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**Cultural Identity and Artificial Intelligence:
Challenges and Perspectives**

**An Extended Essay Submitted in Partial Fulfilment of the Requirement for a
Master's Degree in Literature and Civilisation**

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Dedications

We dedicate our work to everyone who supported us in completing this research, starting from
to our greatest supporters our parents; our lovely parents and siblings.

To our friends and classmates

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Abstract

Cultural identity is considered as the most important social components of any society, as it is the product of different human experiences formed over a group of eras. With the rise of artificial intelligence as a technological force, it has become a major and unique challenge. Thus, this research examines the complex relationships between cultural identity and artificial intelligence by presenting various experiences and opinions. It explores how artificial intelligence and its various programs can be harnessed to preserve and celebrate cultural diversity. Conversely, it examines the potential risks of AI bias and its impact on cultural representation around the world. The research aims to identify strategies to promote a future in which artificial intelligence enables cultural expression while preserving its unique and diverse character.

Keywords: Cultural Identity, Cultural Diversity, Digital Age, Artificial Intelligence, Virtual Identity, Generation Z

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Figure 1: “Livesey’s Web of Identity”

List of abbreviations

AI: Artificial Intelligence

EU: European Union

UNESCO: The United Nations Educational, Scientific and Cultural Organization

APA: American Psychological Association

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General Introduction

General Inroduction

Since ancient times and past centuries, inventions issued by various people from different civilizations have made human life easier and solved many obstacles. The technological advances have witnessed unprecedented growth in the world and have begun to affect all vital human fields, from economy to education at various levels. When any new invention appears, people think that the problem is over, otherwise another invention appears that is more advanced than the one that preceded it and makes life easier.

These inventions have been able to create a world of technology that is rapidly developing and responsive to human changes, such as the emergence of the Internet, which has changed and is still changing the world till now, and it still surprises us with the emergence of new technologies. These modifications led to a change in the individual's view of himself and the environment in which he lives, and how we interact in this vast technological world with multiple of individuals and their different identities.

The path taken by technology is still evolving until the 21st century, which marked the emergence of a new technological achievement represented by artificial intelligence. And AI now has become an effective tool in the world at the present time. The history of AI was full of challenges and scientific changes that occurred before it turns to its current form that we are dealing with. The beginnings of artificial intelligence were political and military, represented by espionage in world wars like Alan Turing who was considered the pioneer of AI according to Rony Chow.

Artificial intelligence is now considered as branch of computer science in which is based on imitating human intelligence to give a facilitation and an ability to understand the instruction of peoples "AI Dictionary". The impact of artificial intelligence has been strong and has touched many areas, and the word 'digital' has become dominant at many levels, and

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we are now seeing new words such as ‘digital art’ ‘digital labour’ and ‘virtual / digital identity’.

The great development in the use of artificial intelligence across different generations, and its impact is extending to cultural identity, which is considered a part and basic pillar in the lives of different nations, despite their different customs and traditions. Moreover, cultural identity is a complex concept, it includes a set of values, customs and cultures, to which a person feels that he belongs to a group with which he shares this tapestry within a specific geographical framework. These different factors therefore shape their self-identities and how they present themselves and deal with other cultures.

The interaction between cultural identity and AI is still a challenge, and we cannot precisely determine its effects because it is still in its early stages and cannot predict what will happen in the future. Many areas of cultural identity have benefited from artificial intelligence programs and help in enhancing and developing them, such as cultural heritage and its preservation. Artificial intelligence algorithms were also able to create a new expressive platform that in the past was limited to professionals, especially art, music, and writing. However, this did not prevent new challenges to appear resulted by artificial intelligence, including, for example, the biases generated by chat programs, in addition to the problem of homogeneity, the idea of a unified culture, and the elimination of other cultures.

Our focus in this research is on artificial intelligence and its impact on cultural identity, as we live in a materialistic age and people’s interest in their cultural identities start to fade for many reasons. Most of the talk now revolves around the loss of jobs and the future in which robots will dominate the world, but cultural identity, unfortunately, receives less attention in this regard. This research work examines the relationship between artificial intelligence and cultural identity and tries to explore the interaction between them by

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presenting the case of some countries such as Japan and European Union and how AI has become an effective tool in enhancing cultural identity to some extent (Dobrin).

To cover this and have a comprehensive understanding, the following questions are addressed:

- 1- What is the relation between cultural identity and artificial intelligence?
- 2- What impact has artificial intelligence on cultural identity ?

In order to answer the questions, we developed some hypotheses:

First, Technology has always played a significant role in transforming various aspects of human life. While it has provided immense conveniences, there are also lingering negative consequences. With the emergence of artificial intelligence as a technological force, technology companies are accelerating its development, raising the question of where our cultural identities stand. As cultural identities worldwide decline due to various factors and the rise of technology and artificial intelligence, it can be said that a complex relationship has emerged between them at multiple levels.

Second, The rapid development of artificial intelligence and its widespread use by the public, which has become involved in many aspects of human life, and thus the cultural concept such as art and its various types and cultural legacies has undergone many changes due to the presence of artificial intelligence. This could create a direct relationship between cultural identity in its broad sense and artificial intelligence, and this relationship may be in two directions. Positively, through artificial intelligence, we can create a new environment of acquaintance and harmony, or the opposite which can create a hostile environment that may appear in multiple forms. Therefore, we decided to take various examples from reality to discover the relationship.

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In order to carry out this research, this work is divided into four chapters. The first chapter entitled, "The Definitions of Concepts". It aims to define the main concepts of the research. It concerns cultural identity, cultural diversity, and virtual identity. Giving details and expanding on these terms.

The second chapter entitled "Artificial intelligence: Historical Background", which is interested in expanding the world of artificial intelligence, with a focus on its beginnings and present, in addition to the digital world, which has begun to rise.

The third chapter entitled "Artificial Intelligence in Two Practices: Case of Japan and European Union", discussing the interaction between them by choosing Japan and the European Union and their experience in the field of artificial intelligence, especially in ancient languages, as well as the arts, this is the case for Japan. As for the European Union, we presented its experience in how to exploit AI in cultural heritage, including tourism and museums, through digitization and how ensuring and respecting European diversity in artificial intelligence algorithms.

The fourth chapter entitled "The Future of Cultural Identity in Artificial Intelligence Era", talking about some of the consequences that arise from the interactions between cultural identity and artificial intelligence, which can sometimes be dangerous. It focuses on cultural heritage and practical identity in the light of artificial intelligence, as well as the issue of homogeneity it has created, and what is the position of Generation Z on artificial intelligence.

In conclusion, the methodological tools used to fulfil this inquiry are based on the qualitative research data analysis approach. Alongside the primary resources, this extended essay also employed a variety of secondary materials like biographies, essays, articles, research works, and videos to attempt and answer the questions listed above. When it comes

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to the methodology and organization of the research, the eighth edition of MLA Handbook for Writers of Research Papers was followed.

Chapter One: Definitions of Concepts

Chapter One: Definitions of Concepts

1.1 Introduction

Cultural identity is a complex and broad world in its social and philosophical sense, as it creates a feeling of belonging to a unified entity united by a group of elements. However, this concept can be expanded into another term, which is cultural diversity, which creates a fabric that is open to others. The digital age has also added a new layer to living reality, which is the virtual identity, which has formed another dimension in the form of communication. So the chapter will cover the definitions of cultural identity, virtual identity and cultural diversity.

1.2 Cultural Identity

Identity is an intertwined and diverse term at the same time because of its implications for the individual and the group. Identity, as a pivotal, important, and integral part of the human mind, including race, gender, and affiliation, which has made this term gain importance among academics and philosophers to express the essence of man and his role in life.

And if we look at the definition of identity in the dictionary of *American Psychological Association* (APA):

an individual's sense of self defined by (a) a set of physical, psychological, and interpersonal characteristics that is not wholly shared with any other person and (b) a range of affiliations (e.g., ethnicity) and social roles. Identity involves a sense of continuity, or the feeling that one is the same person today that one was yesterday or last year (despite physical or other changes). Such a sense is derived from one's body sensations; one's body image; and the feeling that one's memories, goals, values, expectations, and beliefs belong to the self.

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Identity is considered an essential part of an individual's life, and it is what determines this individual's features and sense of self, as a result of the accumulation of experiences and events that he lived, which formed his essence and self-awareness, and which play an important role in shaping his orientations, perceptions and his behaviour's. According to Rummens identity "is the distinctive character belonging to any given individual, or shared by all members of a particular social category or group" (qtd. in Naz et al.). Therefore, identity is the characteristics that make us recognize people and differentiate between them on a collective level.

The concept of culture has changed over time, which has given the term many definitions. In *The concept and dynamics of culture* (1977), a compilation of definitions have given by multiple anthropologists, Bernardo Bernardi asserts in the introduction that "the concept of culture has been a consistent topic of discussion within modern anthropology since its inception as a systematic discipline. The definition of culture by Edward B. Tylor, at the end of the last century, has become a commonplace of anthropological doctrine" (2). There is no specific definition of culture for anthropologists because it is an unstable concept.

In the chapter 1, "An Analysis of the Concept of Culture", Etienne Vermeersch contends that Edward B. Tylor was the first to establish a clear scientific definition of 'culture' in his famous book *Primitive Culture* (1871), offering the following definition: "Culture, or civilization, ... is that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society" (10).

Culture is an important element not only for the individual, but also for society because of its values, such as customs and traditions, language, and the arts, which enable us to distinguish societies from each other.

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The great interrelation that has brought together identity and culture since ancient times has given us an important term in our world, which is cultural identity. Author and educator Chris Livesey is well-known in the field of sociology. In his book, *Culture and identity*, asks whether identity is socially produced or if we are free to choose our own identity, but he asserts that “our identities are embedded in a Web of Identity” (qtd.in Prevos 2).

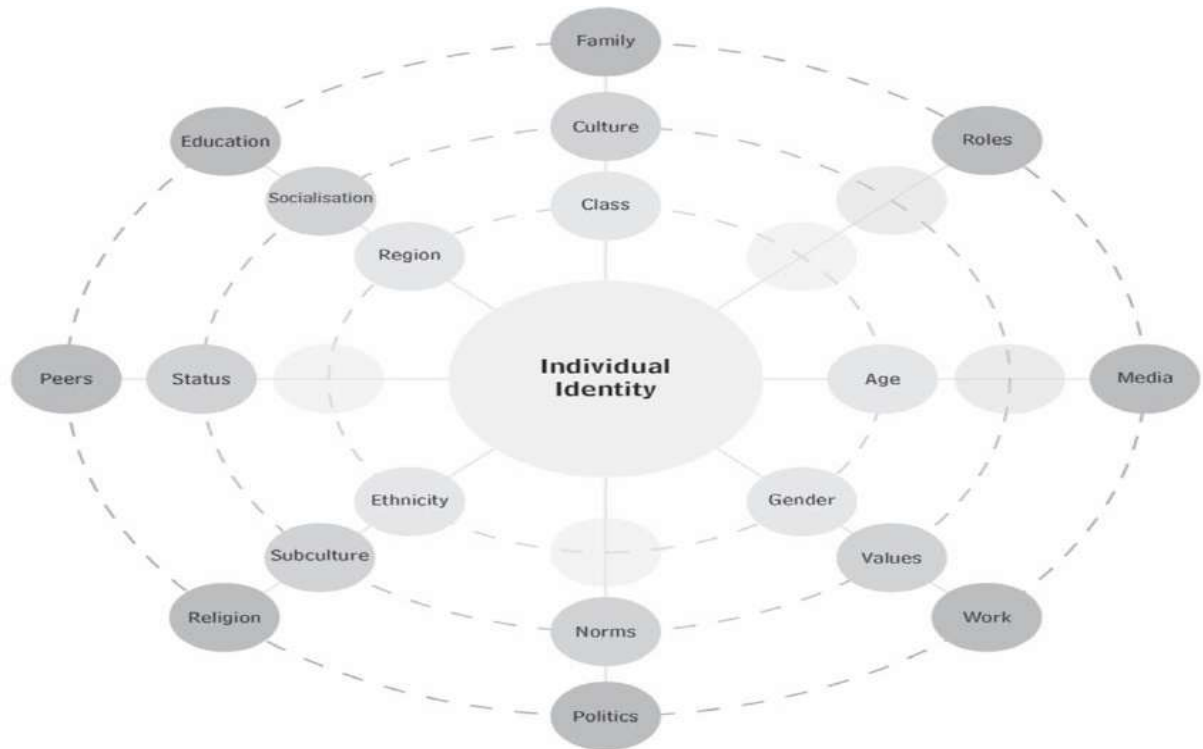


Figure 1.1: “Livesey’s Web of Identity”

Source: Snodgrass 8

The process of entering into the term identity and culture makes intertwined with cultural identity in a way that cannot separate or dispense with, especially since the world of identity is vast. Cultural identity is an integral part of identity, which brings us to the concept that there is no single person with a single thought and mentality, but rather we all live as a cohesive social unit. Then, cultural identity becomes not a facade or a framework for the individual, but rather a society in which all elements are intertwined to make it a world in which he can live and participate, with others in values and beliefs to form a unified image

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that can export to others. Thus, a person interacts with himself through the experiences he has seen and interacted with, and with his cultural heritage that he inherited from his society, and thus forms a basic pillar in the cultural environment of his society and interact with its heritage. According to John E. Joseph in his definition of cultural identity said that:

The term “cultural identity” is sometimes applied to some or all of those just named above, while at other times it is reckoned to be a distinct category. On the one hand, culture and identity are never entirely separable: It is a defining trait of the concept of culture that whatever beliefs, values, inclinations, tastes, practices, and texts constitute it must also serve an identity function for those who participate in the culture. (01)

Separating cultural identity is wrong given the common elements between them. Identity must also play a vital role in highlighting the individual’s culture and avoiding exclusion. Donald Horowitz in his book, *Ethnic Groups in Conflict*, described cultural identity as “the identity of a group or culture, or of an individual as influenced by their affiliation with a group or culture. This identity is associated with a geographic area where people share common traits such as language, religion, and culture” (qtd. in Naz et al.). It is important to realize that respecting the cultural identity of others is beneficial to societies, and this is what helps to create a balanced environment in which mutual respect prevails. It also helps to recognize and appreciate other cultures around us. As William Little in *Introduction to Sociology* (2016) notes,

As people travel farther afield, moving from different regions to entirely different parts of the world, certain material and nonmaterial aspects of culture become dramatically unfamiliar. We notice this when we encounter different cultures. As

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we interact with cultures other than our own, we become more aware of the differences and commonalities between others' worlds and our own. (129)

Cultural identity manifests itself in many forms and symbols, whether directly linked to the individual or linked to a specific ethnic group. We can see it in our social norms and roles, traditions, history and heritage, language and communication, art and expressive forms, we can also see other characteristics of cultural identity, such as mentality, dress, and cuisine, but their effect varies from one region to another depending on the individual's feeling of the extent of his belonging to his cultural identity and the extent of his ability to adapt to the change that occurs in his life as an immigrant. The more a person becomes aware of the cultures around him and is inspired by the issues in his society, the more he becomes aware of his own values and standards that he adopts in order to reject violence and fanaticism in all its forms.

Cultural identity includes many types, including what is oral, such as literature, folk tales, and music, and what is built, such as architecture, engineering, and heritage places. One of the misconceptions that people fall into is to link cultural identity in general with culture and art.

1.3 Cultural Identity in Digital Age

The problems that we discussed in the views of cultural identity and the impact of globalization, cultural invasion and the terrible development that accompanied them in technological development and the emergence of social networking sites caused many thinkers to fall into conflict over the ability of peoples to preserve cultural privacy and protect them from technological hegemony, most of which comes from Western technology companies, but a large section of people see that technological and digital development is inevitable and a necessary condition to keep pace with progress.

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The great technological development witnessed by humanity and the digital transformation that countries and governments are undertaking has a very important impact on cultural identity, especially since people, mainly young people, have begun to spend large amounts of time on the Internet because of its abundant information that replaces the use of books and traditional types of teaching. This is what made many countries of the world, especially European countries, cautious about digitization and study its effects in the short and long term by taking into account strict measures to protect European values and cultures from the great penetration that is digitization by launching the following initiatives that will reduce the risks and prevent touching its beliefs despite the difference in population mix, for example, CHANSE, Collaboration of Humanities and Social Sciences in Europe.

Information and communication technology (ICT) has helped facilitate communication processes and the exchange of ideas and values between individuals, not only between individuals of the country, but also the entire world and people have become able to see different cultures and interact with them, whether negatively or positively, with the emergence of social networking sites and the facilities they give to registrants to create in a virtual world and to build their cultural identities using social media tools and smart phones.

In this small world, it has become easy to know the identities of others through several applications and means and in various forms, such as social networking sites and the media, which have come to play an important role in this aspect, and this is what has enabled people not only to know the identities of others, but even to touch upon their private lives. And when points of view are exchanged, whether negative or positive, through the exchange of cultural dialogue this helps to understand the reasons for the decline in the cultural identity gap in the world (Young 2). The widespread use of information and communications technology platforms creates a virtual cyberspace, complementing the usual reality and escaping people from their miserable reality. However, the most important change is the

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shift from the traditional human being as separate entities to a being connected to information based sometimes on misinformation.

One of the aspects of the impact of the digital world on cultural identity is the presence of the media as a platform and for communicating information between people through television channels or YouTube channels. It is true that modern man has become greatly informed not only about the events of countries as well as about their cultures, but the danger lies in shaping and directing people to specific cultures, by excluding other cultural identities and directing people to specific cultures to serve the specific interests of groups or countries, as well as the effects resulting from language and expression through advertising.

The connection of the world through digital tools has made the concept of how disparities in cultural representation affect digital spaces a real problem facing individuals, creating what is called a digital divide, which is the inability or equality of access to technological devices. The term can be defined as the gap between people who have the ability to access the Internet, its applications and digital content, and people who do not have the ability to do so due to obstacles. However, the highlighting differed between the past and the present, and between the words “access” and “use” (Van Dijk 1). Therefore, these disparities and divisions resulting from geographical, economic and social factors create barriers to fair participation in the expression of cultural diversity in digital discourse and also limit some voices identified by algorithms in the global conversation.

Governments and non-profit organizations interested in cultural diversity play an important role in equally expressing cultural mandates without excluding any culture and highlighting the idea of inclusivity in digital spaces. UNESCO issued a set of rules and principles under the title: Operational guidelines on the implementation of the convention in the digital environment, in 2017. These principles aim to protect human rights in light of the

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digital development the world is witnessing and to highlight identity through cultural and economic activity. The European Parliament also issued a resolution of “cultural and creative industries” or (CCIs) in 2016, which highlighted the importance of cultural diversity within the European Union and the role of digitization in promoting it (“Report on a coherent EU policy for cultural and creative industries”).

Digital platforms also play a crucial role in maintaining connections within diaspora communities across the world. People who belong to the same cultural background, but who were either immigrants or were forced by circumstances, became to stay in contact and exchange the original cultures they inherited, and to preserve their practices and pass them on to the generations after them.

Due to the ease and speed, many characteristics of cultural identity have become linked to the digital world, which has led to a profound transformation in the expression of cultural heritage and how to look at it. Despite the great challenges, there are positives, such as the ease of cultural exchange and spreading cultural identities around the world to inform foreigners about our identities. This facilitates the dialogue process, which in the past was almost absent due to the lack of means to learn from each other, and this is what also gave voices to marginalized identities to change the stereotypical image that they viewed. The widespread influence of global digital platforms can harmonize cultures and create understanding without fanaticism or prejudice. The digital age will lead to the emergence of new forms of cultural expression, including digital art, and the ease of telling stories through social media sites with audio and video. As well as virtual reality experiences, which have witnessed development in recent years, and all of this can contribute to the development of an individual’s cultural identity.

1.4 Virtual Identity

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According to Oxford Learner's Dictionaries, virtual identity it is “an identity created by the user of the Internet that is different from their real identity. For example, a user of Second Life is able to develop an avatar that may bear no resemblance to their physical identity at all”. On the other hand, virtual identity is the representation of an individual in the digital or virtual world. It includes online presence, social networking sites, and other various activities. The virtual identity is created through many forms, such as online gaming platforms, selected images, and the language in which the individual wants to express himself.

We may find many terms that express the concept of virtual identity, such as: Digital Identity, Online Identity, Cyber Identity, Internet Persona, and Internet identity. But the concept remains the same, although the information that a person will display in his profile account may be fake, there are people who enter their correct information through digital media. These various digital platforms enable people to explore and experience cultures other than their own through online content, virtual events, and interactive platforms for virtual cultural experiences to create virtual communities.

According to Dictionary of Media and Communications (2008), virtual communities referred to “group of people who interact on the Internet, for example in chat rooms, because they share interests or business” (300). For Howard Rheingold in his book *The Virtual Community* (1993), said: “Virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace”. (06)

Howard Rheingold began to see that virtual life had become reality for people, he said:

People in virtual communities use words on screens to exchange pleasantries and argue, engage in intellectual discourse, conduct commerce, exchange knowledge, share emotional support, make plans, brainstorm, gossip, feud, fall in love, find

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friends and lose them, play games, flirt, create a little high art and a lot of idle talk.

People in virtual communities do just about everything people do in real life, but we leave our bodies behind. (05)

Therefore, the individual who is distracted from the virtual world is searching for new ways and means that may be absent from his real world or taken away from it due to certain circumstances.

1.5 Cultural Diversity

Human diversity and the diversity of its sects and races in the world created a clear homogeneity that cannot be disputed or denied, which in turn led to the emergence of many cultures that have always shaped the identity and vision of the individual towards the world and made the individual who belongs to a specific culture an important role in protecting this resource from decay and extinction. Especially since there are many factors that have facilitated this, such as technology and globalization.

All cultures around the world, regardless of their identities, have unique characteristics that distinguish them, and this contradicts the idea of a unified or homogeneous culture. This helps to understand how the world works despite its differences, and how we see their beliefs as beliefs and religion differ.

International organizations and legislation have also paid attention to cultural diversity as an important human resource in the development of civilizations and highlighting tolerance between different cultural identities. In the Universal Declaration on Cultural Diversity, UNESCO emphasized the important role of diversity:

Culture takes diverse forms across time and space. This diversity is embodied in the uniqueness and plurality of the identities of the groups and societies making up humankind. As a source of exchange, innovation and creativity, cultural diversity is as necessary for humankind as biodiversity is for nature. In this sense,

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it is the common heritage of humanity and should be recognized and affirmed for the benefit of present and future generations.

Cultural diversity is the product of human experiences throughout the ages, which the individual has taken as an inheritance to the generations in order to celebrate it and deliver it to the world despite its differences. This is evident in the UNESCO declaration that cultural diversity is as essential to humanity as the biological diversity of nature.

The emergence of the Internet made highlighting cultural diversity easy, but it was not without problems, challenges, and sometimes biases. Showing cultural identities in the world through the Internet must show respect and tolerance for others and overcome geographical and ethnic problems.

The emergence of the Internet made highlighting cultural diversity easy, but it was not without problems, challenges, and sometimes biases. Showing cultural identities in the world through the Internet must show respect and tolerance for others and overcome geographical and ethnic problems.

Highlighting tolerance and equality between individuals belonging to different cultures is a right that cannot be overlooked. Respect becomes not a product of fear of another culture, but rather a product of equality (Lin 5), thus building a base of understanding, which in turn increases the opportunities for creativity and innovation to serve societies. This can be achieved through several factors, such as the education provided to students, highlighting the celebration, and enacting laws and policies that call for respect for cultural diversity.

1.6 Conclusion

In conclusion, cultural identity is a multi-faceted construct formed by a set of inherited beliefs and practices. With the emergence of virtual identity, large spaces were made available for cultural expression and exploration. It was necessary to create a tolerant environment for

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cultural diversity in the world. The emergence of artificial intelligence requires a precise understanding of how these aspects interact. The key lies in promoting cultural diversity in this evolving landscape in order to coexist side by side with the thriving world of virtual identity.

Chapter Two: Artificial Intelligence: Historical Background

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2.1 Introduction

The twenty-first century brought about in a period characterized by swift technological progress and digital revolution, in which this chapter discusses the captivating history of artificial intelligence (AI), from its early days to its current status and beyond, as well as the enormous effects of the digital era on the appearance of artificial intelligence and its revolution, because of the way the digital revolution has changed the way people work, live, and interact, artificial intelligence (AI) is becoming a key factor in technological advancement and transformation.

The development of artificial intelligence had its roots in philosophical questions concerning the nature of mind and thinking, long before the invention of contemporary computing. From the early days of trained systems and figurative AI to the present day of machine learning and deep learning, artificial intelligence has gone through several phases of development throughout the years. Every stage has advanced the objective of building machines that are capable of carrying out actions that were previously only done by intelligent humans.

This chapter will cover significant turning points in the history of artificial intelligence, looking at the developments that have influenced the field's growth. It will follow the rise of this revolutionary technology from early foundations groundbreaking research to the present artificial intelligence. A crucial enquiry that comes to mind when people consider artificial intelligence's past and present is this: How will future developments in AI redraw the lines separating human and machine intelligence?

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2.2 Digital Age

The digital age is the period of humanity's transformation from traditional industry to an industry based on a digital economy that relies on technology and communications, which in turn relies on computers and their spread, as well as the Internet, mobile devices, and social media. One of the defining features of the Digital Era is the increased speed and breadth of knowledge turnover. According to Jill Shepherd, "the Digital Era is characterized by technology which increases the speed and breadth of knowledge turnover within the economy and society" (Shepherd). This means that information is not only disseminated more quickly but also reaches a wider audience than ever before. The implications of this are profound, affecting everything from how businesses operate to how individuals communicate and learn.

Digital technology has made it possible for businesses to develop at rates never before seen in the economy. Large volumes of data are now readily available to businesses, enabling them to use it to inform their plans and develop new markets and more effective operations. Big data analytics, for example, enables businesses to comprehend customer behavior in real-time, allowing for more immediate and customized responses to market demands. As Shepherd notes, "Evolutionary theory, as an explanation of the system we live in, states that sustainability relies on knowledge turnover." (04) This suggests that businesses that can quickly adapt by leveraging new information are more likely to succeed in the long term.

In addition, in society, communication and education have been greatly impacted by the quick turnover of knowledge. The rise of social media, instant messaging, and online educational platforms have completely changed how people communicate and learn. Education boundaries have been broken down by the availability of a worldwide resource

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of information and learning materials for students. Furthermore, social media has opened up new channels for community development and public conversation, but it has also brought forward problems like disinformation and the digital divide.

The evolutionary perspective highlighted by Shepherd emphasizes that continuous adaptation is decisive for sustainability. In the Digital Era, this means that both individuals and organizations must be updating their knowledge and skills to remain relevant. As technology continues to evolve, so too must their approaches to leveraging it effectively. This ongoing process of learning and adaptation is what enables societies and economies to thrive amidst constant change. One of the most significant developments driving this change is artificial intelligence.

2.3 Artificial Intelligence Beginning

Stuart Russell and Peter Norvig book '*Artificial Intelligence: A Modern Approach*', they define AI as "the designing and building of intelligent agents that receive percepts from the environment and take actions that affect that environment." (qtd. in Moltzau). Stuart Russell and Peter Norvig encapsulates the core of artificial intelligence (AI) in a clear and concise manner, they highlight two crucial components: perception and action.

Perception refers to the ability of these intelligent agents to collect information from their surroundings, similar to how humans use their senses to understand the world. This involves various technologies such as sensors, cameras, and data processing algorithms that allow AI systems to interpret inputs from the real world. Action, on the other hand, pertains to the responses or decisions that these AI agents make based on the perceived information. This could range from simple tasks like turning on a light when someone enters a room, to more complex actions like navigating a self-driving car through traffic.

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Basically, Russell and Norvig's definition underscores the dynamic and interactive nature of AI. It's not just about passive observation; it's about actively engaging with and influencing the environment. This dual capability of perception and action is what makes AI so powerful and applicable. Their description also implies an ongoing process of learning and adaptation, as intelligent agents continually refine their actions based on new percepts, striving to improve their effectiveness and efficiency in a given environment.

The Characteristics that were limited to humans, such as the ability to think and solve problems, have become common between them and artificial intelligence “Artificial Intelligence (AI): A domain within computer science focused on creating systems capable of performing tasks typically requiring human cognition, such as learning, decision-making, and adaptation, often referred to as “Machine Intelligence”. (“The Arabic Dictionary of Artificial Intelligence”)

By highlighting the capabilities of artificial intelligence at the present time, we see that it sometimes excels in solving complex problems in a short period of time and with infinite accuracy. One of the most important developments that has occurred in learning on its own, which enhances its independence in taking orders.

According to Oliver Jeffery “The academic roots of AI, and the concept of intelligent machines, May be found in Greek Mythology.” (para 3). The ancient Greek civilization was the first place in which the idea of artificial intelligence appeared; it was known as “automata”. Their ambition led them to create the first robot ever was called “Talos”:

The first robot to walk the earth was a bronze giant called Talos. This wondrous machine was created not by MIT Robotics Lab, but by Hephaestus, the Greek god of invention. More than 2,500 years ago, long before medieval automata, and centuries before technology made self-moving devices possible, Greek mythology

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was exploring ideas about creating artificial life—and grappling with still-unresolved ethical concerns about biotechnolgy, “life through craft.” In this compelling, richly illustrated book, Adrienne Mayor tells the fascinating story of how ancient Greek, Roman, Indian, and Chinese myths envisioned artificial life, automata, self-moving devices, and human enhancements—and how these visions relate to and reflect the ancient invention of real animated machines. (para 1)

All these thoughts and ideas proposed by philosophers such as Aristotle in his book *on the soul* to make automated things has made the foundations for the artificial intelligence concept, in which it was followed by creating automated objects such as “wash basin automata “and “windwheel” by the famous Greek mathematician hero of Alexandria “devised a water basin that featured metal birds which sang. A mechanical owl would turn its head to look at the birds, making them go quiet. One of his most well-known creations was a windwheel- this is possibly the earliest example of man harnessing the power of wind in a non-sea environment.” (“Automata in Greek mythology “para3). The integration of ancient workmanship and philosophical investigation established the fundamental ideas that still shape contemporary technological progress.

In the mid-20th century, Alan Turing the founder and contributor of the modern artificial intelligence through the Turing test concept in which he asked the question “can the machine think” in his research paper titled “Computing Machinery and Intelligence” made the basics of the thinking machine that can act independently:

I propose to consider the question, "Can machines think?" This should begin with definitions of the meaning of the terms "machine" and "think." The definitions might be framed so as to reflect so far as possible the normal use of the words, but this attitude is dangerous, If the meaning of the words "machine" and "think" are

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to be found by examining how they are commonly used it is difficult to escape the conclusion that the meaning and the answer to the question, "Can machines think?" is to be sought in a statistical survey such as a Gallup poll. But this is absurd. Instead of attempting such a definition I shall replace the question by another, which is closely related to it and is expressed in relatively unambiguous words. (433)

Alan Turing is considered the father of the idea of artificial intelligence. A mathematician, computer scientist, and proficient programmer in his field, one of his most important achievements is that he worked early in World War II as a codebreaker for the British government communications offices, where his influence was crucial in defeating enemies, as he decoded encrypted messages that carried sensitive messages addressed to the armies, "although most famous for his WW2 work at British codebreaking center Bletchley Park, his contributions began long before that. ("Alan Turing: Behind the World War II Legend" para 2). The Turing is a test dedicated to thinking machine to proof if that machine has the same capabilities as the human mind, which was "The imitation game". "Turing test, in artificial intelligence, a test proposed (1950) by the English mathematician Alan M. Turing to determine whether a computer can "think". ("Turing test")

The imitation game is a test composed of three participants, the machine, the person and the interrogator each one is separated in deferent rooms, and named X (the machine) and Y the person, the interrogator knows them as x and y, in which its goal to decide which one is the person and which one is the machine through asking question for example "does X play chess". The objective of this game is to determine whether a machine can sufficiently mimic a human being that the investigator is unable to distinguish between the two. This idea behind the "Turing Test" is used to evaluate a machine's capacity for intelligent behavior that is identical to human conduct. (The Turing test)

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2.4 Artificial Intelligence in the 21st Century

The Dartmouth Conference, which took place in the summer of 1956 at Dartmouth College in Hanover, New Hampshire, was the turning point that led to the development of artificial intelligence (AI). The goal of the conference, which was organized by MIT's John McCarthy, a young mathematician and computer scientist, was to investigate the prospect of building intelligent robots that could emulate human cognitive capacities. (A Proposal for the Dartmouth)

A wide range of academics from several fields, including economics, psychology, engineering, and mathematics, came together for the conference. The father of information theory, Claude Shannon, and the originator of neural networks and cognitive science, Marvin Minsky, were among the prominent guests. ““2 month, 10 man study of artificial intelligence” submitted by John McCarthy (Dartmouth College), Marvin Minsky (Harvard University), Nathaniel Rochester (IBM), and Claude Shannon (Bell Telephone Laboratories).” (qtd. in press) The term ‘Artificial Intelligence’ was given by John McCarthy which were the first appearance of the term in the Dartmouth conference “John McCarthy held a workshop at Dartmouth on ‘artificial intelligence’ which is the first use of the word, and how it came into popular usage.” (qtd. in What is the history)

The increased use of computers has facilitated the way how the artificial intelligence develops rapidly, the developer and programmers has found the resources to help the movement from a machine that mimic the humans to learning machine which can learn its self “Self-learning AI is artificial intelligence that can train itself using unlabeled data. On a high level, it works by analyzing a dataset and looking for patterns that it can draw conclusions from.” (qtd .in Shalamanov).

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The massive data which is being dealt with nowadays is the fuel that make the vast advancement in the artificial intelligence field in which it learns from it on how the humans act, think or even taking decision more precisely: “The synergy between Big Data and AI is undeniable. Big Data serves as the lifeblood of AI, providing the vast datasets necessary for training machine learning algorithms. Without access to these data troves, AI systems would lack the essential knowledge to make informed decisions.” (qtd. in Big Data and AI). Nowadays artificial intelligence has made lives easier in which it is included in industry and in big companies such as Google, Microsoft, open ai and even the social media.

2.5 Conclusion

In conclusion, in this chapter we delved into an overview about concepts of the digital era and artificial intelligence and its origins. The rapid evolution of digital technology has changed traditional ways of information sharing while also paving the way for significant advances in a variety of sectors. Artificial intelligence (AI) is one of the most significant developments of modern era. As we learn more about the impacts of AI, it's critical to understand how it fits into the overall structure of the Digital Era. This revolutionary technology represents the concepts of quick information and continual adaptation that define our modern era, with the ability to improve decision-making, and revolutionize everyday life.

Furthermore, we have explored the historical ground of artificial intelligence (AI), tracking how it developed from beginnings starting points to modern progressions. The evolution of AI has been characterized by interesting turning points, ranging from the development of "Talos," the first robot capable of performing simple tasks, to complex systems that simulate complex human behaviors and brain function. This shows not only illustrates the advancements in technology but also the development of early AI pioneers like Alan Turing and John McCarthy.

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In today's technologically advanced and globalized society, the relationship between cultural identity and AI is very relevant. Artificial intelligence (AI) systems constantly impact and are impacted by the digital era in which they function as they become increasingly incorporated into different facets of daily life. Comprehending the origins and progression of artificial intelligence via the lens of digital age offers a sophisticated viewpoint on how these technologies might be developed and. As we move forward, it is essential to examine how different regions are adapting to and shaping the AI landscape. The next chapter delves into the strategies and responses of Japan and the European Union in the face of AI's rapid advancement, exploring their unique approaches to innovation, regulation, and integration of artificial intelligence in their societies and economies.

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Chapter Three : Artificial Intelligence in Two Practices : Case of Japan and European Union

3.1 Introduction

After exploring deeply into the concepts of cultural identity and artificial intelligence and identifying their most important characteristics, in this chapter will try to understand the process of overlap that occurs between them and to understand to what extent artificial intelligence can affect various aspects of different cultural identities around the world, whether it is direct or indirect interference and influence.

For this reason, we devoted a model to Japan and the European Union in how to deal with artificial intelligence and presented examples to highlight the changes that occurred in these societies and how these countries responded to the challenges created by artificial intelligence. Countries such as Japan and the European Union are known for their terrible diversity in their cultures and their great history that extends for thousands of years. This is what made them reconsider the laws of artificial intelligence in order to ensure that their societies, individuals, and cultural identities are not exposed to future threats that may lead to their collapse and creating a balance between inevitable technological evolution and preserving their identities for subsequent generations.

3.2 Japan's Cultural Identity and Artificial Intelligence

Artificial intelligence occupies an important position in Japan, whether in the government sector or the private sector, in order to develop the economy and make Japan a center for artificial intelligence in the world. Artificial intelligence is represented in specific fields, the most important of which are robots and the diversification of their use, such as health care or public places. In recent years, interest in generative artificial intelligence has begun to grow. With the diversity and cultural prosperity in Japan, it has created great

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challenges in how to exploit artificial intelligence without harming certain groups of society due to the loss of jobs or changing the behavior of individuals for the worse.

3.2.1 The Impact of AI in Social and Culture Life

Because of the future solutions that AI has provided with in various practical, economic, and cultural institutions, many individuals and societies have relied heavily on it. This led to the emergence of some consequences in many areas (social and culture life) that ancient man thought was impossible to touch in the technology sector and AI in particular. The horizons opened by generative programs based on AI have made many researchers, and even non-specialists in AI, divide into two groups. There are those who see it as necessary, most of whom are owners of companies in artificial intelligence and technology, and there are those who see that the future will become a dystopia (Talty), especially with the spread of machines that take human jobs.

The social and cultural situation in every country in the world is going through a set of factors and changes, and no one can deny that technology has turned this upside down, as it has been able to turn the world into a small village in which anyone can obtain information about others. It has also been able to directing the compass for many issues and, more importantly, changing the behavior pattern of some individuals. Artificial intelligence, although it has only been a few years since its launch to users, has been able to transform this world and make it a trend not only among computer scientists but also simple users of all ages.

Currently, artificial intelligence systems still need significant and, most importantly, diverse supervision in order to highlight various phenomena and social life without biased prejudices. This is what Fox Harrell (professor of digital media, computing and artificial intelligence) emphasizes in his article on *The Guardian*, “AI can help shape society for the

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better – but humans and machines must work together”, which emphasized the ability to build an integrated system of AI based on creativity by entering data and purposeful experiments, so that any impact of AI is in the public interest.

Japanese society boasts a set of characteristics that make it different from the rest of the world that what made Japan one of the most important centers in the world in the fields of technology and digital development, despite the country’s recent economic problems and the high rate of aging. This has made employing artificial intelligence a priority for the Japanese government and developing robots and diversifying their use for the benefit of society and the economy, and to fill the gap in key country-critical sectors (Inagaki et al). Digital development in Japan has become a distinctive feature of this country to the point that when its name is mentioned, we immediately remember huge factories with machines in which we rarely find humans (Digital Labor), and robots that are present everywhere, work, cafes, stores, whether local people there or foreigners have become familiar to it.

The Japanese view of robots has taken a different turn from the rest of the world's people, as its use and employment in daily life has become a cause for either wonder or concern. Whether it is fear of what the future holds in terms of developments that affect people, such as losing their jobs, especially since the Japanese people sanctify work, or because of the high percentage of elderly people, as well as fear of moral deterioration, such as using robots for bad things, and it has reached the point of dating.

The Japanese government has identified areas in which AI it will have a role, including productivity, health, medical care, social care and mobility, and this was clearly evident during the Corona pandemic, especially since it has become used for delivery and assistance in medical facilities and elderly care places (Dirksen and Takahashi). Thus, Japan is trying to position itself as a leader in the high-tech sector, especially in the field of artificial

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intelligence, not only for prestige but also to confront societal challenges and risks and shape its future. This vision essentially boils down to society, a concept that integrates artificial intelligence into various aspects of Japanese society.

The robot sector in general will receive wide attention, whether in its forms that will be human-like or the algorithms that will be inside it, and its uses will be diverse, especially military and economic. However, Japan is trying hard to separate artificial intelligence from its identity, and this is evident in the legislation undertaken by the Japanese government. According to *The Japan News*, where the Japanese government has enacted guidelines related to artificial intelligence, which are 10 principles directed to companies specialized in AI, and these principles also obligated them to put humans at the top of their priorities.

Robot culture has also become popular even in drawn and animated stories (anime and manga), which have become popular today and have become widespread in the world, especially among teenagers and even young adults. One of the anime that has touched on artificial intelligence and robots in a new and psychological way is what was released on the Netflix platform, *Pluto* (2023), which exposes somewhat dark philosophical ideas about the future, where it has become possible to coexist with machines and create super robots that cannot be differentiated from humans. As for the most dangerous thing that the anime presented, it is the possibility of machines becoming independent of humans and employing artificial intelligence similar to the human mind. So that the machine has feelings and commits mistakes like humans. Not only this, the term ‘Law of Robots’ also appeared, and that those who will protect robots in the future are humans.

3.2.2 Local Languages in Japan and AI

The language in any country is considered an essential resource for its cultural identity and interface, and preserving these different languages and dialects is considered a basic need,

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especially with the massive spread of the English language as it is the language of science and innovation, and therefore the language of artificial intelligence, as most of the conversation programs generated by artificial intelligence were in its first release in English, it began releasing versions in several languages, which in turn whenever large amounts of data were entered in this language, the accuracy of the answers increased and consequently fewer errors.

Since there are many languages on the way to extinction, some scientists in artificial intelligence rushed to launch the AI Pirika program, which is an AI system for the Ainu people in Japan, which knows an isolated life and a way different from the Japanese people. This program also works not only to revive the language, but also to revive the culture and explore the suffering that these residents went through (Rewired), and that is why AI Pirika is considered a unique opportunity to learn the details of this nation, which perhaps after years people would not have heard about.

3.2.3 Local Art in Japan and AI

The arts are considered one of the types and cultural activities most affected by artificial intelligence due to the presence of many tools presented by technological companies specialized in AI, which have gained wide popularity not only among the general public and even among some artists, but it has created a wide controversy among the artist class, especially those who They consider art to be their source of income. There is no stage in human history in which art was not an outlet and an expression for the people. For example, the drawings on the wall by primitive man, which described his condition as he hunted, were activated in religious narratives, especially by Christians and their churches, and distinguished themselves in the Renaissance era, which produced great artists for us.

This led to the Japanese court issuing a set of laws regarding the use of AI for copyright problems, especially with Netflix releasing an anime whose drawings were based on artificial

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intelligence. This led to widespread anger among animators, especially since their salaries are low (Deck), consequently, the emergence of AI had a major impact on the arts in all its forms, including images, drawings, and music... In Japan, since manga and anime are mainly based on drawing, and in light of the spread of AI tools, it has become necessary for artists to reveal their concern that these tools are a blind imitation of his works and not original works in order to enter their data.

3.3 The Cultural Identity of the European Union and Artificial Intelligence

The European Union, represented by its legislative and legal institutions, is trying hard to regulate artificial intelligence in a way that serves the interests of the European Union countries worse at the present time or in the future, not only in the economic field, but also in the cultural field.

3.3.1 Cultural Heritage in the Era of AI

The global development that we are witnessing has become a major challenge for us, especially as generations born in the era of technology. It has become a basic pillar in their daily lives, and this has created some obstacles in how we view and receive human cultural heritage, preserve it, and transmit it without distortion or forgery to other subsequent generations. Heritage is considered an essential resource for knowing and distinguishing the country and a vital bridge between generations to introduce cultural and even natural heritage, whether tangible or intangible, in order to preserve them and highlight their status (Logan 34).

Technological development, led by artificial intelligence, has opened great horizons and plays a fundamental role in preserving cultural heritage and creating new ways to convey images and identities that may have been absent or damaged due to circumstances, and this is what made many governments, led by the countries of the Union, European efforts to exploit it and discuss ways to develop this field and use it in many sectors, such as tourism, museums,

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and the rehabilitation of archaeological buildings, especially with the emergence of the term digital art. The great development that has occurred in machine learning and computer vision technologies has revolutionized cultural heritage inspections, especially in monitoring the structural condition of ancient heritage structures that are on the way to extinction. Through analyzing digital image data and deep learning, the detection of damages that have occurred in archaeological buildings is enhanced, allowing proactive measures to be taken and defects detected, thus preserving archaeological sites (Mishra and Lourenço 536).

The traditional heritage of any nation depends primarily on transmitting narratives from one generation to another. This is what leads to these narratives playing an important role in values and beliefs and disseminating them to the world. Here lies the role of artificial intelligence in how to clean these narratives and address them in a scope that does not hurt feelings, and the beliefs of any people and speaking about them without any falsification. This is what Stephen Ibaraki explains in his article “Artificial Intelligence For Good: Preserving Our Cultural Heritage”, in which he described that the use of artificial intelligence has become common as some companies develop new methods for understanding cultural heritage and telling stories in more accurate ways. Ibaraki also discussed the time machine project which was funded by the European Union with 1 million euros, which aims to digitize huge information stored in museums and use artificial intelligence to analyze it, which will explore broad horizons in the search for the roots and history of Europe.

3.3.2 Tourism and Museums

The tourism and museum sector has become one of the important sectors and the most rapidly affected by artificial intelligence due to the ease it provides and the low costs compared to the human element. This is what has led to many museums around Europe using AI extensively in recent times.

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The use of robots to guide people inside tourist places and museums has become common, as well as entering visitor data and analysing it by artificial intelligence in order to understand, study, and thus provide better service to visitors, especially since AI has a superior ability to deal with things and classify them for visitors according to what they want. There are also many advantages that AI offers in this type of sector, which countries that depend on their profits from the tourism sector can benefit from, such as instant translation for foreigners and the use of augmented reality in order to enhance understanding of the tourist place and see it in different dimensions (Münster et al. 797).

3.3.3 AI and Cultural Diversity in EU Countries

Due to the great cultural diversity experienced by the countries of the European Union and the multiplicity of its members and affiliations, in addition to Europe becoming a major center for immigration from many countries of the world in search of good standards of living compared to their countries of origin. This led to the importation of many of the customs, traditions and religions of these immigrants, so it was necessary to the countries of the European Union have decided to legislate laws regarding artificial intelligence in order to ensure the security of its cultural diversity and not be exposed to some of the negatives resulting from AI.

Artificial intelligence has emerged in recent years as an important means in the world of technology, to the point that it has become an integral part of technological machines and websites. AI has the ability to analyse huge amounts of data supported by complex algorithms and machine learning to result in ease of use by the user, and this is what has made many large companies, especially economic ones, rely on it more than workers. Processing algorithms of this data, which represents the different cultural identities of humans, without discrimination or prejudgments, is a difficult task that artificial intelligence still suffers from,

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in light of the lack of a strategy or method that prevents algorithms from falling into these errors.

The issue of bias is an important topic and a challenge for technology companies responsible for artificial intelligence systems, and it may be due to several reasons, including training data, which referred to the process of entering a set of data from different sources and various users, in order “to train a machine learning model” for any program, and this leads to improving use and providing an ideal experience and convincing answers (Sayedi). It must be noted that this data is not immune to errors, whether intentionally or unintentionally on the part of the programmers, which leads to the repetition of these errors and biases become inherent in the artificial intelligence system.

Also, some prior political biases against some ethnic groups or cultural or religious groups may lead to their exclusion or giving some false images about them. This is due to the lack of diversity in the team of developers for artificial intelligence systems. For example, the Arab countries are still witnessing a shortage of data scientists and application programmers, and this is why there is a diverse team ensures at least the presence of different points of view that will change some of the cultural and ethnic biases that exist in the world, and this is what helps in managing the artificial intelligence system in a fair and equal manner.

The consequences of bias may sometimes be catastrophic and remain for a long time if no intervention occurs to correct it, and this leads to the exclusion of others and a lack of trust between the user and the artificial intelligence system. In order to address errors and ensure that they do not occur, the team of programmers must build a strategy based on respect, ethical use, and equality without causing harm to different cultural identities around the world.

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‘The Artificial Intelligence Law’ issued by the European Union is considered the first legislation related to artificial intelligence in the world, as it has become obligatory for EU countries, after the great development that has occurred in AI and its growing role in managing the economy, especially by European companies, to set guidelines in order to protect user data and reducing deep fakes. However, the legislation faced some criticism, such as licensing regarding innovation, especially with the growing global conflict between America and China (Broughel). This is why the European Union is trying to use a policy of neutrality and not use artificial intelligence as a weapon against countries.

3.4 Conclusion

In the end, using artificial intelligence and employing it in various cultural sectors has created a new concept and vision and how could exploit it well, especially by governments, particularly in Japan and the European Union. Moreover, it may constitute an effective tool in communicating these cultures, known since ancient times and known for their scientific achievements, to the world by narrating their history and cultural heritage using artificial intelligence. However, despite this, this did not prevent taking some measures and legal fortifications in order not to fall into biases and false narratives, especially since the European Union countries and Japan had a dark history of colonialism.

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4.1 Introduction

The unique linking generated by artificial intelligence with cultural identity, which we saw in the previous chapter, has given wide scope, not only among scientists but even among the general public, as the intersection between them has become more clear, even if it is still in its beginnings. In the face of the rapidly spreading artificial intelligence, cultural identity in its broad sense has become a fragile term. This has created great challenges in how to balance them, especially since it has become an inevitable reality that is difficult to abandon. The emergence of the term virtual identity with the rise and spread of social networking sites is a reflection and result of that interaction between AI and the world of cultural identity, and therefore in this chapter we will try to delve deeper into this new term and explain the results that have emerged. Will also try to delve deeper into the narratives that address the various scenarios, assumptions, and risks that artificial intelligence can create in a rapidly developing world. Although many questions surround the unique interaction, and obliged to identify the various aspects of the digital landscape.

4.2 The Consequences of AI on Cultural Identity

Technology has always played a major role in changing individuals' perception of their cultural identities and the cultures of others, either positively or negatively, and with artificial intelligence, the matter is no different, especially since different segments of people have become able to access it easily, and this results in consequences that may be dire if can not control it.

4.2.1 From Cultural Identity to Virtual Identity

After explored into the concepts of identity and cultural identity, which means the individual's representation in a specific cultural community of which he is a part. A new term

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appears on the forefront, which is virtual identity or virtual community. Despite the novelty of the term, it has become the most common and used by people, but this does not mean that the term online identity or virtual community does not intersect with modern cultural identity, as it may affect and interact with it. However, with the rise of artificial intelligence and its advantages, the gap between cultural identity and virtual identity has become uneven and unbalanced due to its applications that have become an essential part of the Internet.

In the book of *Building Virtual Communities* (2002), Dorian Wiszniewski and Richard Coyne, they present a new conception of identity in virtual communities by giving it the metaphor of the mask, where the person who enters the Internet wears a mask, like participating in ancient plays. “Apparently, in anonymous online chat groups you can play charades, wear a mask, and pretend to be of a different age, gender, or appearance ... It seems that we can accomplish this transformation of identity with great fluidity now. As the Internet and its successors become more pervasive and the technologies become more sophisticated and convincing” (191).

He also likened this condition of wearing a mask to blindness:

The appropriateness of whichever mask we choose depends on the reciprocal shift from specific realm to discursive realm, from individual to community. Our obsession with technoromanticism can be countered by a pragmatic playful scepticism. The virtual reality helmet need not be an opaque mask putting the wearer in a condition of blindness. (210)

This is why we see that there is an intertwining of virtual identity with the concept of ‘virtual reality,’ which is a representation of certain circumstances, including social status, behavior, and how others perceive the individual in the digital world.

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4.2.2 The Homogenizing Impact of AI on Cultural Identity

Throughout the long history that humanity has passed through, it has been confirmed to us that the development of humanity is parallel to the development of its diverse culture, and this is what has created for people a terrible diversity and multiplicity in the cultures of peoples at different times, and in most cases it has had a positive impact on man, and despite the wars that have distinguished man, whether ancient or present, his culture and identity remained far from any conflict that might avoid the risk of extinction. However, this matter seemed to change somewhat, especially after the emergence of the philosophies of evolution and the ideal human. These ideas formed a new trend in the era of man and were adopted by many rulers of countries and even the common people, which highlight the culture of superiority over others in terms of mind, culture, and race, which unfortunately, it has not disappeared yet, and with the emergence of colonialism, whether direct or indirect, and the term globalization, man has lost a basic pillar, which is the identity and culture of his or his people.

Artificial intelligence has become an important technological and economic tool for many major international companies, to the point that it has become a major driver in the shares of technology companies, which have been quick to adopt, use, and offer it to users. However, anyone who follows the affairs of artificial intelligence will find that it is still in the hands of a handful of companies that control it, most of which are Western companies. Although they emphasize that they are trying to respect the cultures of all peoples without any marginalization, this does not prevent them from using it to put forward specific agendas that serve the interests of a specific group.

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The monopoly of artificial intelligence by big tech companies is a concern he has expressed by the expert of AI sector Dr. Seth Dobrin in his blog “AI and the Risk of Technological Colonialism”, Where did he express his concern about the monopoly practiced by these companies, which we can see in the word colonialism, and will lead to challenges and risks related, especially to what we said previously, the digital divide. AI programs still suffer from problems that may create the problem of a unified or dominant culture, changing some values, and thus the disappearance of cultural identities. He does not believe that there is a fair distribution in the world regarding artificial intelligence, which results in submission to one group over another. He also describes that the bias that AI creates is a non-technical problem, but rather the result of problems related to the cultural structures of societies that are still trying to rise above others. The threats that we raised previously regarding monopoly and a unified culture, although they are in their infancy, are a difficult problem that countries and companies are still trying to give guarantees that they will be solved and that incidents related to bias will not be repeated.

4.3 Robots and Cultural Identity

In the previous chapter, we reviewed some of the methods and uses of robots in Japan and how society there accepts the idea of robots. However, there is no bleak vision for artificial intelligence, and robots are part of that because the real danger lies in the AI that exists and is capable of liberating itself from the grip of humans and its independence in its decisions. This seems difficult to achieve due to the power of the software that scientists have developed in order to ensure that the robot should not disobey humans, but anything is possible.

So, what if any robot or artificial intelligence program came forward and demanded that it would be an ordinary citizen? This seems ridiculous and unthinkable, but this scenario

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really happened and it occurred with the Alpha 4 program, and in order for it to achieve that, it had lawyers standing up for it in court. Even if we say that citizenship will become a right for robots, how will they be dealt with in terms of taxes? Is there equality? The presence of robots as voice agencies or programs in your daily life means that it can practically be said that you are talking to a person who knows everything and is an expert in all sciences who can analyse, investigate, and provide services quickly. But it must be noted that this ease that anyone in the world desires is based on your huge data that is analysed quickly. So, what if people in the world, specifically in the future, come forward and refuse to sell this data or even do not use any artificial intelligence techniques (Talty). Then, how will we see these people as backwards who do not see the truth and do not like development, or will these characteristics apply to the people who sold their data?

Anthony Elliott, in his book *The Culture of AI: Everyday Life and the Digital Revolution* (2019), divides the scenarios related to robots into two parts: between people who still do not believe that these robots will take their jobs, and that these hypotheses have been fueled by films and literature, and among people who believe that robots are a contemporary revolution, and for him “some sceptics even recognize that certain types of workers are in for a rude awakening as a consequence of the rise of intelligent machines” (56).

Job loss is considered one of the main risks of artificial intelligence, as some large companies have been firing workers in recent years in order to reduce costs and compensate for them with artificial intelligence. The accompanying impact of these arbitrary decisions of workers to fire them only because they have found workers (even if they are only programs built on AI waiting to build robots) will generate economic, political and philosophical crises in the extent of the workers’ trust in employment contracts or their companies, and it will also affect the productivity of production.

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In the future, which is not far off, companies will choose robots over humans, and they will come out to us under the pretext that humans have become lazy and demand a lot of compensation instead of robots that are characterized by great productivity and quiet work (no compensation, no strikes). Will a time come when machines will transform? And robots to human workers and require compensation due to stressful and tiring work. Will there come in the near or distant future a robot lawyer who will defend his kind from the great work and stress that humans have caused to machines?

4.4 Cultural Heritage and AI

The role that artificial intelligence and digitalization also play in cultural heritage and its preservation is something that has many benefits on the cultural identity of any country and nation in the world, whether in tourism, archaeological sites, as well as museums. With the development of technologies such as holograms that can recreate objects, which may bring about a major revolution in the future if they are exploited well, some of the fears of their use are that they can be used for fake and violence videos or without permission of persons.

But this does not make it problem-free; The real dilemma and obstacle lies in the fact that many countries of the world were under colonialism, and one of its results was the theft of many historical monuments from these original countries (Creative Commons 00:09:40-00:10:00), as is the case with Egypt and India for Britain and Algeria for France. How will artificial intelligence deal with these traces, to whom should they be attributed, and how will it choose the appropriate words so that the algorithms can tell that they were stolen and came illegally?

One important area of impact is in the arts. Artificial intelligence tools and algorithms are being used to create music, literature, visual art, and even films. This reduces the gap

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between human and machine creativity, asking questions about authorship, originality, and the artistic expression. Artificial intelligence generated art encounters our understanding of imagination and invites us to review the role of the artist in the creative procedure.

Additionally, Artificial intelligence is changing the way we connect and cooperate with each other. Social media platforms and online communities leverage Artificial intelligence algorithms to personalize content, shape user experiences, and even reasonable discussions, this has consequences for how we form and express our identities online, as Artificial intelligence driven algorithms influence the content we consume and the societies we engage with.

In education, Artificial intelligence is transforming how we learn and teach. Intelligent teaching systems, adaptive learning platforms, and Artificial intelligence powered educational content are providing personalized learning experiences tailored to individual students' needs and abilities, this not only improves learning outcomes but also challenges traditional models of education and expertise.

Ethically, Artificial intelligence increases complex questions about bias, fairness, and accountability. AI algorithms can perpetuate and even impair existing social inequalities if not designed and implemented thoughtfully. Issues such as algorithmic bias, data privacy, and the ethical implications of Artificial intelligence driven decision-making systems are increasingly essential to discussions about social justice and equity.

4.5 Generation Z and AI

Generation Z refers to the generation following Millennials (Generation Y), and includes individuals born approximately between the mid-1990s and the beginning of the 2010s, is the cohort succeeding Millennials. This generation is often referred to as Zoomers or Postmillennials. What distinguishes Generation Z is its close connection to technology and its

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various means. They have easy access to the digital world and get information quickly, especially the emergence of the World Wide Web in 1995 was a defining moment in the historical narrative of Generation Z. This has made their personal and cultural identities affected by major factors and challenges, and it has become part of their daily practices and the forms of expression that they export abroad.

Generation Z's understanding of their cultural identity in the context of rapidly evolving artificial intelligence is an important tool for exploring how Generation Z interacts with advanced technological and how they shape their individual and collective identity in an era characterized by rapid and sometimes dangerous transformations (Politically, economically and socially). Generation Z's increased use and confidence with the evolving landscape of artificial intelligence (AI) presents a numerous of challenges and opportunities that not only shape their technology experiences, but also impact the development of their cultural identity.

As Gen Z citizens born and raised in the digital age, Generation Z's reliance on AI-powered technologies raises concerns about the destruction of identity and disinterest. Constant interaction with AI conversation algorithms and social media may contribute to distorting and changing authentic and original cultural expressions, because the widespread of digital content through platforms that rely on artificial intelligence can contribute to cultural homogeneity, erasing the nuances and unique cultural expressions that characterize the geographical region or religious practices. which may lead to weakening the sense of identity even if most of their use revolves around facilitating their work and job or study (education) by providing easy answers that compensate for attending the class and follow his professor's explanation.

Also, striking a balance between globalization and preserving diverse cultural identities has become a challenge for Gen Z. Especially with the process of inclusion carried out by

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some western institutions that seek to merge cultural identities with each other and spread practices that do not comply with Eastern Arab and Islamic customs, this makes Generation Z a main target for these campaigns that may be generated or built through AI.

4.6 Conclusion

In conclusion, during this chapter, in which we focused on the consequences that may be terrible, such as virtual identity, as well as some scenarios, some of which are currently occurring in the world and others perhaps in the near future, we conclude that artificial intelligence is still not possible to control it in a complete way, in the absence of some necessary precautions. As we mentioned previously, diversifying the developer team for AI programs. Also, the great acceleration towards which technological companies are moving to develop AI may lead to the creation of a society that is not closely linked to its cultural identity.

General Conclusion

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The future of technology in general and artificial intelligence in particular is uncertain, and we cannot predict what will happen, and many questions remain unanswered. Through our research, we find that the rise of artificial intelligence and its impact on cultural identity is still a challenge, and therefore we cannot confirm whether artificial intelligence is dangerous to cultural identity or not.

In general, the cultural identity of any individual around the world is a source of pride for him, as it carries all of his characteristics that he inherited from his ancestors, and he in turn tries to preserve them and export them to subsequent generations without any forgery. Here comes the role of artificial intelligence in making the matter easier, as it can revive ancient languages, as we saw in Japan, and through it we can see some of the archaeological buildings that we lost due to wars, and translate narratives into various languages and disseminate them to the world. Through artificial intelligence, it has become easy to create music or a piece of art inspired by our cultural heritage. As we see, the prospects that artificial intelligence holds are great if we exploit them well.

However, some uses of AI may lead to disastrous results. Until now, artificial intelligence algorithms are still not efficient in order not to accept biases, and this leads to restrictions on the level of cultural identities and individuals' experiences, and some AI programs are still in the wrong hands in order to pass some "bad" and "hateful" messages. Virtual identity is also increasing, especially among young age groups, which creates an unreal world that may affect the individual's psyche.

As we mentioned previously in our research, there are several countries and entities that are trying to take proactive measures, which is certainly a welcome thing in order to combat some capitalist companies such as Microsoft and Chat GPT, whose only concern is money and collecting the largest amount of personal data. Also, the role of developers and diversifying

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their team has become imperative in order to expand the circle of different identities and respect for others.

Moreover, we can turn artificial intelligence into an essential tool and a historic opportunity to strengthen cultural identities in various regions around the world, especially since it has now become available to everyone. Therefore, we can see the transformation of the machine or robot into an opportunity to build a world based on understanding and expression in different forms, so that cultural identities do not fade and erode.

Furthermore, through this research we aim to shed light on the complex relationship between cultural identity and artificial intelligence. Artificial intelligence has the potential to preserve and spread cultural identities in the world. On the one hand, artificial intelligence can analyze vast amounts of cultural data relating to peoples, and facilitate the preservation of languages, traditions and forms of artistic expression that might otherwise be lost, as we saw in Japan. On the other hand, AI algorithms can introduce cultural biases and create a hostile environment.

By presenting the hypotheses, and analyzing the different works and legislation, we were able to establish a relationship between cultural identity and the AI and we could confirm that there is an existence of a relationship of mutual influence between cultural identity and artificial intelligence, and this influence is represented in the various uses that AI has come to provide to the general public, which either behaves well with it and thus enriches cultural identity, or in presenting false conclusions whose purpose is to present false images of a particular group of peoples identities.

We took care in our research to give a large space to aspects related to the future of cultural identity and the various identities that fall under it and future generations, especially professional identity and Generation Z, and how countries deal with AI. In the end,

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technology, including artificial intelligence, has become an inevitable reality that we must accept, but it must be the bridge that connects all cultures of the world without discrimination.

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