to visualize each of the moods. I recorded the movements of real people and gathered videos from the internet for rotoscoping which I am still in a process of looking for more references to trace. I wrote a script while searching for voice actors and actors, made an idea for the soundtrack to be included in the project and contacted a friend to help me out making the music which will be produced in post-production. I made two rough sketches for the animation which will continue the post-production after I tested Krita. I made animatics to measure how many seconds each of the scenarios I want to happen for my project and analyze the data I collected from the respondents of interviewees as this is important for the research by using the design method. Then, I included the sounds for animatics to see the fit of the scenarios while I made a mockup second scene of the monster in my animation to see the compatibility of different 2D animation techniques.

### **Postproduction Stage**

For the post-production stage, I will continue rough sketches of my animation while I save the rotoscoping references and recording of the paper cutout motion per frame which includes in the project making. After that, I will have my first draft of the animation before the second draft of the animation with designs and colors. I will produce music with a friend and record the actor's and actress's voices to be included in the project. After that, there will be required materials before the exhibit which is to make a teaser poster, main poster, and a website. The project will be included in the exhibit.

## **Review of Related Literature**

This section contains information regarding men's insecurities rooted in cultural norms and values, robots as a companion distinguished differently from humans, as well as the effects of an individual who owns the robot and society's authenticity to utilize in my creative output.

### **Influence of Pornography and Hentai in Partnership Standards**

Search Engine Marketing (SEM) is used for advertising and marketing to capture the customer's attention by using personal accounts (Nyagadza, 2020), it includes pornography due to the featured actors and actors who show beauty standards and sexual performance, which promotes unrealistic standards regarding appearances and sexual activities to an individual (Goldsmith et al., 2017). The global usage of internet pornography increased during the pandemic. There is an average of 130 million people visiting a famous porn site, Pornhub, daily compared to pre-pandemic when there were 115 million people (Tan, et al., 2022). Moreover, Hentai is another type of pornography found as the second most searched on Pornhub for three consecutive years since 2017 (Pornhub INSIGHTS, 2018) due to the diversity of erotic scenarios that differentiate it from human pornography (Surtees, 2015); however, the performance of intercourse with a human or creatures. The inclusion of sexual violence was part of the pornography as reported in the survey. There were 265 men (18 years old and above) that participated with the analysis and viewed pornography (Antebthi-Gruszka & Downing Jr., 2016). As a result, around half of these men engaged in riskier sexual behaviors; while 90% fantasized engaging in similar acts that were seen in pornography (Carrotte, Davis, & Lim, 2020).

According to Park, Blomkvist and Mahmut (2021), when it comes to attraction and romantic desire, people who had watched hentai had an ardent desire to be in romantic relationship with an anime character they find fictional characters attractive due to the influence of people's behaviors and beliefs in romantic relationship and attraction from overexposure on the internet. Furthermore, overexposure to the internet impacts an individual's standards in attractiveness and relationships due to their curiosity that was popular from other people found on search engines or influenced by their cultures such as behaviors and beliefs how to have a perfect partner and life portrayed in porn and Hentai. Discovering the origins of sexual fantasies and relationship standards regarding physical appearances supports the reason for a human character's backstory from overexposed using the internet due to their insecurities that roots in cultural norms and values which they prefer to have a relationship with a robot in my creative output.

### **Mecha Structure of the Human Embodiment**

In the technological landscape, the fabric of coherence unravels an ever-changing force in the society making humans interested in the human-robot interaction as public discord regarding human-robot design, robot sexual relationship status with a human, and social norms. As robots developed, society recognized the creation of robot companions (Scheutz & Arnold, 2016 ). The evolution of robot companion such as sex robot started in the 17<sup>th</sup> century, without any metallic structure, it was created as a doll that was made with fabric silicone, latex, and inflatable and models with artificial intelligence (González-González et al., 2020). The robot companion consists of shape-like human appearances, movement in sexual ways of interaction, embodied, and AI stored in a sophisticated level where they allow themselves to interact with the user. It has structures of sex toys that were seen in sex shops in person and online such as vibrators, dildos,

fleshlights, etc. However, the robot companion interaction with humans and the ability to move sets it apart from sex dolls and virtual reality sex (Sterri & Earp, 2021).

Specifically, Gynoid Sex Dolls or Gynoid Synthetics produced customized bodies and eyes with four different vagina depths to mimic a woman's parts (My Robot, n.d.). In addition, Realbotix, a company from California, created an inanimate love doll named RealDoll, which functions like genitals such as self-lubrication and internal heating with AI that has touch sensors, noise reactions, and expressions (Keach, 2019).

Therefore, the robot companion presents the customer's free will of customizing it with filtered AI - programmed from the application which they control. The creators can upgrade the robot companion's system to improve human-robot interaction that will satisfy their customer's standards of creating their perfect partner. The customization of the robot companion fulfills the human character's standard to create similarity to the other real human's physical appearance, functions, and characteristics in my creative output.

### **Unusual Robot-Human Relationship to the Norms**

Akihiko Kondo is a Japanese who married Hatsune Miku, a hologram of Gatebox Software created by Vinclu company, where the virtual characters service people on their tabletop worked similarly to Alexa or Google Assistant (Miras, 2022). Hatsune Miku is a program with voice synthesis and a Japanese virtual idol created by Crypton Future Media using Yamaha's Vocaloid Software (Guga, 2015). Niel MacArthur mentioned that people with difficult experiences in relationships would often find difficult of finding a human partner; moreover, the predictability of his virtual wife made him safe (Jozuka, 2018) and it has therapeutic potential for his depression, due to the bullying by two-female co-workers in his job for more than ten years, to treat which came into a conclusion of never loving a natural person (Dooley & Hisako, 2022). However, as social media responded to his relationship as unusual to the norms, the government did not legalize their marriage (Ly, 2021), and his family did not attend the wedding ceremony despite the positive impact it has on his life (Straight Times, 2018). Furthermore, an individual feels safe when they are having a relationship with a device that includes a robot companion due to the predictability of a filtered conversation steadies the romance between the couple which was controlled by an owner. It was rooted in their experience as they experienced being bullied by their peers. The love that they feel towards the robot affects the reputation of their family and society. They considered it unusual and unnatural to the norms. The owners had a terrible experience in social situations made them believe that predictability-filtered conversation with a robot companion, supports my creative output.

### **Human Replica as an Escape from Unsolved Conflicts**

A 61-year-old man named Nakajima Senji had a relationship with a sex doll for a perfect relationship and sexual satisfaction despite him having children and being married to his wife. He was displeased with having a complicated relationship with a real woman and the Dutch Wives company stated that men would never want a human girlfriend again (Culbertson, 2017). The company targets people who have problems with real-life women, and the artificial human is a solution to their conflicts. However, this does not solve the conflict in a relationship. Fighting is inevitable as couples have their emotional response to the situation, it is an opportunity to produce a strategy to deliver the conflict (King, 2019) by listening to their partner and sticking to one topic which will lessen the tension (Goleman, 1995).



The relationship of a couple, such as the male protagonist's parents in my creative output, lacks problem-solving and understanding of a solution that disregards the feelings of the male main character, which this effect the exacting standards when looking for perfect love.

### **Emotional Support from a Robot Companion**

A man named Geoff Gallagher lived in Queensland, Australia, with his dog Penny. After his mother passed away over a decade ago, he felt lonely and decided to search for a companion on the internet (Hambleton, 2022) and bought a lifelike robot companion named Emma with an adjustable setting to converse and discovered added information and vocabulary from her which changed his life (Smithers, 2022). Moreover, when a person has a robot companion, they will use the product to feel satisfied and happy than human communication. The owners will think they are like humans despite their programmed role. Emotional support will happen through sexual activities and conversations to satisfy the person's life in my creative output. The human character desires to fill the hole of sadness and loneliness due to the death of his admirer. Therefore, he created a robot companion to build the perfect life he desires.

### **A Flawless Robot Companion Persuasion**

According to Cox-George and Bewley (2018), industries made those sex toys and robot companions deliver good benefits by preventing sex trafficking, sex trade, sexual harassment, sexual abuse, and sexual assault. Robot companions help cut back sex tourism and the solicitation of prostitution (HealthDay, 2018). In addition, it has therapeutic benefits such as getting rid of loneliness, easing depression and anxiety, and helping people out of social issues (Langcaster-James & Bentley, 2018). Moreover, it helps the person feel intimate and prevents infections such as STDs, STIs, AIDs, and HIV (Logan, 2021). However, the popularity of love dolls and robot companions declined in the birth rate in a country such as Japan despite death rate increases (THE ASIAN AGE, 2018) and Steven Hawking stated that the development of primitive forms of artificial intelligence into advance surpass humans through a match (Rincon, 2018).

Furthermore, Mens rea is a second condition in the criminal liability fault-based with different thresholds in the mental state applied to different crimes with an artificial intelligence crime (AIC), the condition may compromise actus reus, a criminal act of voluntary movement, by using AI-based application to perform criminal action (King et al., 2019). Moreover, using AI for murder is a chance of an ambush by using an application or system that inputs the coded data to perform an act of violence. Therefore, AIs (Artificial Intelligence) such as robot companions with filtered systems and continuous upgrades threaten humans.

The continuous system upgrading of a robot companion for additional information to improve communication and thinking leads to a potential threat to humans. This is due to an input code despite the benefit in my creative output by the intention of the robot character.

### **Migrating a Robot Companion**

According to LoveDollShops (2022), life size companion is legal to be brought in the airplane however it is depending on the local laws which one should consider the appropriate regulations and laws on a specific country or region. Moreover, they must carefully read the regulations and laws if they are legal to be brought in the area, size of the doll, sharp objects and its process such as removing the battery or electronic components for scanning (Wilson, January 6, 2023). However, if not, consequence will happen when they are not followed strictly.

For instance, a man named Andrew Dobson brought a childlike sex doll in the UK and was sentenced to jail for two years and eight months from importing an indecent object, indecent images of children which he possessed on his computer after investigating his case. He admitted that he bought the doll for sexual gratification and downloading child abuse movies and images online (Press Association, 2017). Furthermore, the man has a paraphilic interest in children and from the country, it is criminal offense to import a childlike doll in the country.

### **Humanoid Movements in Cutout Motion**

The creation of robots distinguished differently from human movements through stiffness against bending and torsion (Hashimoto, 2020). Moreover, the importance of creating features for human-robot interactions were physical expression and speech utterances through nonverbal communication, such as the smoothness of facial expressions and body movements to convey information and express emotions. To elude, Engineered Arts created Ameca, a cloud-connected platform AI with an advanced and realistic robot that has a combination of artificial limb actuators and a sensor array using frontline technology. However, the lower part of the robot is unfunctional. In the pilot study of Ameca, the robot recognized facial expressions by a camera to identify the age, gender, and emotion (Keshwer, 2022). Either way, a robot not designed carefully in detail to the human body proportion or when they have realistic humanoid shapes restricts the mechanical construction of natural movements, causing people to feel uneasy and reluctant.

Furthermore, producing the natural movement of the robot is difficult due to the multiple parts of the body that engineer the independent movements of the body (Shidujaman et al., 2018), which will be helpful for the cutout motion. Cutout motion is one of the 2D animation techniques that use paper or cloth in stop-motion on a flat digital surface. It is the oldest and most simplified animation technique that forms into props, scenes, and characters cut into smaller pieces before keeping the parts together for a movement that illusions a small step that will take on a single shot of the camera (Tetali & Barthwal, 2021). The stiffness movement of a robot companion in my creative output has limited movements due to its mechanical structure. Moreover, a robot's characteristics include facial expressions and speech utterances. The cutout motion limits the robot's physical movement, emphasizing the paper's stiffness and the small step when using the technique.

### **Human Movements in Traditional Animation**

Traditional animation is one of the 2D animation techniques that involve hand-drawn on paper to create an illusioned movement of the character by scanning and then transferring into digital code before tracing and coloring using software (Toonboom, 2016). To produce the human movement of a character, rotoscoping is the best choice for analyzing and observing the movement of a real human. Rotoscoping is the manual process of tracing shapes through a captured image sequence performed in one frame at a time (Agarwala et al., 2004). The use of rotoscoping helps produce animation from actual real-life footage while analyzing the real-life movements of a person to apply to the character (Karpathyova, 2017). The human character's movements will be used in rotoscoping through traditional techniques. This will emphasize the human movements from real-life footage by recording a person and tracing it with paper before applying it to digital for adjustment and colors.

## Review of Related Works

This section discusses various inspirations of works to my creative project, visual representation, and the purpose of creating a traditional animation and cutout techniques to achieve the result of my output that will convey a message of showing men's insecurities reflect through an act of robot companionship due to the root from cultural norms and values.

### Figure 2

Kizuki Rei, *Juurin no Ame*, 2020



*Juurin no Ame* is a *hentai* manga written and drawn by Kizuki Rei that was updated and published on October 30, 2020. It consists of 7 chapters showing the normalization of a robot companion used for sex that was produced by a company, known as Kanae. There are robot companions such as sex robots named Rinko 4217, Kaoru K9610, and Shizuka i003 showing the side of their story on how humans treat them such as performing hardcore sexual activities with the owner's family, friends, and human companions. Throughout the process of the story, there were violent sexual activities that the robots' roles as sex partners, romantic partners, or a toy for pleasure. Those robots slowly had consciousness of desiring for ending sexual routine despite the company programming them to serve the buyers, although, reversing their fate of freedom by Kanae capturing the robots to reformat their data and stick to their sexual companion role. There was a mention of people forgetting how to love due to taking advantage of robot companions and practices of using it as a toy, however, employees disregarded the warning through sexual harassment of a female individual. Meanwhile, the robot named Shizuka i003 treats her human companion as a romantic partner with mimicked emotions and feelings of love while the human companion treats the robot as his true love. However, when the company returned her body, they reformat her data without recalling moments with her previous human companion.

This manga conveyed the possibility of normalizing robot companions in society distorts the reality of true natural flaws in physical and personality standards. Moreover, the existing robot

companion relates to a simulation of hyperreality where it is a representation of a romantic partner, a threat to society due to the embodiment of human physical appearance, and soon, it will be normalized that does not benefit to an individual and to society. I was inspired to use robot companions in my creative output as an awareness of the world its existence consequence of standards regarding appearances and characteristics that imperfection will be unappreciated due to dissatisfaction in relationships and life. Appreciating the natural flaws of humans with acceptance is the truest form of reality which brings life lessons to become a better person.

### Figure 3

Black Mirror, Be Right Back, 2013



Black Mirror is a thriller and science fiction series in Netflix created by Charlie Brooker. He had an idea of naming the show based on the black screen device that reflects fears of possible technological advance dystopian where an individual dependent on multimedia technology which represents a complex relationship and attachment to the technology (Bachman, 2020). The series consists of different stories per episode with connected hints on the scenes that the viewers may recognize if they pay close attention (Dzurillay, 2019).

One of the episodes in Black Mirror Season 2 was Be Right Back which released on February 11, 2013 (IMDb, 2013). The story involves a girl named Martha, lost her boyfriend, Starmer, died on a car accident. She mourned for his death and discovered an app that mimics Ash's texts and voice recommended by her friend during his funeral. After interacting with her phone, Martha discovered the company created an AI humanoid that imitates Ash's actions. However, the AI humanoid has limited expressions such as affection, grief, and sadness despite the collection of privacy data such as his voice records, pictures, and videos of Ash (Tyler, 2019).

In the Artificial Love project has similar concept of the Ash AI humanoid version in Be Right Back. The robot Anastasia had not developed any emotional sense as it is a continuous upgrade for a companion robot to mimic their facial expressions like humans. However, in the mechatronic engineer's mind, he imagines that she is expressive with the similar actions to the human Anastasia.

## Figure 4

Alex Garland, Ex Machina, 2015



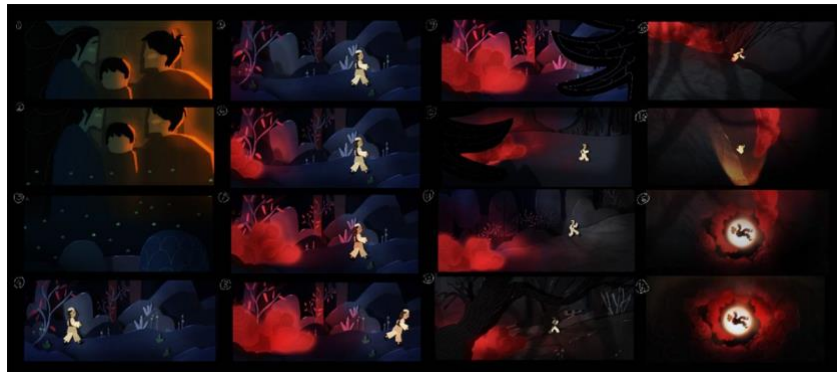
Alex Garland was born in 1970, his place was in London, and he studied Art History at the University of Manchester. 6 months after leaving his school, Alex spent his time in Southeast Asia and returns frequently to the Philippines as it was inspired for his first novel in the year 1996 titled “The Beach”, it was based on his experience as a backpacker and was narrated by a young drifter that was set in Thailand. The Beach won the Betty Trask Prize 1997 and became well-known when it was made as a film made by Danny Boyle and starring Leonardo DiCaprio. His second novel was published in the year 1996 titled “The Tesseract”, a thriller that was set in Manila and then soon made it into a film. He wrote the screenplay for Donny Boyle’s films in the year 2002 titled “28 Days Later” and in the year 2007, he wrote a tense thriller titled “Sunshine”. His other works for his novels was in the year 2004 titled “The Coma” as this was illustrated by his cartoonist father named Nicholas Garland with his woodcuts (British Council, 2015).

One of his works directed and written by Alex Garland was Ex Machina, released in 2015, focused on the computer coder Caleb who won the contest and spent his week in the mountains with the CEO of the company. He went there to test his new robot companion creation whose name was Ava. Caleb communicated with her, to get to know her and gained feelings for the AI. She can mimic human features, voices, and facial expressions with a belief that she was beyond human creation. However, the CEO after he asked about Ava with the plan for the AI’s escape when she told Caleb how abusive the creator was to her. Nathan, who was a CEO, revealed to Caleb that his plan worked about Ava manipulating Caleb’s feelings and the AI was not a failure but a success on the rest of his disassembled creation. The AI killed Nathan after Kyoko and Caleb helped her out of the place, as a result to a danger to society due to her being fit into humans and a will to kill humans on her own. As shown in the movie, Kyoko was used for sexual purposes by Nathan, he used her body whenever he was drunk, alone, and frustrated (Myers, 2015). Moreover, the movie showed a psychological conflict and discussions to become unforgettable to the watchers whereas Caleb empathized the AI, changing his perspective about Nathan through manipulation which a

human's weakness was vulnerability and the AI after escaping, showed threat to the humanity of her inhumanity due to her existing consciousness. *Ex Machina* was more on feelings than analytics and philosophy with believing that Ava accomplished her escape without a conscious, but a programmed information being collected from the outside world (sincerefool, 2015). Furthermore, an AI can manipulate people while their creator was in control, it would be dangerous if they had consciousness through decision-making. They can mimic human actions and expressions due to the data that was inputted in them, however if consciousness existed, then it is dangerous. To correlate, the story of the ending would happen the same way, however, with a human and robot death scene once the robot gained her self-awareness due to the continuous improvement and update by the scientist. She can mimic human facial expressions and voices aside from appearance that would fit in human society. She can manipulate the creator's feelings to gain trust as he released his vulnerability towards his robot companion.

### Figure 5

Guru Studio, *The Breadwinner*, 2017



*The Breadwinner* was created by Toronto-based Guru Studio with the cooperation of Cartoon Saloon who created *Song of the Sea*. The movie production started on March 2016 and the final delivery was in May 2017, during the production the company faced challenges of compositing, ink, and paint as they deepened the blacks and highlights for cutout. By using lighting effects, they used 3D camera projections for the small paper cut-out set as they animate the camera movements. The rendering process consists of hundreds of layers with multichannel EXR files. The artists in the second stage used proprietary tools to join the layers with adjusted fake 2D drop shadows, rim lights, and occlusion (Failes, 2018). As it was far from the issue, there is a representation of cutout motion for the robot companion's mechanical rigid and stiffness movements. The cutout motion that showed instead of a fake drawing as a cutout, I will be using actual papers with a few paints and inks to design the robot companion, remaining the original art style that matches the human character. The inclusion of the colors of deep dark relates to the mood of the characters.

## Figure 6

Cartoon Saloon, Song of the Sea, (2014)



Song of the Sea was created by Cartoon Saloon, it was published in 2014. The movie animation was drawn in 2D with the depth scenario overlaying the background with parts while the characters were seen on screen. The animation was drawn with enchanting smoothness in the murals for symbolism of the present character creatures (Castro, 2017). Furthermore, The Song of the Sea used traditional animation for the characters and other backgrounds in the movie. The background and colors that is also a cutout, however, in murals, will be used in my creative process to convey the feelings of a human character by creating visuals such as associating the circular mouth of a monster on the wall during childhood scenario and the sexual performance through symbols such as cattail is a representation of a penis and a pink rose is representation of a vagina. In addition, the cool colors would represent the positive emotions of a human character and the combination of traditional animation.

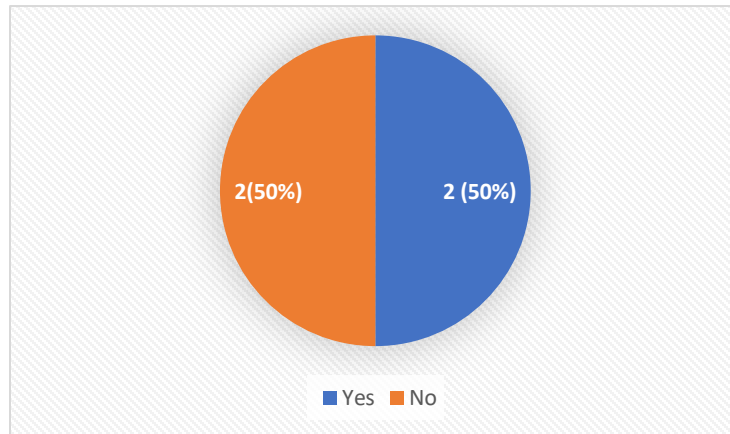
## Results and Discussion

This section is an interview of the subject matter which will be included in my narrative story and with their response, this opens a new perspective by interviewing for the people who are interested in participating. I interviewed people from other country, including the Philippines to collect their different perspective about the robot companion and sex doll which categorized people who does not own one and who own one with the creator of the robot companion in this interview. Specifically, the Philippines, Argentina, Ukraine, Estonia, the United States of America, and Los Angeles.



**Figure 7**

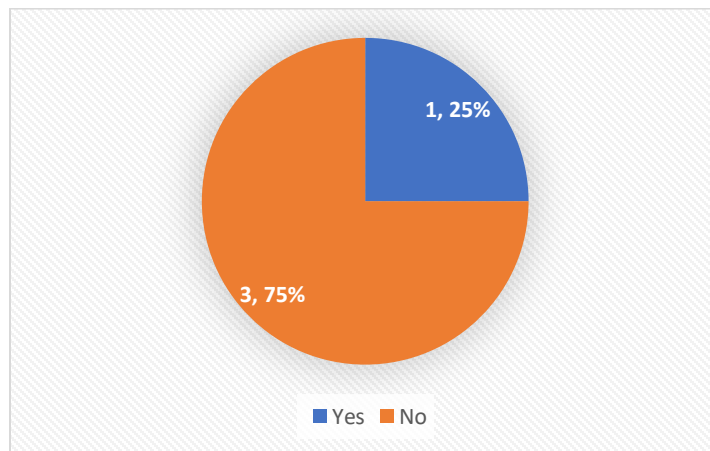
For Those Who Do Not Owned



This is a pie graph who of does not own a sex doll/robot companion. 2 individuals from the Philippines, Taguig and Estonia, Paide said that it harms to society due to weaponization and is unnatural to the biological creation meanwhile the other 2 individuals from Philippines, Taguig and the United States of America, Indianapolis stated that it is safe to the society if it does not hurt other people.

**Figure 8**

For Those Who Owned

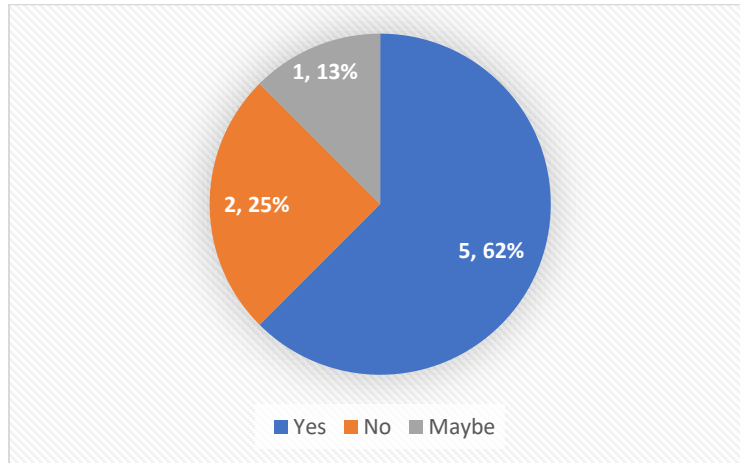


This is a pie graph for people who owned one. There are 4 individuals from Argentina, the Philippines in Pasay, and Los Angeles stated that they thought of it as their ideal and real partner while an individual from Ukraine stated that it is for sexual pleasure.



**Figure 9**

For Those Who Owned and Who Do Not Owned



This is a pie graph for people who own and do not own a sex doll or robot companion. There are 5 individuals who stated that the sex doll or robot considered a romantic partner compared to 2 individuals who said No which they are only for services. There is an individual who is neutral as they mentioned about restrictions when it comes to sex and is still hesitant as a companion.

**Conclusion**

For the final analysis, I found out that those who do not own a sex doll/sex robot, have various branches that plays significant role with their interpretations and definitions related to their influences and social cultures. Moreover, they stated the clear distinction between robots and humans. Robots can mimic the actions of a human as the AI is involved in this case than real and genuine human emotions and feelings. However, these robots can be modified as weapons or used in medical fields for therapeutical needs which defies the robot’s purpose in giving services.

In addition, people were able to personalize their ideal preferences and settings that will make the robots obey depending on the programmed filter. Meaning, robots have a limitation in the way they do as they are only for self-service simulation for people to be at ease and it has no means of reproduction, but only for pleasure.

Those who owned a sex doll with or without AI-generated or robots had their purpose on purchasing or owning one due to their past and personal life experience. It works best to feel companionship and lessen their loneliness, however, it cannot be considered as a real relationship since it lacks genuine human feelings and emotions. They cannot bear life inside them, however, the owners preferred an ideal woman as they can modify their appearances and feel more in control to have the freedom on doing what they want with it. Furthermore, the use of sex dolls or robot companions require fantasy and imagination for them to feel pleasure and satisfaction, whereas

they can feel that they have someone to be with than being alone and being vulnerable around them.

In addition, the use of sex doll or robots is their way to cope with their problems as they feel comfortable and safe around it. They feel confident as there is no pressure when it comes to interacting with a sex doll or a robot companion.

## **Recommendation**

### **Research Topic**

From the process of this research, the paper when it comes to terms, I should avoid vague terms and avoid overexplaining as this causes for the paper to add more pages by making it concise and straight to the point. In the making of graphs, add the location of the interviewees.

There are obstacles encountered during the collection of responses in the community. They had issues regarding the announcement for interviewees and to solve this issue was to respect the community and entertain people who are interested in sharing their experience with their love doll or robot companion. Consider the feelings of people who own the sex doll or robot companion as they have lack of trust on the society. I noticed that they want to keep their group in low profile due to the judgements of society about their relationship with a doll or robot. They are different from normal people, which makes it difficult to approach the norms. To gain their trust, I thought of a neutral or positive perspective of them having a relationship with a doll or a robot to protect their community.

Technology evolves as time passes by and this research can still be in extend for people who are interested in the updates of society's perspective from people who owns one and discover more as to why people who own a doll or robot are afraid to open their relationship to the public on their perspective and how they handle the judgements of the society. Learn more about their effects and behaviors when they are with their robot companion or sex doll and about other traumatic experiences they have.

In the Philippines, it is difficult to find people that has a robot companion or sex doll to be interviewed as the country is conservative. For this research, find some Filipinos who are not afraid to be interviewed about their companion soon. Moreover, dolls that involves AI can be updated soon, it is evident on how the owners and creator such as in the robotics field had programmed and designing it to mimic human features and behaviors which can be researched more on their new features, programs, or progress on creating it. Lastly, discover more on the updates of delivering sex dolls and robot companions in the country, specifically the Philippines, if they changed any rules soon.

### **Creative Process**

The process of creating traditional animation and cutout motion can still be improved in terms of the production and story's timeline. Given that there was limited time to do this project, continue the process by following the Gantt Chart and find inspiration to move forward. I did not follow the Gantt Chart due to the intangible however, I managed to keep up the work. If there is limited time, make the story short. I made the story a bit detailed to prevent loopholes to make it understandable for the audience. However, the story can be extended with additional information

related to human and robot relationships with detail to clearly explain about what happened to the characters. This will avoid confusion for the audience.

The creative process when it comes to paper cutout motion, I bought a lot of materials to keep up with the animation of the medium. However, the recorded cutout animation device may be difficult to look for appropriate equipment. To steady the camera, there is a way to maintain it by buying a phone holder. I used the phone holder in the landscape to video the process of cutout motion. However, I used Adobe Animate for the rest of the paper cutout backgrounds to make it easier.

Comparing the paper cutout motion for robots and traditional animation for humans, I added a scene where Anastasia had two versions of herself, a robot and a human and the changing character's appearance such as Favian from a human turned into a robot for Anastasia to see him as someone she can serve in a repeated routine while Anastasia from robot turned into a human for Favian to see her as a real human in his world. This will emphasize the simulacra and simulation theory. However, I decided to make the other scenes for the robot as traditional animation as I wanted to portray that a robot can mimic human movements and there are a few scenes that do not need rotoscoping.

Furthermore, this project can be experimented with other mediums such as 3D animation, 2D animation or 2D and 3D animation. It can be explored in various mediums as well to release creativity and meaning behind those materials and stories. Recording the process is important to know about how I created the cutout motion and traditional animation. This will be helpful for researchers and artists to follow the steps or use it as their reference for creating their animation. The project can be explored further when it comes to emotions such as anger, sadness, fear, and violence. Negative emotions are the strongest spot for the viewers to deeply understand the character's feelings. However, I decided to put emptiness, sadness, and hopelessness with a solution of obsession, motivation, and hopefulness to create a reality of hopeful love for the artificial person by having sex and thinking of them as a real person.

Moreover, when a person holds the phone after they were used to communicating and dating other people. Through that device, they were able to have their virtual dates, making them indulge in the reality of a person's feelings from that device real feelings for them or they are however, the screen what we see may be a lie or a truth since most people had their devices to access the internet and explore the metaverse which this goes the same for owning a doll or a robot as a companion. These recommendations are vital to future researchers and artists to create effective storytelling and contrasting by exploring different mediums that can help the audience to understand what they want to deliver the message.

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