

Analyzing the Role of Moral Values in the Development of Human Civilization Post-Industrial Revolution 4.0

Arqom Kuswanjono¹

Universitas Gadjah Mada, Indonesia

arqom@ugm.ac.id

John Abraham Ziswan Suryosumunar²

Institut Agama Hindu Negeri Gde Pudja Mataram,
Indonesia

suryosumunar0202@gmail.com

¹Corresponding Author: E-mail: arqkus2021@gmail.com

Abstract

The study aims to explore values within industrial revolution development, including Value 1.0 (territorial value), Value 2.0 (science and technology value), Value 3.0 (media value), and Value 4.0 (big data value). Qualitative research methods and materials obtained from literature related to the development of the values of civilization were used in this work. The study also applied systematic-reflective analysis on the collected data along with hermeneutic method. The findings reveal that the dynamic development of human civilization has been consistently based on changes of values appreciation that occur during the development of global society. Values as the center of orientation references of world society have their own expectations and direction, which in turn, become the orientation of daily life during the post-Industrial Revolution 4.0. Furthermore, an emergent Value 5.0 (moral value) can serve as the basis of social pattern, as it integrates all aspects of human life, including religiosity, humanity, politics, culture, and economy.

Keywords

Human Civilization, Moral Value, Post-Industrial Revolution, World Society

To cite this article: Kuswanjono, A; Suryosumunar, J, A, Z. (2021) Analyzing the Role of Moral Values in the Development of Human Civilization Post-Industrial Revolution 4.0. *Review of International Geographical Education (RIGEO)*, 1(4), 1721-1734. doi: 10.33403/rigeo. 8006881

Submitted: 07-03-2021 • **Revised:** 12-04-2021 • **Accepted:** 29-05-2021

Introduction

Man, as an object of philosophical study, is never separated from the discussion of our relations with nature, community, and society (Schiller, 1905; Yusuf & Saepuddin, 2017; Munaf & Piliang, 2018; Puspitasari, 2020; Qomariyah *et al.*, 2020; Wifkil & Bagong, 2021; Imanuella & Aryani, 2020). As the world suffers from various problems due to the COVID-19 pandemic, both in terms of humans as part of nature and as external parts of nature, there is never ending material that can be studied and explored (Pramukti, *et al.*, 2020). Nature teaches us about how to deal with life and how to meet human needs, which are actually provided by nature itself. On the one hand, in the development of human civilization, it can be understood that every movement of human life is always dependent on nature; on the other hand, humans also exert effort to control and dominate nature. Humans have a transcendental ability to go beyond what is in themselves, by submitting their natural characteristics and being an *animal rationale* who always processes their mind to produce new things in an instinctive way.

Science and technology emerged as part of human efforts to control and dominate nature (Leiss, 2018). These efforts have shaped human civilization and its development. Technology created by humans has become a medium that provides an intermediary between the needs of humans and every difficulty they encounter in their lives while dealing with nature. To date, technological developments have become increasingly ubiquitous, reaching every aspect of human life and reacting to many changes in human life. There exists a principle of reciprocity between technology and humans, that is, the greater the extent at which humans break away from nature, the greater their dependence on technology. Thus, the motion of the world, which in the beginning, has always depended on the natural order, is now controlled by a new system wherein technology is the main driving force.

The development of technology and science cannot be separated from the existence of the *Renaissance* and *Aufklaerung* movements in the West (Fiedeler, 2011). These cultural movements are the basis of optimistic attitudes that take a position wherein humans—with their rational powers—can penetrate their natural boundaries and control nature (Whaley, 2015). In turn, this spirit has led to the emergence of the Industrial Revolution. The Industrial Revolution, which began with the invention of the steam engine in the 18th century, had a great impact on increasing production capabilities (Bogart, *et al.*, 2017). Consequently, the increased level of production also increased the demand for raw materials and labor. Such rising demand eventually led to the increasing influence of the capitalist system, especially in creating a gap between the bourgeois and proletariat. Globally, this also resulted in the expansion of third world countries, warfare, destruction of nature, and widespread social inequality.

Reflecting on the emergence of the Industrial Revolution during the 18th century, it can be understood that any form of technological progress has a tremendous and comprehensive impact that penetrates all aspects of human life. This is more massive in the development of digital technology, especially related to the fields of communication and information. In recent years, the development of digital technology has rapidly created a digital world that has almost no limits. In this case, technology has become a giant that has effectively swallowed its creators into cyber space, sinking further into the artificial world they created. This infinite sea of information in the digital world may be considered the leading point of today's human civilization, aptly named "the fourth industrial revolution." This so-called Industrial Revolution 4.0 encourages everyone to follow the development of digital technology, in which self-existence is no longer measured by human rational ability but on how quickly one can access information, regardless of whether or not such information is valid.

The development of human civilization will basically continue to cause various cultural changes. In this case, culture, as understood by Raymond William, is a representation of a way of life that expresses meaning and values; it is not just limited to matters of art and learning but also to customs and daily behaviors (Williams, 1983). This understanding is in line with efforts to understand the social changes that occurred prior to the Industrial Revolution 4.0, where each culture that emerged in each phase of civilization raised values that, in certain contexts, served as indicators in determining decisions in the social sphere. Values in this condition become matters that need to be studied more deeply, especially after the Industrial Revolution 4.0, which has brought about the phenomenon of big data information, wherein everyone can access information while simultaneously disseminating information. Moreover, reference value becomes a vague thing, where information based on truth or fake information exists. This condition illustrates that humans

have, for centuries, been controlled by the vortex of uncertain mobility and away from the deepest principles of natural human conditions.

The phenomenon of the Industrial Revolution 4.0 demonstrates a broad occurrence of dehumanization, in which the principles of morality in the interaction of human life no longer serve as the fundamental support (Schwab, 2016). Thus, the current research argues that future expectations have emerged about the existence of values that tend to be more humane and dependent on morality. Preserving humanity is important in controlling the pace of technological development and in striking a balance between technological progress and its usefulness in solving social problems. Thus, value 5.0 has emerged as a new hope for the development of human civilization and as the foundation of human civilization after the Industrial Revolution 4.0. In many ways, it is important to study this topic fundamentally, especially using the axiological perspective. This study, therefore, aims to answer the following questions:

- What are the concepts of value appreciation in every development stage of human civilization until Industrial Revolution 4.0?
- How can moral value as the projection of post-Industrial Revolution 4.0 value appreciation initiate the integration of digital technology and morality for the development of humanity?

Methodology

The study is based on qualitative research. The research materials were obtained from studies related to value appreciation until Value 5.0 and the development of civilization after the Industrial Revolution 4.0 era. These materials were divided into two sources, namely, primary and secondary data. The primary data came from books explaining the fourth industrial revolution and the concepts of morality and humanity. This research also used secondary data, which came from books and journals related to the development of value appreciations until Value 5.0.

In the analysis, the hermeneutic philosophical method was applied, in which the researchers investigated the development of value appreciation based on changes of world society orientations. According to Anton Bakker (2004), there are several methodical elements of philosophical hermeneutic method: a) "description" describes in detail the historical appreciation of value in each era and explains what is referred to as Value 1.0 until 5.0; b) "interpretation" interprets the problems that occur in the context of value appreciation development within global society; c) the "holistic" element comprehensively understands various aspects that become references; and d) "reflection" reveals the possibility of Value 5.0 as a solution to problems related to world society relationships post-Industrial Revolution 4.0.

Results And Discussion

Relativity Appreciation of Value as a Driver of Social Change

Discussions about value often lead to fundamental questions about what value constitutes. How can something be considered valuable? What is the correlation between values and the concept of virtue? These questions basically invite a variety of answers, each referring to various contexts. According to Schwartz and Bilsky (1987), "values" are desirable transitional situation goals that vary in importance and serve as guiding principles in the life of a person or other social entities. They also argued that values serve as a guide and purpose in human life across all situations and conditions faced by humans; in other words, the value, in this case, can be said to be a universal demand from humans (Schwartz & Bilsky, 1987). The authors also theorized that values could be derived from the universal human requirements, as reflected in needs, social motives (interaction), and social institutional demands (Schwartz & Bilsky, 1987). Values are reflected in human needs driven by the social motives of a dominant group within their social environments and can also arise through personal experiences that vary from one person (or context) to another. In this case, the same value can be understood in different ways and can affect the assessment of various considerations.

In line with Schwartz's opinion, Denis (2019) referred to Nietzsche's thought and explained the existence of the relativity of virtue. The author quoted Nietzsche's opinion about the relationship between one's mental health and the virtue of his life, Denis tried to explain the concept by reinforcing a universalist account of how what we consider healthy for all individuals is unsustainable, which is the same for a universalist account of which character traits are

considered as virtues. Thus, this principle of virtue has become a matter of debate in many conditions, and there are some arguments that assumed the principle of virtue as the base of good and bad judgments that cannot change. Meanwhile, some perspectives quoted by Denis, such as the Nietzschean view, assumed that moral principles are always related to individual considerations, which are closely linked to mental health conditions and the diversity of social paradigms. These diversities correlate with the subjectivity of the assessment, which always takes the spirit of eras and cultural patterns affecting one's mental character as a decision is determined.

This opinion is supported by changes in every stage of human civilization. Thus, if the human understanding of value is static, then the question is how human civilization can experience significant changes until the present time. Let us take an example from the field of economics. Our understanding of an economy initially focused on the discussion of how human activities are carried out to meet their needs. Nowadays, the concept of "economy" has become more complicated, that is, when we discuss about the economy, we enter into the patterns of production, the use of capital, and how digital technology has facilitated economic activities. What used to be a very simple concept has now become more complex. These conditions reveal that there is a way of development of human judgment which develops as the way human civilization develops. Sternberg (2019: 480) quoted Mischel's opinion in understanding the human personal character and stated the "view of personality, in general, as residing in the situation rather than in the person". This opinion confirms that the situation is very influential on a human's personality, both in terms of how to behave and how to think in every particular society. This idea then reveals the relations between natural conditions and the diversity of situations experienced by humans, on the one hand, and the form of values and norms in the general social environment on the other hand.

The diversity of natural conditions and social situations affects the paradigm of communities, especially concerning the concept of virtue that, in turn, would determine the assessment process. In this case, the relativity of the virtue concept offered by Denis leads to the rejection of the uniformity of the appreciation of value and understanding of the *a priori* value that remained unchanged in every historical development of human civilization. Meanwhile, Bertens (1993) argued that values have a place in the atmosphere of appreciation or judgment; consequently, an object will be valued differently by different people. This assessment becomes a critical process. This is because when humans experience their existence, they make an assessment similar to experiencing their existence as a subject, along with the characteristics of the age in which they live. From this understanding, the authors sought to classify an appreciation of value that is developed throughout human life, which in turn, is based on the development of human civilization that is continuously changing.

Territorial Value as Value 1.0

Human civilization started from very simple things into unlimited complexity. In the simplest conditions, humans were confronted with their natural instincts and the natural realities surrounding them. Humans naturally have desires that encourage them to fulfill their needs and sustain their lives. The natural need to defend one's life is the most basic need. Jerome (2013: 42) referred to Maslow's hierarchy of needs, which include physiological needs:

These are biological needs which consist of the need for oxygen, food, water, and a relatively constant body temperature. They are the strongest needs because if a person were deprived of all needs, it is these physiological ones that would come first in the person's search for satisfaction.

In reality, the basic needs of human beings (e.g., food and drink) cannot always be met easily, especially if external natural conditions and competition for resources are present. In such situations, human beings find conditions that cannot always support their natural needs. Thus, they have to strike a balance between fulfilling their physiological needs and the surrounding conditions that may pose difficulties. If the need is not met, it can lead to sufferings, such as hunger. In turn, these sufferings encourage people to focus on things that can help them meet their physiological needs. As cited by Baehr (2019), Brady states that there is a link between afflictions and the process of expressing appreciation of values. This is because there is a close link between emotion and attention. The attention then constructs a new value system that

encourages the domination of various mediums to fulfill human physiological needs.

One reason why the effort to meet human physiological needs often trigger competition is the limited amount of land. In fact, the desire to fulfill human physiological needs encourages humans to practice the expansion and control of land to fulfill their needs. This is evident in the rise of agricultural fields and farm production in the early civilizations. This desire encouraged the movement of early societies; thus, giving rise to a system of colonization and imperialism. Under such conditions, the territorial value, referred to as Value 1.0, became the main indicator of a nation's glory, wherein the broader its territorial expansion, the wealthier and more powerful it became. This condition then formed the binary distinction between the East and West, and these themes later came to the attention of post-colonial thinker, such as Edward Said who stated that orientalism must create its own other; because of this other it can strengthen its own identity and superiority and because of this other it can set off against the Orient as "a sort of surrogate and even underground self" (Said, 2020:3).

Edward Said attempted to understand the existence of a value structure that sought to produce and represent orientalism to form the Western–Eastern and superior–inferior identities. This orientalist views form the value structure of a nation that can conquer another nation, in which the colonizer nation is considered more civilized than the conquered nation. The high or low position of a nation is then determined by its power. In this case, it can be said that the desire to fulfill human needs is based on the will to power. In this case, Nietzsche proposed a theory about "the will to power" (*Der wille zur Macht*) as a moral foundation that underlies the development of human life. Nietzsche considers the "will" and "the will to power" as the center of all human actions. As explained by Nietzsche in aphorism 19 of *Beyond Good and Evil*:

So let us for once be more cautious, let us be "unphilosophical": let us say that in all willing there is, first, a plurality of sensations, namely, the sensation of the state "away from which," the sensation of the state "towards which," the sensation of this "from" and "towards" themselves, and then also an accompanying muscular sensation, which, even without our putting into motion "arms and legs," "begins its action by force of habit as soon as we 'will' anything" (Nietzsche, 2000, 20).

The world is the embodiment of the human's will to power. In Nietzsche's thought, the world contains various strengths or potentials that have the will to dominate one another. For example, Value 1.0 highlights the dominance of colonialism.

Value 1.0 developed not only during the rise of Western colonialism to the East but also many centuries before that—since the Romans became the largest empire in history from the early 6th century B.C. This conquest was also carried out by traditional kingdoms in Nusantara to expand their territory. The orientation associated with the territorial value or Value 1.0 according to the author is an early value appreciation system that developed globally and encouraged tremendous social changes globally. Given that Value 1.0 has a very broad influence in shaping the world order, especially after the emergence of a colonial system based on the superiority of the colonizing nation over its colonies, it has influenced how people came to understand their cultural identity and nationality. A paradigm had been formed wherein the glory of a nation depended on the amount of territory it subjugated. In turn, this paradigm led to a massive expansion into various regions globally until the end of the 19th century.

Science and Knowledge Value as Value 2.0

The development of reason and consciousness among humans encouraged them to actively seek ways on how they can exceed their limitations. This need stemmed from human awareness regarding the limitations of their physical abilities. Such a motivation drove the development of science and technology, which has reached a highly sophisticated phase today. As humans transform the world around them, they also transform themselves in the process of history. Thus, man is his own creation (Fromm, 2018). This statement sufficiently explains how technology and science as a consequence of human civilization's development broke human physiological boundaries, made life more convenient, and helped them form a new world that is vastly different from their natural conditions.

The idea that *knowledge is power*, raised by Francis Bacon during the Renaissance, illustrates the power of science and knowledge value, which opened the gates of modern civilization. Knowledge is hereby defined as an experimental process that refers to the manipulation of natural

performance in ways that are related to both the causes and effects that occur in humans. Bacon argued that the development of science and knowledge led to the human liberation from the tyranny of misery and physical needs (García, 2001). Science and knowledge value, referred to in the current work as Value 2.0; thus, encouraged sustainable technological development. In particular, we can say that the invention of the steam engine, which led to the development of the production process, also paved the way for the emergence of other inventions. In this case, there is a distortion in the duality of man and nature that has resulted in an ecological crisis of planetary magnitudes because in his eagerness to conquer and dominate the environment, humans have attempted against their lives, their fellow human beings, and against nature (Alvarado, 2019).

Furthermore, the development of technology not only had a significant impact on production but also on military activities. Developed countries began to compete in creating future technologies for economic survival and exercise defense to protect their national competitiveness. This, in turn, paved the way for the emergence of new needs associated with human appreciation for the conditions of their experience. In other words, there emerged a new kind of consciousness that has shaped the world's social systems and values based on the mastery of science and knowledge.

After the end of 19th century colonialism, science gradually became the main driver of human civilization without the need for war and conflict. In the modern world, science and knowledge are the main means of achieving power over certain domains. In his discussion of knowledge and power, Foucault (1980) explained that forms of knowledge and discourse are better means of building good power than physical repression or violence. According to Gramsci's concept of hegemony, the creation of power is not due to binding regulations but to the process of forming awareness of one's reality (Mano, 2015). In other words, there emerged a relationship between knowledge and power. Power was no longer a domination of action that was repressive or prohibitive toward a society. This explains how mastery of science and knowledge became the main indicator of a country's progress, representing an appreciation of values based on Value 2.0. Value 2.0 not only has an impact on state governance but on the personal lives of each and every individual (Rahayuningsih, *et al*, 2019).

This understanding explains how knowledge comes to have its own value in shaping patterns of social life. During this phase, science and knowledge are the main indicators in shaping the power of a country, representing an appreciation of values that is based on Value 2.0. Moreover, a person's competitiveness is not based on his physical strength in repressing others and in controlling certain areas but on his ability to master and develop knowledge. Raising awareness regarding the importance of science and its development are part of the process of evaluating both objects and humans themselves.

Media Value as Value 3.0

The development of science entails the existence of technology as a product and the emergence of various inventions. Related to this, the development of technology certainly has implications for human beings, one of which is the need for communication and easier access to information. At this stage, communication and information media have played a huge role in breaking through spatial and territorial boundaries in each region and between countries. For example, the invention of television became a defining moment that changed the world and helped the spread of popular culture. In turn, the cultural transformation that occurred led to the formation of a new social order. In this condition, face-to-face communication was gradually replaced by mass media, which facilitated faster and easier access to communication. Consequently, the media gradually occupied a central role in influencing every aspect of human life.

The kind of value appreciation based on the effect of the existence of mass media is called "media value" or Value 3.0. Due to its ability to influence or change the world significantly, mass media can shift the position of science. Under this condition, the truth would no longer become a benchmark. At this stage, the public tends to be more interested in entertaining and easily digestible shows. Unfortunately, these shows have the underlying motive of inviting, if not forcing the acceptance of certain perspectives, lifestyles, and preferences, which impose prestige in the social environment. Baudrillard refers to Marx's theory and argues that using and exchanging value entail a sign value, in which commodities are valued by the way they confer prestige and signify social status and power. In this case, the problem is not from the production but rather

consumption (Baudrillard, 2019). The truth is determined by mass media by forming signs or *simulacra* that may obscure reality itself. This condition demonstrates that there is a close link between the existence of the media and the power to form social structures as well as the appreciation of values within them. Thus, media value becomes a power that encourages the emergence of visual simulations that drive individuals to imitate and use them in the process of making decisions on a daily basis.

Television shows redirect the world's attention to certain topics consumed by the public. This media value creates a patron, which indicates or dictates truth. Mass media has succeeded in influencing public opinion and influencing society in determining a decision or judgment (McCombs & Valenzuela, 2020). This creates a condition where impressions of simulations are no longer images of reality but rather affect perceptions of reality. Everyone then competes to control media due to its significant influence in determining the future of interests, especially in a bureaucratic environment. A country is considered strong if it can dominate and control the media. Moreover, by dominating the media, a country will have access to virtual hegemony over its people.

Value 4.0 in the Fourth Industrial Revolution

Mass media, as a means of communication and information, continuously innovates in various forms. After the rise of visual telecommunication, another form of mass media that has taken an important role in changing the world society is the Internet-based media. In recent years, television is gradually being displaced by Internet media as the provider of easy access to information. Such a condition, accompanied by the loss of public trust in television shows, slowly paved the way for a new form of hegemony that attempts to dominate public opinion. As social life changed, there occurred a shift in interest from a reality focused on the principle of presence bound by time and space or from limited information coming from a singular source to a reality involving cyberspace, which provides a wealth of unlimited information. According to Spoetl and Tütlys (2020), this process characterizes the Industrial Revolution 4.0 era, and this latest revolution is transforming the structure of work in many parts.

Schwab believes that the fourth industrial revolution is currently in operation with all of the transition aspects that help build digital revolution (Schwab, 2016). This digital revolution represents an orientation reference to a new value called "big data information value" or Value 4.0. With the Internet of things and cyber digital systems, everything seems all easy. At present, boosting the world economy requires the use of the Internet to expand marketing range and gain broader access to social media and unlimited information; thus, making it easier to achieve an international scope (Tosida, *et al.*, 2020). In the Value 4.0 era, access to information is no longer limited by what is being offered to people; rather, anyone can now easily choose what they want to consume. The concept of the Industrial Revolution 4.0 is formed through a model that places information and communication as a layer with an important role in facilitating the realization of this new era.

The development of information and communication is comparable to changes in business patterns that occur in a society. According to Schwab (2016), this development is closely related to the advancement of digital technology, with its various social media platforms that have initiated a cultural shift through various forms of digital human interactions. In the field of business, the existence of digital media makes it easy for everyone to promote various commodities and market them directly to potential buyers. Spoetl and Tütlys (2020) also explained that digitalization has increased informatization and networking. Furthermore, by mastering information and communication, business agents can easily understand the current market trends and simultaneously create new market trends themselves.

In this sense, we can say that Value 4.0 is the base of globalization. The influence of the Industrial Revolution 4.0 and the accompanying cultural change has facilitated rapid globalization. In turn, this has led to conditions wherein culture is no longer only fixed on certain boundaries related to race, clan, or locality, but is now an ever-changing conception (Suryosumunar, 2019). The cultural changes that occur due to globalization and the strengthening of information technology through the cyber world have led to cultural exchanges. In this case, the market culture as the dominant culture now has a more prominent position than other cultures simply bound by locality (Aguirre, 2018). Related to this, there occurs a transcultural process, in which the central states of the modern world have the power to impress the marginalized culture.

The rise of social media and the Internet has led to the emergence of an invisible hegemonic

power that is changing how we think, our ways of doing certain things, and how we interact with others (Aguirre, 2018). This can be attributed to the rise of market culture. Unfortunately, globalization has led to the new sets of problems, including the excessive culture of consumerism, which is changing individual and collective identities (Pulido *et al.*, 2019). Due to the rise of a powerful market culture, truth is no longer an important consideration, unlike in past eras. Everyone is now moved by trends, which are dictated by influential forces in the social media sphere. The large amount of information that is spread easily through digital media may come in the form of fake information or hoaxes. The spread and acceptance of fake information represents how truth of information is no longer a benchmark and that the priority now lies in how fast one can access such information. In this case, there occurs an appreciation of value that emphasizes the large amount of information (big data information value), which can be spread easily through digital media. Unfortunately, the manipulation of information can be used for various purposes, often leading to the coupling of public opinion and reinforcement of certain arguments that bring down the parties concerned or vice versa. Indeed, a "hoax" is a deliberately concocted untruth made to masquerade the truth (MacDougall, 1958).

According to MacDougall (1958), hoaxes are not something new in the history of human civilization. However, it can become dangerous because digital media access has made it easier for fake information to spread widely, causing disadvantages for many parties. Montoya *et al.* (2019) explained that the use of fake news (hoax) is something that needs to be avoided because it can have significant impacts on various fields, such as education and politics. In the era of digital technology, everyone can easily access and spread false information. The diversity of information; thus, rests on the preferences and needs of a market, in which market mechanisms are driven by personal interests based on competition and individualism (Smiley & Emerson, 2020). The existence of the social phenomenon that emphasizes the value appreciation of dominating the amount of information is called the "big data information value" (Curry, 2016). Through the Internet and digital technology, which affords a world without limits, everyone can easily take advantage, especially in accessing, manipulating, and disseminating information that can either be useful or harmful to others. Thus, along with the advantages of this technology, online fraud, wiretapping, and the spread of fake information have also become part of digital human life amidst the development of digital technology.

The existence of big data information value is also supported by the emergence of social media platforms, such as Facebook, Twitter, YouTube, and so on, which further degrade the position of television or other electronic media as the center of mass information and communication. Nowadays, society no longer focuses on one predetermined reference but looks for references that can justify certain beliefs in line with specific preferences. The information we receive is typically processed through the sentimental and emotional sides of the people, especially in relation to the spread of fake information. In this phase, the truth of the data is no longer an indicator of consideration, but rather a reference to how much the information supports the diverse beliefs and tastes of individuals.

Moral Value as the Hope of Global Society after Industrial Revolution 4.0

The changes in value appreciation throughout history demonstrate the various possibilities facing the future of humanity. The development of civilization shows that humans are not only the subjects but also the object of values (Suryosumunar, 2019). Appreciation of value is constantly in line with the movement of global social dynamics, showing a correlation between virtue and changes of value appreciation. In this case, something that has a higher value is considered be a primary consideration. In the modern era, especially during Industrial Revolution 4.0, the process of digitalization makes human lives easier; thus, digital technology is considered the most valuable aspect of global society today.

With its development, digitalization has benefited all humanity; however, it has also plunged us into a world of uncertainty. Aside from the hyper consumption of technology, there is a chain that seems to heighten our dependence on such technology (Schneier, 2018). The emergence of alienation under this condition is an inevitability. However, this alienation is almost undetected due to the simplicity of digital technology that has "absorbed" the people, so to speak. This condition, unfortunately, can lead to the dehumanization of individuals, in which they would always distance themselves from their natural lives through the "digital world" they have built.

There is an ideal attempt to construct and negate the basic natural life of human beings. Social relations, social sensitivity, love, and empathy are often materialized with imageries and pseudo-

statuses in cyberspace. The civilization that forms throughout the historical experiences of human beings becomes part of the human self, which continuously highlights various possibilities that are dynamic and uncertain. These conditions lead to a state of “nothingness,” especially in the chain of capitalization and dehumanization that occur through various digital processes. This sense of nothingness causes symptoms of anxiety (*Angst*). According to Heidegger, anxiety reveals existence as a phenomenon that eludes all attempts to explain and control it, thus opening up the fundamental elements of *Dasein*'s existence, revealing its “world as world” and bringing forth its most important and authentic possibilities in the face of finitude (Magrini, 2006, p. 78). The condition characterized by *angst* is accompanied by a fear of things that are constantly changing, that each human being is actually shackled in uncertainty.

In the era of Industrial Revolution 4.0, when the digital technology became the most recent achievement, a form value appreciation emerged based on the digitalization that has permeated all aspects of daily life. On the one hand, the digital world, which is very far from the natural world of humans, is formed through digital manipulation that presents high efficiency and effectiveness. On the other hand, it also leads to negative impacts. As previously mentioned, the development of human civilization has always led to the transcendence of human limitations, bringing humans to conditions that are very different from their natural state.

Thus, it is a paradox that all human efforts to free themselves from the limited natural conditions always lead to anxiety and alienation, which in turn, become part of the existential problems of human beings. Humans, as personal entities, are absorbed into the mass realization wherein their conscience as a person is chained and trapped in the endless routine of the digital world. This gives rise to a new sense of awareness that one has lost their meaning in life, driving an individual to question his/her ultimate goal in life. Awareness of these limitations fosters a desire to undergo a process of alignment or self-disclosure before making adjustments to various conditions.

In this case, humans continue to look for the meaning of their existence, which may be answered by building relationships with the others. Human, as beings with the others, will never be separated from the case of moral value (Value 5.0) based on the existence of Society 5.0. In fact, the concept of Society 5.0 was first proposed in the 5th Science and Technology Basic Plan as a future society that Japan should aspire to. It follows the hunting society (Society 1.0), agricultural society (Society 2.0), industrial society (Society 3.0), and information society (Society 4.0) (Government of Japan, 2021). With moral value appreciation in Society 5.0, digital culture is expected to develop with morality, which arises when humans confront other human relations that occur inter-subjectively. There is a common thread wherein Heidegger explains the concept of “being-with” (*mitsein*) as a relation between the existence of individuals and others, which shows part of the ontological characteristics of humans (Heidegger, 2010). There is pre-adaptive phase that occurs in preparing an individual as a whole person to face the natural reality that lies outside the human self.

Almost similar to Heidegger, albeit on a humanism paradigm, Fromm proposes that a way to overcome the existential problems of human beings in modern times is to establish a kind of love, which he called “brotherly love” (Fromm, 2018). Specifically, this is a form of human love based on the experience that we are all one and that the differences in talent, intelligence, and knowledge are negligible in comparison with the identity of the human core that is common to all men. Fromm explained that the universal human relations are platforms through which we can develop moral values. Actually, this brotherly love can be found in various cultural and religious teachings based on morality, not fanaticism, including the concepts of *vasudhaiva kutumbakam* in Hinduism and *ukhuwah insanniyah* in Islam. *Vasudhaiva Kutumbakam* is a phrase from ancient Indian Vedic literature, which essentially means the whole world is one family (Kovács, 2015). In Islam, the concept of *ukhuwah insanniyah* explains about humanity being “brothers” (Rahmi, 2018). Both concepts can be understood as teachings of the unity based on morality and love to all humans in the world. Love is universal, and this universality constitutes Fromm's solution to the problems of the human being. However, one may ask, how can the application of the principle of universality always underlie the uncertainty of human life?

In this case, we need a principle of morality that is in line with the continuous change of human civilization. Rorty, a neo-pragmatist, offers a concept of contingency. In his perspective, human life cannot be bound by an absolute pattern:

All human being carry about a set of words which they employ to justify their actions, their beliefs, and their lives. These are the words in which we formulate praise of our deepest self-doubts and our highest hopes. They are the words in which we tell, sometimes prospectively and

sometimes retrospectively, the story of our lives. I shall call these words a person's final vocabulary. (Rorty, 1989, 73)

However, this final vocabulary that everyone carries as a basis for living in the midst of uncertainty does not have a definite direction, and this is something that cannot work. According to Rorty, the moral foundation in the uncertainty of human life is human sensitivity to suffering or what is called "empathy." This is exemplified by the sensitivities that are driven by the existence of reformist novels, which succeeded in reconciling all kinds of differences, including the reconciliation of the problems of Blacks and Whites in America (Niznik, *et al*, 1996).

Using Rorty's perspective, the authors of the current work formulated a projection of life after the industrial revolution with a high spirit of solidarity, characterized by goodness, respect, care, and tolerance. These four principles comprise the foundation of morality, which is in line with Rorty's idea of empathy, thus bringing hope to humanity after the era of big data information value. Moral value is the most natural thing in self-humanity, and there is a sense of empathy between humans that serves as a principle of morality. This moral sensitivity is called "moral value" or Value 5.0, and it allows for a shared existence among all human beings. This value integrates all basic principles that are not only based on ecological and economic interests but also on humanity, culture, politics, and spirituality.

Based on Rorty's view of moral sensitivity or empathy, humans will not be fixed on one final vocabulary but a variety of "final vocabularies." This shows that Value 5.0 as a moral value can serve as a foundation for every principle of life, whether in the areas of religiosity, humanity, politics, culture, and economy, allowing humans to gain space and move in line with technological and scientific developments. In this case, moral value is not only an answer but also a hope that can restore balance in all aspects.

Conclusion

The history of human civilization involves a process of development that shows success in every phase and involves current inventions occurring continuously in every development stage. Each phase is characterized by many changes in orientation that developed in each era. In other words, efforts to understand the development of human civilization must also be grounded in an understanding of the paradigm changes, which are related to the life orientation of the global society. The process of changing paradigms in the development of human civilization refers to changes in the orientation of the dynamic appreciation of value. The change begins with the simplest paradigm based on human physiological needs up to the limitless complexity of the rapid development of science and technology.

The changes in value appreciation that occurred in every development stage of human civilization began with Value 1.0, which focused on the physiological needs of humans and encouraged the expansion of land (territorial value) as a production factor. This phase then formed a binary relationship between the colonizer and colonized. This was followed by an orientation shift that led to Value 2.0, referring to science and knowledge value. This was driven by the rapid development of science, especially after the modern scientific era. During that era, people were valuable or useful if they gained mastery of science and knowledge. The development of science broke down human limitations through the technologies produced. One example is related to the creation of platforms (mass media) to facilitate the flow of communication and information, starting with print media up to the television, which later facilitated the spread of popular culture throughout the world.

The impact of the invention of the TV in encouraging social change demonstrates how the mass media has successfully caught people's attention while simultaneously controlling and shaping public opinion. In this condition a new form of value appreciation (Value 3.0) emerged based on the dominance of the persuasive power of the media. In this case, the media is also constantly experiencing innovation encouraged by technological developments that occurred during that time.

The emergence of the Internet, as an invention of information and communication technology in the late 20th century, became one of the most important factors contributing to changes in the global orientation. The Internet presents a digital world in which inter-personal and mass communication became more advanced. This is called the Industrial Revolution 4.0 era. The dominance of information (big data information) is referred to as Value 4.0.

The emergence of digitalization has facilitated easier access to information. However, it has also led to a condition wherein people are no longer oriented to the validity of information but on what kind of information is beneficial to them and is in line with their personal preferences and opinions. This condition has raised awareness regarding the importance of a value that underlies the movement of human life hurtling toward uncertainty. As a solution, morality is not only the answer but also our hope in living a life that can withstand uncertainties in line with the development of human civilization. Morality, as Value 5.0, is neither absolute nor based on the assumption of universality. Rather, it is a value that integrates various aspects of human life, including spirituality, humanity, politics, culture, and economy, among others. Furthermore, moral value is based on inter-subjective fusion that encourages mutual feelings of love, empathy, and openness by each individual to other individuals. Value 5.0, which then becomes the basis of orientation in the world society, includes digital technological development, economy, and all aspects that affect the current movement of human civilization.

The results of this study can be used as a basis for predicting what will happen after the fourth industrial revolution. In this case, moral value is needed for the development of digital technology and its applications because it provides the benefits of digital technology and improves the state of humanity. The findings of this research can also greatly contribute to the development of studies in other fields, such as philosophy, ethics, education, economics, and other social sciences. Finally, future research related to the development of post-Industrial Revolution 4.0 can use the results of this study as basis for understanding the historical context in every change of value appreciation throughout the history of human civilization.

References

- Aguirre, J. (2018). Globalización, internet y transculturación. Reflexiones desde el pensamiento de Fernando Ortiz (Globalization, Internet and Transculturation. Reflection of the Thought of Fernando Ortiz). *Utopía y Praxis Latinoamericana: Revista Internacional de Filosofía Iberoamericana y Teoría Social (Utopia and Latin American Praxis: International Journal of Ibero-American Philosophy and Social Theory)*, 81, 129–135.
- Alvarado, J. (2019). Horizontes de La ética Medioambiental: Consideraciones Intergeneracionales (Horizon of Environmental Ethics: Intergenerational Consideration). *Revista de Filosofía (Philosophy Magazine)*, 91, 7–25.
- Bakker, Anton. (2004). *Metodologi Penelitian Filsafat (Methodology of Philosophical Researches)*. Yogyakarta: Kanisius.
- Baehr, J. (2019). Wisdom, Suffering, and Humility. *The Journal of Value Inquiry*, 53(3), 397–413.
- Baudrillard, J. (2019). *For a Critique of the Political Economy of the Sign*. New York: Verso Books.
- Bertens, K. (1993). *Etika (Ethic)*, Vol. 21. Jakarta: Gramedia.
- Bogart, D., et al. (2017). *Transport Networks and the Adoption of Steam Engines in England and Wales, 1761-1800*. Working paper.
- Curry, E. (2016). The Big Data Value Chain: Definitions, Concepts, and Theoretical Approaches. *In New horizons for a data-driven economy* (pp. 29-37). Springer, Cham.
- Dennis, M. (2019). Nietzschean Self-Cultivation. *The Journal of Value Inquiry*, 53(1), 55–73.
- Fiedeler, U. (2011). When Does The Co-Evolution of Technology and Science Overturn into Technoscience? *Poiesis & Praxis*, 8(2–3), 83–101.
- Foucault, M. (1980). *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*. New York: Pantheon
- Fromm, E. (2018). *Seni Mencintai (The Art of Loving)*. Bantul: BASABASI.
- García, J. M. R. (2001). Knowledge is Power: Francis Bacon to Michel Foucault. *Neohelicon*, 28(1), 109–121.
- Government of Japan. (2021). Society 5.0. https://www8.cao.go.jp/cstp/society5_0/index.html
- Heidegger, M. (2010). *Being and Time*. New York: Suny Press
- Imanuella, J., & Aryani, M. I. (2020). Upaya Gastrodipomasi Indonesia di Korea Utara (Indonesian Gastrodipomacy Efforts in North Korea). *Jurnal Hubungan Internasional*, 13(2), 235.
- Jerome, N. (2013). Application of the Maslow's Hierarchy of Need Theory; Impacts and Implications on Organizational Culture, Human Resource and Employee's performance. *International Journal of Business and Management Invention*, 2(3), 39–45.
- Kovács, G. (2015). Soulful Corporations - A Values Based Perspective on Corporate Social Responsibility. *Journal of Management, Spirituality and Religion*, 12 (2) 178-181
- Leiss, W. (2018). *Modern Science, Enlightenment, and the Domination of Nature: No Exit? In Critical*

- Ecologies. Toronto: University of Toronto Press.
- MacDougall, C. D. (1958). *Hoaxes* (Vol. 465). New York: Dover Publications.
- McCombs, M., & Valenzuela, S. (2020). *Setting the Agenda: Mass Media and Public Opinion*. New Jersey: John Wiley & Sons.
- Magrini, J. (2006). "Anxiety" in *Heidegger's Being and Time: The Harbinger of Authenticity*. Chicago: College of Dupage.
- Mayo, P. (2015). *Hegemony and Education under Neoliberalism: Insights from Gramsci*. London: Routledge.
- Montoya, M. L., et al. (2019). Educación y Democracia. Una alianza necesaria para la sociedad abierta y contra la demagogia, conducida por la Fake News (Education and Democracy. A Necessary Alliance for an Open Society and Against Demagoguery, Led by Fake News / Education and Democracy. A Necessary Alliance for the Open Society and Against Demagoguery, Led by Fake News). *Utopía y Praxis Latinoamericana (Utopia dan Latin American Praxis)*, 24(S4), 137–147.
- Munaf, D. R., & Piliang, Y. A. (2018). Knowledge and the Mystery of Black Boxes: The Construction of a Techno-scientific-culture in The Case of Digital Maritime Safety. *Jurnal Global & Strategis*, 12(1).
- Neugebauer, R., et al. (2016). *Industry 4.0: From the Perspective of Applied Research*. Amsterdam: Elsevier.
- Nietzsche, F. W. (2000). *Beyond Good and Evil: Prelude to a Philosophy of The Future*. BNPublishing.
- Niznik, J., et al. (1996). *Debating the State of Philosophy: Habermas, Rorty, and Kolakowski*. philarchive.org
- Pramukti, I., et al. (2020). Anxiety and Suicidal Thoughts During the COVID-19 Pandemic: Cross-Country Comparative Study Among Indonesian, Taiwanese, and Thai University Students. *Journal of Medical Internet Research*, 22(12).
- Pulido, E., Fuenmayor, A., & Gutiérrez, D. (2019). Orígenes de la ciudadanía. Una interpretación al texto de Lewis Morgan (Origins of Citizenship. An Interpretation of Lewis Morgan's Text). *Revista de Filosofía (Philosophy Magazine)*, 91, 41–61.
- Puspitasari, R. D. (2020). Pertanian Berkelanjutan Berbasis Revolusi Industri 4. (Sustainable Agriculture Based on the Industrial Revolution 4.0). *Jurnal Layanan Masyarakat (Journal of Public Services)*, 3(1), 26.
- Qomariyah, A. N., et al. (2020). Analysis of Organizational Readiness towards Library 4.0: A Case Study at X Library. *Record and Library Journal*, 6(2), 110.
- Rahayuningsih, S., et al. (2019). The Local Government Transformation, The Big Five Personality, and Anxiety. *Opcion*, 35(88) 759–770.
- Rahmi, A. (2018). An Analysis of the Implementation of Islamic Brotherhood Value on the Students of MTsN Jeurela Sukamakmur. *Jurnal Ilmiah Peuradeun*, 6(3), 549-562.
- Rorty, R. (1989). *Contingency, Irony, and Solidarity*. Cambridge: Cambridge University Press.
- Said, E. (2020). *Orientalism*. London: Routledge.
- Spoettl, G., & Tütlys, V. (2020). Education and Training for the Fourth Industrial Revolution. *Jurnal Pendidikan Teknologi dan Kejuruan (Journal of Technology Education)*, 26(1), 83-93.
- Schiller, F. (1905). *Essays Aesthetical and Philosophical: Including the Dissertation on the "Connexion Between the Animal and Spiritual in Man"*. London: G. Bell and Sons.
- Schneier, B. (2018). *Click Here to Kill Everybody: Security and Survival in a Hyper-Connected World*. Hein Online. New York: W.W. Norton
- Schwab, K. (2016). *The Fourth Industrial Revolution*. New York: World Economic Forum.
- Schwartz, S. H., & Bilsky, W. (1987). Toward A Universal Psychological Structure of Human Values. *Journal of Personality and Social Psychology*, 53(3), 550.
- Smiley, K. T., & Emerson, M. O. (2020). A Spirit of Urban Capitalism: Market Cities, People Cities, and Cultural Justifications. *Urban Research & Practice*, 13(3), 330-347.
- Sternberg, R. J. (2019). Four Ways to Conceive of Wisdom: Wisdom as a Function of Person, Situation, Person/Situation Interaction, or Action. *The Journal of Value Inquiry*, 53(3), 479–485.
- Suryosumunar, J. A. Z. (2019). Perspektif Gilles Deleuze terhadap Proses Imitasi dalam Masyarakat Konsumeris di Era Revolusi Industri 4.0 (Gilles Deleuze's Perspective on the Imitation Process in a Consumerist Society of the Era of the Industrial Revolution 4.0). *Waskita: Jurnal Pendidikan Nilai Dan Pembangunan Karakter (Journal of Education and Character Building)*, 3(2), 43–58.
- Suryosumunar, J. A. Z. (2019). Konsep Kepribadian dalam Pemikiran Carl Gustav Jung dan Evaluasi

- nya dengan Filsafat Organisme Whitehead (The Concept of Personality in Carl Gustav Jung's Thought and Its Evaluation with Whitehead's Philosophy of Organisms). *Sophia Dharma: Jurnal Filsafat, Agama Hindu Dan Masyarakat (Journal of Philosophy, Hinduism, and Society)*, 2(1), 18-34.
- Tosida, et al. (2020). Optimization of Indonesian Telematics Smes cluster: Industry 4.0 challenge. *Utopía y Praxis Latinoamericana: Revista Internacional de Filosofía Iberoamericana y Teoría Social (Utopia and Latin American Praxis: International Journal of Ibero-American Philosophy and Social Theory)* 25(2), 160–170.
- Whaley, J. (2015). True Enlightenment can be Achieved and Beneficial: The German Enlightenment and its Interpretation. *Oxford German Studies*, 44(4), 428-448.
- Wifkil, M., & Bagong, S. (2021). Hegemonic Practices of Online Local Fashion brands in the Information Society Era during the Covid-19 Pandemic. *Jurnal Sosiologi Dialektika (Journal of Sociology Dialectic)*, 2020, 53–63.
- Williams, R. (1983). *Culture and Society, 1780-1950*. Columbia: Columbia University Press.
- Yusuf, P. M., & Saepuddin, E. (2017). Practical Values of Village Libraries and Community Libraries in West Java. *Record and Library Journal*, 3(2), 17.