

Hybrid identity: A study of the development of self-identity with digital media and artificial intelligence

Identidade híbrida: Um estudo do desenvolvimento da auto-identidade com mídias digitais e inteligência artificial

Identidad híbrida: Un estudio del desarrollo de la identidad propia con medios digitales e inteligencia artificial

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Mestrando em Comunicação Visual e Estudos de Mídia estuda a auto-identidade, e como ela pode ser alterada ou moldada ao longo do curso durante a vida.

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ABSTRACT:

Current society is constantly fixed behind a screen. Every moment of our waking lives is uploaded and shared online for the rest of the world to browse and the way people view us has become vastly important to us. Our sense of identity has been shaped to focus on

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how others might think of us, rather than forming and understanding our own self-identity. This study will delve into whether our self-identities have drastically changed due to the world revolving around digital media. Additionally, whether this is leading towards the development of a new 'hybrid' form of identity that goes hand-in-hand with technology.

Keywords: *Identity. Hybrid. Self-identity. Technology. Artificial intelligence.*

RESUMO:

A sociedade atual é constantemente fixada atrás de uma tela. Cada momento de nossas vidas acordadas é carregado e compartilhado online para que o resto do mundo navegue e a maneira como as pessoas nos vêem se tornou muito importante para nós. Nosso senso de identidade foi moldado para focar em como os outros podem pensar em nós, em vez de formar e entender nossa própria identidade. Este estudo vai investigar se nossas auto-identidades mudaram drasticamente devido ao mundo girar em torno da mídia digital. Além disso, se isso está levando ao desenvolvimento de uma nova forma 'híbrida' de identidade, que anda de mãos dadas com a tecnologia.

Palavras-chave: *Identidade. Híbrido. Auto-identidade. Tecnologia. Inteligência artificial.*

RESUMEN:

La sociedad actual está constantemente fijada detrás de una pantalla. Cada momento de nuestras vidas despiertas se sube y se comparte en línea para que el resto del mundo lo navegue y la forma en que la gente nos ve se ha convertido en algo muy importante para nosotros. Nuestro sentido de la identidad se ha formado para centrarse en cómo los demás podrían pensar en nosotros, en lugar de formar y comprender nuestra propia identidad. Este estudio profundizará en si nuestras identidades propias han cambiado drásticamente debido a que el mundo gira en torno a los medios digitales. Además, si esto está llevando al desarrollo de una nueva forma "híbrida" de identidad que va de la mano con la tecnología.

Palabras clave: *Identidad. Híbrido. Auto-identidad. Tecnología. Inteligencia artificial.*

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1 Introduction

Identity has become increasingly ambiguous over the years. There are various types, from how a person identifies her or himself in a professional sense, to how you identify yourself among your own people – resulting in developing a cultural identity. However, with the emerging enhancement of Artificial Intelligence (AI), will there be a new form of identity that we will be adding to the mix? An identity that merges human and technological factors? Is this form of “Hybrid Identity” detrimental to how we view ourselves and the world surrounding us?

Since this topic is so vast, there are countless aspects of identity we can look at. First, let’s delve into the history of identity. Human beings constantly form and change new ideas of identity, resulting in people rejecting a certain type of self-identity. Despite what people may think, identity is a personal and intimate relationship with one’s self. But how different will it be if (or when) computers begin to develop their own sense of identity? Will we reject this concept entirely or accept it with open arms? It is hard to imagine a resistance against this concept. Today, platforms, such as social media, affect how we see the world. Besides, in small percentages, technology controls everyday life, from automated vacuum cleaners to self-driving cars. Will the automated way of life help us from the “distractions” that prevent us from looking deeper within ourselves? Or will the advent of hybrid identity cause us to question it in a negative light?

One of the questions that we will be posing later in in this paper is the concept of “modern identity” and whether it is (or was) developed based on how a person wanted the rest of the world to perceive her or him. Thus, with the growing number of people isolating themselves in today’s society, has identity changed entirely? Social Identity Theory shows us that people adopt or develop an identity based on the group they are involved in (TAJFEL; TURNER, 1976). If so, the nature of the internet complicates and enhances this idea on a much larger scale.

Finally, this study will look into the similarities between human beings and artificial intelligence in an increasingly automated society. We always find it difficult to discuss whether our free will is what we want to believe it to be. It is true that we have choices to make in our everyday lives: what to have for breakfast, how to get to work, who should we sit with during lunch, etc. However, our

routines seem to have changed over the centuries. Instead of winding a clock to set our alarm, we can ask Siri or Alexa to wake us up whenever we please. Younger children born into our current society are delving into uncharted territory. Being bombarded with screens and various forms of technology might cause a new form of identity in the not so distant future.

Despite these interactions with AI being somewhat new, have they changed how we see the world? Additionally, how much have our decisions been influenced through social media platforms such as Instagram and Facebook? And how will this develop when we have to interact with much more advanced forms of AI every day?

2 History of Identity

Human beings had and will always have one goal in every form of society – to make sense of who we are and the world surrounding us. Various theorists studied this topic in great lengths to help us understand the “self”. In the second chapter of his book, *From Pilgrim to Tourist – or a Short History of Identity*, Zygmunt Bauman explains that identity is the way in which people attempt to “escape uncertainty” (BAUMAN, 1996, p. 19). He suggests that we are in a constant struggle with ourselves to find some form of acceptance from the society we are residing in, thus, forcing us to ‘project’ a persona that will allow us to walk among our fellow humans without having the pressures of being different.

The idea of identity varies from culture to culture. People identify themselves very differently in the Far East compared to Western Europe, for example. James Morris described the history of how we identify ourselves. In his book, *Can Computers Create Art?*, he states that “what we call a self in the West does not find an exact parallel in cultures which do not share our Graeco-Roman and Judeo-Christian heritages” (MORRIS, 2009, p. 69). Therefore, this would suggest that there are various aspects that come into play when developing a sense of identity. During the Middle Age, religion ruled all facets of society. People worked and lived for the good of the church and the inner workings of the community revolved around God and the acceptance of others. On the other hand, the Qing Dynasty of the 17th century focused on the ruler and how his subjects would be able to

follow his every word without fail – subordination (CROSSLEY, 2000, p. 57). Both societies, however, share the similarity of togetherness that focused on creating likeminded individuals to maintain a form of harmony.

2.1 Modern Identity

Today, our sense of identity has changed drastically due to various factors. The way in which we interact with each other is vastly alien to that of the Middle Ages, let alone the 1950s when the Turing Test was conceived. We are in a constant state of change that could possibly spiral out of control. Due to the advent of social media, such as Facebook and Instagram, we are currently expressing ourselves in different ways. Paid 'Influencers' on Instagram, for example, dictate how it is appropriate to use the platform, be it a 'selfie' every day or updating your 'stories' to show off your lavish lifestyle. This consistent urge to portray yourself to the outside world creates a bubble that can be easily burst. Other forms of internet media are shown to be detrimental to a person's sense of identity. For example, a study conducted by Penn State University reveals that early exposure to the internet may harm the development of a child's sense of how she or he sees the world. This is due to the fact that they are constantly creating an image that is tailor-made for others to see (MANAGO *et al*, 2008).

Furthermore, a study conducted by Patti M. Valkenburg suggests that there are three main types of identity in the digital age: self-presentation, intimidation and self-promotion (VALKENBURG, 2005). Self-promotion seems to be the most rampant form of self-display on the internet, with various profiles, specifically on platforms such as Instagram, dedicated to promoting one's worth in hopes to gain more 'followers'; and a large number of younger individuals are beginning to follow suit. Thus, this shows that moulding an identity is as important as the internet's primary function – to communicate. Many users tend to focus on instant feedback from their followers in the form of "likes", which could be a defining factor in constructing a person's "digital identity" due to the fact that they can quantify their popularity online (DUMAS *et al*, 2017). This is a major contrast to how we defined ourselves in the past. Previously, we had a system or leader to follow and guide us to understand who we are by ruling over our everyday life, such as the Catholic Church. The introduction of social media allowed the opportunity to make identity fluid, which made it increasingly easy to define our very own understating of the "self", while, on the other hand, some may argue that

this is a form of narcissism. As a result, the internet has given a form to escape from the traditional ideals of self-identity. A person can now reform an entirely new identity online if they are not pleased with the way people may perceive him or her in the real world.

3 Hybrid Identity

3.1 Introduction to Artificial Intelligence

We are currently living in an age where we engage with AI on a daily basis, despite it still being in a primitive state. This innovative technology, that is growing rapidly every day, has become so embedded within our society that it is hard not to stumble on a form of it in our everyday lives. For example, we can choose to order our meals from a self-service automatic ordering kiosk rather than traditionally paying at the cashier (FLUSS, 2017). According to a study that delved into the introduction of AI within the service industry, it is understood that there are four distinctive types of intelligences that are required to come together for the best service: mechanical, analytical, intuitive and empathetic intelligences (HUANG; RUST, 2018). Therefore, this suggests that AI could possibly replace human interaction entirely if it is able to tick all the boxes without fail. Despite the possibility of replacing human interaction, it will not be an easy task as it might take an entirely new generation of people that have grown up in a completely automated society.

Another example in which AI has been implemented in our daily lives is via journalism. Journalism is one of the most human-orientated occupations in society; journalists are expected to report the news through stories that captivate readers through emotion. However, much like many industries worldwide, journalism has been changed over the years with the emergence of digital media and AI. In terms of the reader, it is now possible to send out the news faster than ever before, while for the writer, articles can be written quicker and various other opportunities to develop the craft of journalism have been introduced (LINDÉN *et al*, 2019). *Automating the News: How Algorithms are Rewriting the Media*, written by Nicholas Diakopoulos, suggests that journalists should not resist the

emergence of AI but embrace the new technology as a new way to express ideas and narratives (DIAKOPOULOS, 2019). The introduction of AI could also help journalists publish articles more efficiently and frequently, due to the growing demand of the internet.

These are only a minimal number of examples for how AI is constantly changing our lives. But one of the most significant changes is in our homes, changing how we routinely interact with one another and how we view ourselves every day.

3.2 Programmed Identity

Siri and Alexa are categorised as Intelligent Personal Assistants (IPAs). There are various forms currently in the market. Besides Apple's Siri and Amazon's Alexa, there is Microsoft Cortana and Google Assistant. They all come with their unique way of communicating with the user (LOPATOVSKA *et al*, 2019). They are capable of answering basic questions about the weather, calling someone from the contact list and setting reminders. These IPAs usually process input from the user via "voice-controlled interfaces" (speech recognition) or touch screen keyboards (CANBEK; MUTLU, 2016). And, through permutation, the IPA gladly obliges by doing the task instantly.

At first glance, these forms of artificial intelligence seem very simplistic and compliant. The programme processes the users voice through various pre-set algorithms that help it decide what to do based on the question or statement that is said by the user. However, advancements every day may result in better and much more responsive assistance from IPAs. For example, when first introduced, Siri, utilising a natural human voice, simply answered limited questions that were preprogrammed and anything said that was not on the "list" would have resulted in an error. However, the technology has evolved to the point where Siri is capable of making jokes and sarcasm (CANBEK; MUTLU, 2016). These functions are very human. As a result, despite not having a physical body, Siri seems to have her own personality and identity; she becomes a humorous and knowledgeable friend that is ready to help out at any moment in time. Suddenly, our interactions with Artificial Intelligence has become natural. It is still very early to suggest whether IPAs will be capable of developing their programmed identities. However, it might be heading towards a path for artificial humanity where we would be able to have sophisticated conversations with our IPAs that requires learning from the software.

Despite what is mentioned above, it is difficult to truly suggest that machines are capable of developing human emotions. All the functions that IPAs convey are simply databases that are consistently being updated. Ultimately, the technology can easily mimic and connote these emotions, but they can never truly be human. Some might suggest that the mimicking can be enough, however, there are various “human” factors that cannot be mirrored. One of the most crucial of these aspects is pain, be it physical or mental. We experience different forms of pain in the span of our lives: an injury may result in agonising pain, that can also result in trauma, and a death of a loved one could lead to grief where the emotional pain can be too much to handle at times (MINSKY, 2006). Pain can also shape a person’s sense of identity as it could trigger a change in their persona. It is difficult to suggest that machines would be able to learn how to feel any form of pain, even mimicking would not be convincing enough.

3.3 Merging Humanity and Technology

With all the technological advancements we are currently witnessing, it seems we are heading towards a world that is combining humankind and AI. If we look at the internet, for example, it is a massive archive of memories that can be unearthed at any given moment (unless the website cannot survive beyond the average 2 year and 7 month lifespan). Just about everything has become documented (VAN HOUSE; CHURCHILL, 2008). As mentioned previously, our sense of identity has become heavily influenced by social media platforms and this constant anxiety of how others may perceive us may be an argument to suggest that we are living in an age of narcissism (LASCH, 1979). This could be linked to the fact that we are free to choose to become who we want to be, without a certain system dictating that aspect of our lives (GIDDENS, 1991).

In an experiment conducted by Valkenburg that followed adolescents’ motives online, the results suggest that the participants focused on self-exploration first, then social compensation and, lastly, social facilitation (VALKENBURG, 2005). As a result, the experiment showed that young children were using the internet to help develop their own sense of self. This suggests that the human and the machine were working together, resulting in an identity that would not exist without the other. However, due to us being more connected, could it be ceasing human physical interaction? That could ultimately be one of the drawbacks of our current society (GIDDENS, 1991). At times, online

personas can vary drastically from the 'real-world'. Some people opt to not portray their true self-identity onto the world, which could result in a constant battle from within the self that may lead to detrimental consequences in one's sense of who they actually are.

4 Conclusion

Our world is growing rapidly with no sign of slowing down. How we see ourselves has changed exponentially over the past fifty years or so. We are now free to create our personality and self-identity despite what others may want us to be. This change was only possible due to the rise in popularity and usage of digital media, a growing new world that allows users to become anyone they please. However, with this rapid growth, are we heading one step closer towards an identity that cannot be developed without our technological counterparts?

Our interactions with social media, for example, have become much more frequent than when the idea was first introduced to the world. Computer programmes are beginning to mimic functions that we believe to be exclusively human, such as IPAs. However, these programmes are not human, but they have begun to play a crucial role in the way we see ourselves and the world surrounding us, thus influencing our very own way of life and how we process our own sense of self-identity.

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