# Embodiment Relations of Technology (Computer) in Digital Design: Case Study Her Film by Spike Jonze's (2013)

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### **ABSTRAK**

Keterkaitan antara Desain dan Media seolah-olah menjadi tak terelakkan. Digital Desain menawarkan masa depan kognitif yang banyak mengambil peran dalam kehidupan manusia sehari-hari. Tidak hanya imaji, bahkan melampaui itu, hiperrealitas. Penelitian kualitatif ini menggunakan studi literatur, mengidentifikasi bagaimana teknologi sebagai instrumen dapat memengaruhi desain di masa depan. Penelitian ini bertujuan menghasilkan serangkaian prediksi interaksi sosial antarmanusia sebagai relasi kebertubuhan yang tak dapat dipisahkan dengan teknologi. Kasus studi yang dianalisis adalah film Her (Spike Jonze, 2013); yang menarasikan dengan tepat bagaimana komputer, memengaruhi artifisial desain, sampai pada akhirnya berdampak pada perilaku manusia. Kebergantungan manusia dengan teknologi internet, memunculkan realitas virtual; dan mengantarkan manusia pada era kebertubuhan teknologi; yang terbangun sebagai bagian dari perkembangan seni dan desain.

Kata kunci: kebertubuhan teknologi, digital desain, augmented reality

# **ABSTRACT**

Design and media are linked in various fields. Digital design is becoming a cognitive future that is taking a role to penetrate a variety of human activities. Not only imaging, but it has led to prestige and hyper-reality in interacting. This qualitative research uses a literature review to examine how technology as the result of instrumentation can affect design in the future. This research aimed to predict social and human interaction as embodiment relations. The study analyzing Film 'Her' (directed and written by Spike Jonze, 2013)—and identified that 'Her' shows future technological developments with a scientific approach predicted that the principles of physics will automatically change the design in practice, with the invention of computers—that began to radically change the system and the way mass communication took place, which meant forming an order of cultural significance in almost every kind of world society. Humans are so connected to each other by technology and the internet. By virtual reality that represents through technology, we are in the embodiment relations of the technology' era; which is developed as part of the role of art and design.

**Keywords:** embodiment relations, digital design, augmented reality

### 1. INTRODUCTION

Human desire is driven by something that is sexual. Instinct reigns because of the phallus. The phallus distinguishes between men and women. So, there is a tendency for men to dominate over women. The phallus drives human desires. All human work is an attempt to fulfill libidinal desires. Whether it is a work of a sexual or a-sexual nature, all of it is an effort to fulfill libidinal (sexual) desires. Momentarily intermitting the question of human libidinal desire, Dr. Michio Kaku, Professor of *Theoretical Physics* and author of *"The Future of the Mind: The Scientific Quest to Understand, Enhance and Empower the Mind"* makes predictions of how science will be in the future based on two criteria: 'principles of physical laws must be obeyed' and 'prototypes must exist that show evidence of these principles' effect many aspects of human life, including questions of basic desires and their forms in the culture of human behavior. One of the predictions is *'Augmented Reality Will Be Everyday Reality'*, which means, artificial reality will become real reality; the construction and circulation of meaning designed and constructed by technology become meaning itself.

Hollywood visualized this in the film "The Matrix" which depicts how virtual information appears to help inform the everyday physical reality. Michio Kaku, in this regard, argues that "(...) if the Internet can be accessed through contact lenses, biographies of the people we are talking about will appear on the faces of the people we are talking to. These lenses will revolutionize the lives of actors, politicians, surgeons, tourists, this kind of lens design can have a huge social impact. If memories can be uploaded, unemployed workers may one day be trained to learn new skills. Students can take college courses while sleeping. Facebook offering us emotions and memories. Film as a design product that relates to and/or as a medium may offer emotion."

Indeed, design and media are very much linked in various fields. As media technology began to change the face of media significantly, Design changed too. For example, when Johann Gutenberg invented the printing press, Design as a product had entered the human mind, where the thought of mass production of representations of stories and mystical symbols began to develop. Besides, the emergence of other print media such as newspapers has had a strong influence on the development of the human mindset where meta-cultural based on literacy develops when ideas begin to grow far and wide, across political boundaries through print media. Design as a practice, where there is fairly rapid development, especially in the field of typography. Initially, typography was in the form of hieroglyphs in the form of pictures as a form of representation of verbal language which was used to become the alphabet we use today. The film has become a major revolution from the previous visual product which was only in the form of still images (photography). Digital design is becoming a cognitive future that is beginning to penetrate a variety of human activities.

Regarding Michio Kaku's prediction regarding "Augmented Reality Will Be Everyday Reality", mind beyond matter, the relationship between design and media occurs because of the development of communication needs that arise in society. Communication, which initially runs with two people, has shifted to pluralism in communication and also the number of people involved in the communication and not just two - until finally human interaction and communication become sufficient only by being mediated by screens, internet networks, symbols, and emoticons. This development is influenced by the many innovations in design that affect the media product itself. Information around the world can be extracted from a mini screen. A spectacular form of mass communication with very informative values. The interaction between humans is increasingly broad and sophisticated. There is a change in the relationship between humans and the media where the formation of a heterogeneous culture

can become homogeneous. Not only imaging, but it has led to prestige and hyper-reality in interacting. This is what is considered to be the pinnacle of the relationship between humans and media.

### 2. METHOD

This qualitative research using a case study as an approach, and literature reviews as an instrument for gathering primary data that will be using for ground analyzing the case. The research object is "Her" Film—which was directed by Spike Jonze in 2013. In an increasingly sophisticated and complex century, the presence of technology is not just a tool for humans but has become part of human beings, changing the relationship between humans and nature, with society, and even with themselves. Technology is the result of instrumentation from science or it is a separate part of science that exists itself. Predictions of how design in the future can affect human interaction to how the existence of technology can liberate human libidinal desires are visualized, one of which is visually in the film 'Her' which is directed and written by Spike Jonze and starring Joaquin Phoenix, Amy Adams, Rooney Mara, Olivia Wilde, and Scarlett Johansson. The film, which was released on December 18, 2013, tells the story of an introverted man in a future world named Theodore Twombly (Joaquin Phoenix) who also works as a "love letter" writer who recently experienced a marriage failure. He then decides to buy an advanced technology, OS named Samantha (Scarlett Johansson), and finds himself in love with that computer program. This film shows that future technological developments with a scientific approach and the principles of physics will automatically change the design in practice, with a guite sharp stepping marker is the invention of computers.

# 3. 3. RESULT AND DISCUSSION

### 3.1 Result

## 'Her': Future Computer OS Designs that Create a Technological Body

Computers, with their hardware and software, began to radically change the system and the way mass communication took place, which meant forming an order of cultural significance in almost all corners of the world. A personal computer today is capable of storing the equivalent of thousands of books. Nearly every text that we think is meaningful or functional has been transferred to the computer memory system. The unique love story in "Her" can be said to be a subtle and satirical allusion to today's technology-crazy world-society. It is a social phenomenon that the more advanced technology is — the more individual humans are and the less anti-social. The figure of 'Samantha' is a kind of solution for such a world, an augmented 'robot' that can solve personal problems and daily problems faced — from just tidying up the hard drive to becoming a kind of loyal 'friend' to be a listener. In 126 minutes, the audience was treated to Joaquin Phoenix's face with a thick mustache and virtual conversations between himself and Samantha (Scarlet Johansson) with their chemistry so strong and felt. It's hard not to fall in love with Samantha, in her energetic voice, fun and sexy — and it does so without having to appear on the screen at all so that her actions can be said only through verbal language. Joaquin Phoenix's acting also showed an extraordinary performance, as Theodore was able to display a fragile side that was both sweet and sad, the impact of the abandoned Id, the limbic system that was not maximally satisfied.



**Image 1** Samantha (computer program) and Theodore (user) in the film 'Her' have a dialogue in the circulation of meanings that are considered 'real' (Source: https://www.analyticsindiamag.com/movie-portrayal-future-ai-capabilities/ Accessed 12/03/2021)

Spike Jonze, with cinematographer Hoyte van Hoytema, presents images with pale and soft tones, with modern spaces that appear "empty" as if to show Theodore's loneliness, and it makes Her so beautiful to behold. The use of modern technology in a world set in the future may feel unsatisfactory in terms of quantity, but this is not a science-fiction movie. This film shows clearly how technology is integrated into the design which aims to design quite complex conflict-filled behavior. He can create his madness, as shown in the movie 'Her', the scene when Theodore runs around like crazy (out of love) with OS Samantha in his pocket while they are 'dating'.

A reflective question arises, how anti-social is someone to ultimately prefer to fall in love with computers? "Her" raises a dilemma. On the one hand, this film is brilliant with a smart script, beautiful cinematography, great indie music scoring, and the acting of Joaquin Phoenix and Scarlett Johansson that stands out. But on the other hand, there is a helplessness to suppress sarcastic thoughts from emerging and to question the main concept of "Her" about a man's relationship and a computer program which instead of being sweet and impressive, on the contrary, is substantially human 'as' human' - ridiculous, sad and scary. It is true, that the integration of technology with the development of Digital Design as a product and/or idea will certainly not be separated from the negative view of society. It can be seen when Theodore is cornered by the character Rooney Mara through the dialogue, "It does make me sad that you can't handle real emotion" -Spike Jonze packs up Theodore's aesthetic anxiety, the loneliness that weakens him; including problems trapped by a gloomy past relationship. In the real world, Theodore could not have a connection with someone. He was satisfied with the virtual relationship he had with Samantha. It perfectly describes the human condition today and the predictions of human relations in the future. We are so connected to each other by technology and the internet.

## 3.2 Discussion

Digital Design Augmented Reality Based with Artificial Intelligence Equivalent to Human Intelligence: Can the satisfaction of computer system instrumentation, verbal texts, narratives, and image typology be able to give satisfaction to the limbic system; beyond physical contact?

Freud referred to the term 'id' for desire, namely the impulses which the 'executor' must fulfill, namely: the ego. However, one's ego is limited by the egos of others which usually structure themselves on the code of conduct (norms) in society; in Freud's terms it is called the 'super

ego'. With the superego, the desire (id) must be fulfilled by following the patterns compiled by the superego. The lack of understanding of the id and the superego results in self-isolation which is the beginning of psychological problems, namely feelings of isolation and depression. Id must be fulfilled. The ego must be clever to fulfill it with a harmonious dialogue and not back to back with the superego. The fulfillment of the id in a way that is balanced with the superego is key to one's mental health. In the process of fulfilling the id which is sexual drive.

Michio Kaku's prediction clearly states that in the future the things narrated in the film 'Her' are very likely to happen, a condition where 'mind beyond matter'; how the mind can be constructed by computer technology becomes so artificial, even consciousness can be implanted. Future computer technology with a variety of features designed to satisfy human needs and desires (id) can create empty and lonely spaces that may at one point no longer be able to be interpreted by humans themselves. The presence of Samantha in 'Her' became a kind of catharsis for Theodore. Samantha provides all kinds of things that Theodore previously didn't have, such as attention, love, and of course inner connection. The tug-of-war of appropriateness and ethics of a machine like 'Samantha' can give happiness, it is very possible to end in an announcement, that at the end, when OS technology and its features as a manifestation of Digital Design as a product as well as the practice continues to develop with artificial intelligence which is equivalent to human intelligence, libidinal desire is not only a matter of physical presence, not also a question of sex, but how one another as an entity has chemistry to be together and feel intimately together - where this intimacy is built with the satisfaction of computer system instrumentation, verbal text, narrative- a narrative and typology of images that can give satisfaction to the limbic system; beyond physical contact.

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In line with what Michio Kaku expressed, Digital Design with the development of 'artificial intelligence' or Artificial Intelligences in the future is very possible to replace the role of humans in the real sense of humans, who have a totality of the things they face in interactions in various settings. social relations, including:

- Ability to perform complex tasks. In the future, Digital Design can develop AI in the form of virtual personal assistants to be more real, more human-like, including having the ability to search its byte system to understand life and relationships and become more human-like. Artificial Intelligence with Digital Design goes beyond artificial simulation having capabilities in speech recognition, speech generation, natural language understanding, and above all aspects of emotional intelligence, AI is 'designed' to understand human behavior. This shows how in the future, a computer program through Digital Design will not be limited to just being an assistant but someone who shapes the lives of its users by providing information, opinions, and a step further, to be a proactive assistant.
- **Have a Physical Existence.** Digital Design in the development of AI and AR in the future will position AI to have a physical presence utilizing advanced technology. This presence will add more value to all AI conversations with its users, making it a richer experience.
- Currently, AI which is the realm of Digital Design development has begun to be demonstrated with the Siri program, Cortana; which in the future, it is not impossible, the program can make us humans enjoy unlimited conversations with our computers and maybe even get inspiration from them, such as the interactions that occur in the film "Her".

## 4. CONCLUSION

Winston Churchill once said, 'The kingdom of the future is the kingdom of the mind.' In line with this, if it is permissible to quote Ihde, which has specifications on image technology and intercultural perceptions, the in-existence of technology with humans; *Menubuh* or embodiment means that a tool is used as a part of the way of perception of the human body and then used by humans to carry out its activities in everyday life, so the existence of technology which is understood as an instrument embedded in culture (cultural embedded of technology) indicates that culture is a metaphor for something [4]—that is more profound (behind reality), namely a kind of unique multiculturality whose influence is getting bigger in culture because it is assisted by contemporary technology. In a myriad of ways, we can decide to choose — even the classiest of clothes — from a wide variety of cultural works and incorporate them in a contemporary and eclectic fashion.

This kind of culture occurs as a result of high technology spreading throughout the world thanks to a wide communication network, and Design, in which it plays a role both as a practice (idea) and or as a product. Thus, the practical value of design technology design in the technology transfer process can be interpreted differently, even to a value that is not understood by a culture. The relationship between technological fulfillment and humans in culture, then, is understood as an extension or extension of the functions of the human body. In other words, in everyday life, the real world is transparently displayed by instruments. There is no distance between humans and technology in the human relations relationship, humans experience acceleration in their abilities and roles in the world. Image technology resulting from the relationship between design and media plays a significant role in connecting the global communication system and a medium for socio-cultural change.

Future computer design allows bodily experiences to occur which are sensory experiences, such as seeing, hearing, smelling, tasting, and feeling; becomes stopped at the capture of stimulation by the sense organs; which in the future, with the existence of Augmented Reality in a more complex byte system, can implant chips and/or simulation features that can involve embodied cognition, which includes mental processes, remembering, thinking and imagining,

until involves an interpretation (interpreting) which is influenced by individual and cultural factors - an artificial intelligence that encompasses real human life. Concerning human libidinal desire — Ihde, in harmony with Michio Kaku, also questioned how changes in humans could be explained if technology had shaped a system like the one we experience today. Is it possible that we can call them 'humans', or will we enter a 'post-human world, where human roles, real interactivity with the totality of appreciation, and intact *auratic* values can be replaced by AI? It could be that the question is our own contemplative space, because we, currently, whether as a subject or an object, are actors with behaviors related to high intensity in computer technology design and its leap today, as well as in the future.

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