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THE PHENOMENON OF ARTIFICIAL INTELLIGENCE AS A FUTURE DREAM TECHNOLOGY ACCORDING TO HINDU'S TEACHINGS

By:

I Wayan Dikse Pancane¹, Nyoman Dantes², Ni Nyoman Perni³

¹Universitas Pendidikan Nasional, ^{2,3}Universitas Hindu

Negeri I Gusti Bagus Sugriwa Denpasar

e.mail: [1diksapancane@undiknas.ac.id](mailto:diksapancane@undiknas.ac.id), [2dantes@undiksha.ac.id](mailto:dantes@undiksha.ac.id), [3nyomanperni80@gmail.com](mailto:nyomanperni80@gmail.com)

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Abstract

Technological developments have made significant progress. One of them, namely the manufacture of computers designed to make it easier for humans to do their jobs. This advantage makes the role of humans reduced and displaced by the tools created by humans themselves. However, behind the sophistication of tools made by humans, stored the power of *Ida Sang Yang Widi Wasa* which is undetected and underappreciated. In fact, the manufacture of these tools turned out to be mirrored in the creation of *Ida Sang Yang Widi Wasa*, which was designed as if he wanted to emulate it. However, if explored and contemplated, *Ida Sang Yang Widi Wasa's* creation will not matched by the tools created by His own creation. Because nothing could match the creation of *Ida Sang Yang Widi Wasa* even though in the eyes of humans it is a monumental sophistication.

Keywords: Natural intelligence, artificial intelligence, computer, reason, brain.

I. INTRODUCTION

In its development, the computer functioned as a data processor and information producer. Computer experts are still developing the sophistication of computers to have abilities like a human. Problem solving methods by adopting human forms, characters, and habits in living their lives in this world, are widely used as material for reflection and research for computer experts, especially those in the field of artificial intelligence technology. Artificial intelligence technology can be viewed as an attempt to model aspects of human thinking in computers.

However, computers and artificial intelligence technology will always go hand in hand with the passage of time. Computers are indeed superior in terms of logical reasoning and mathematical calculations. However, humans can not only count, but humans can also feel the feelings of love, hate, fear, pleasure. Humans have an inner life, which computers do not have.

Due to the small things described, we can think and reflect on the existence of Ida Sang Yang Widi Wasa and the perfection of His creation. Ida Sang Yang Widi Wasa is limitless, not limited to His aspects, and there are no ways to reach Him. We read in the Rig Veda "Ekam Sat Vipra Bahudha Vadanti" "Truth is only one, wise people call Him by various names". As narrated in sutra 2 confirms this:

(This Sutra can also be interpreted in other ways. It has been said in Sutra 2 that Ida Sang Yang Widi Wasa, who is the cause of the multiplicity of the universe, is naturally omniscient. This Sutra confirms this. If so then it should be read: "(Ida Sang Yang Widi Wasa who is omniscient and omnipotent from His existence is the source of this sacred text. "The scriptures themselves state that the Almighty Himself breathed the breath of this Veda. There fore He who has created this sacred text, which contains amazing knowledge it is inescapably omniscient and omnipotent).

This sutra makes clearer the ideas put forward in sutra 2. If there is still any doubt about Ida Sang Yang Widi Wasa as the origin and others

of the world as determined by the authority of the scriptures, and not because of inferences etc., which are independent from this, this sutra makes it clear that sruti alone is the only evidence about Ida Sang Yang Widi Wasa.

II. METHOD

This study uses a qualitative approach. Furthermore, the research method used is descriptive method. According to adhi kusumatuti, n.d. the purpose of using this method is a process of comprehensively summarizing the events that occur on a daily basis as well as certain events of an individual or an organization. According to (Wahidmurni, 2017) descriptive qualitative research methods can be seen as an approach that can be said to be less interpretive because it does not require researchers to move far from or into the data and researchers do not require abstract or conceptual data, this is what distinguishes descriptive qualitative research from with other qualitative approach designs.

In the data collection process, descriptive qualitative research focuses on finding a feature or nature of a specific event whilst being studied. Thus, data collection can be done using structured and open interviews with resource persons or using guided group discussions (FGD). In addition, data collection can also include an examination of existing documentation in the form of notes, reports, photos, documents and others. Descriptive qualitative research data analysis, unlike other qualitative approaches, does not use a pre-existing set of rules that results from the philosophical or epistemological stances of the disciplines that create a particular qualitative research approach. In contrast, descriptive qualitative research is purely data obtained in the code generated from the data during the study. Like other qualitative research approaches, descriptive qualitative research is generally characterized by the simultaneous collection and analysis of data.(adhi kusumatuti, n.d.)

The process of collecting and analyzing data in this study uses a systematic literature search on a database of journals that focus on social science and technology (Blessinger & Maureen, 2004) including EBSCO, IEEE, Science Direct,



ProQuest, and SCImago. In the search process on web networks (web surfing) it is oriented to a title and keywords that have a structure such as ("public sector" or "government" or "public policy" or "artificial intelligence" or "artificial neural network" or "sentiment analysis". or "big data"). Moreover, researchers search for books on online publications, proceedings, working papers, and online news as a complement to the search for research data. These sources are reviewed and used as the basis for the events or cases that the writer will examine. Mendeley® software is used for each literature retrieved to facilitate the process of searching and organizing literature.

III. RESULTS AND DISCUSSION

1.1.Reason, Human Brain, and Computer

Brain

a. Brain

One of the very special and special gifts of *Ida Sang Yang Widi Wasa* given to humans is reason. There are no creatures other than humans who have been given reason by *Ida Sang Yang Widi Wasa*. For this reason, humans were chosen as the substitute (representative) of *Ida Sang Yang Widi Wasa* on earth. Intellect is a process or ability to think. This ability exists only within humans and it is a human advantage over other creatures.

The Bhagavad-gita tells people to always think, not a few words of reason are mentioned in it. According to Naiyayikas, God's existence is called that God is personal in the sense that God's form can be captured by thoughts, feelings and can be given attributes so that God's existence as creator, preserver, and dissolving all includes the personal nature of God (Personal God). In Bhagavad Gita VII - 5

aperyam itas tv woven prakrtim viddhi me param, jiva-bhutam maha-baho yayedam dharyate Jagat.

This is My lower realm element. Know the other element of My higher realm, which is the spirit, who sustains this worldly realm,

O Mahabaho (Arjuna) (Mantra, n.d.)

As a holy book, the Bhagavad-gita has various dimensions to be used as a guide for life and for every Hindu in living his life. The existence

of Bhagavad-gita as a guide to life for Hindus does not mean denying the role of reason as a meaning of thought and consideration for humans in carrying out their daily lives. Even further than that, Bhagavad-gita actually provides guidance to the human mind to always *istiqamah* in walking in the laws and provisions that have been set, as well as to always reflect and pray for the existence of *Ida Sang Yang Widi Wasa* and His creation. To perfect and maintain our minds so that they can function optimally, we must make faith and *taqwa* the provisions of our lives.

b. The Human Brain and Its Features

Humans according to Hinduism are not only seen as physical beings but also spiritual beings. Physical beings are humans who have bodies and are responsible for their bodies, while humans as spiritual beings are humans who also have a soul, or spirit that gives life force to their bodies. The phenomenon of the spirit or soul in humans can be logically said that the dead person has complete organs, but why he died, and his body does not function, it is explained that humans have a spirit or soul. In Hinduism the spirit or soul inhabits the body, and rests in the Padma hrdaya or heart. As mentioned in the Katha Upanisad 1.2.20:

Anor anīyān mahato mahīyān, ātmāsyā jantor nihito guhāyām:

Tam akrotuh pasyati vita-soko, dhātu-prasādān mahimānam ātmanah

Smaller than small, greater than great, *ātman* is at the heart of every living being. He who without any desire can see it and will be free from sorrow. Through equanimity of mind and senses, (he sees the greatness of *ātman*) (Rama, 2014).

The *Atma* that cannot be seen by the ordinary human eyes and any other tool has a size smaller than an atom, resides in the heart, and sustains the body. Atman and the physical body need each other, the atman inhabits the body for karma, while the body needs the atman to support life, without the atman the body is just a body. In Hinduism, humans actually have three bodies, which are called *Tri Sarirara*. *Tri Sarira sthula sarira* (rough almond) consists of, *suksma sarira* (subtle body), and *antah karana sarira* (causative body).



In the book Artificial Intelligence, it has been explained that computers are intentionally made intelligent by experts by imitating the work of the nervous system in the human brain. Computer intelligence is influenced by the presence of small objects (hardware) commonly known as microprocessors, which work to process data. We can say the processor is the brain of the computer.

Biologically, the brain is the center for all activities of the human body. The brain is like a processor in a computer's CPU (Central Processing Unit) for the human body. The brain is a part of a network called a neural network, just as the processor is also one of the most important parts of the CPU. In the human body, cells make up tissues, tissues make up organs, organs make up systems, and systems make up humans. Interwoven forms like this also apply to computers.

The privileges possessed by the brain, among others.

- 1) The brain occupies the highest position compared to the organs in the human body.
- 2) The brain is the center for all activities of the human body.
- 3) The brain is the only part of the body that is most developed and can automatically learn itself.
- 4) The brain is where our memory is stored.
- 5) The brain becomes a bridge between the inner life and the outer world.
- 6) The brain works to produce thoughts or ideas.
- 7) The brain is not bound by space and time. He is free to think about anything, even about *Ida Sang Yang Widi Wasa*.

So, one of the features of the brain is its evolution. The more often used, the more developed the brain.

c. Human Brain and Computer Brain

All computer equipment (hardware) is just a facility. What makes a computer work intelligently is the intelligent programs (software) it contains. Both in the form of operating system programs, as well as various kinds of application programs that are embedded in the computer's CPU. So, when the intelligent programs have entered into the

computer's brain (CPU), then the computer just run according to its "nature". Once turned on, the computer will automatically enter directly into the operating system program. Then, the new computer can function according to the existing application programs on the computer.

The working mechanism of such a computer is more or less similar to that of humans and their brains. Humans are created by following a certain pattern which is usually called *fitrah*. In that basic nature, humans are given certain abilities to function in living life and living in the world. That's the nature of the operating system in humans. Meanwhile, various kinds of abilities and talents possessed by humans are application programs for the gifts of *Ida Sang Yang Widi Wasa*.

So, the basic program in humans is the operating system that is in accordance with the nature of *Ida Sang Yang Widi Wasa*. The operating system is called the spirit. It is like a Windows program on a computer. With this spirit, humans in their lives are already in an operating system that is in accordance with the nature of *Ida Sang Yang Widi Wasa*. It's just how he runs the application program. The operating system by *Ida Sang Yang Widi Wasa* is placed in all cells of the human body, from head to toe. All of that potential for life has been operating according to the nature of *Ida Sang Yang Widi Wasa*. The presence of *Ida Sang Yang Widi Wasa*'s nature in the human body is what is called His spirit.

Spirit never dies. The purpose of the spirit being in this world is to learn. With the physical body, then the spirit can learn from actual experience. Therefore, the spirit chooses different experiences through *punarbhava*. The one experiencing the *punarbhawa* is the gross body, while the spirit or *atma* never experiences birth or death, as stated in Bhagavad Gita 2.20:

*na jāyate mriyate vā kadācin
nāyam bhutva bhavita van a bhuyah
let's go nityah sāsvato'yam purano
na Hanyate Hanyamane Sarire*

There is neither birth nor death for the soul at that time anywhere. Prayer was not created in the past, it is not created in the present, and he will not be created in future. He was not born, exists for forever and



everlasting. He is not killed when the body killed.

According to its nature, the *ātma* is not subject to change like the body, the soul is called the steady or *kuta-stha*. The body underwent six changes. The body is born from the mother's womb, endures for some time, grows, produces something, gradually declines, and finally disappears. However, the spirit does not undergo such changes. The soul is not born, but because the soul accepts the body the body is born. **Atma** is not born and the *ātma* does not die. Whatever is born is bound to die, because the *ātma* is not born, there is no past, present or future for the *ātma*. *Atma* is eternal, exists forever, and is eternal—that is, there is no record in the historical treasures of the realization of *atma*. Only impressions from the body, humans look for birth history, and so on. *Atma* is never old at any one time, as the body does. Changes in the body do not affect the *ātma*, because the *ātma* does not degenerate over time like other matter. *Atma* also doesn't produce anything or reproduce, as the body produces. The body develops because of the *ātma*, but the *ātma* does not have offspring or other changes, such as changes experienced by the body, this is also confirmed in the Kathā Upanisad (1.2.18)

*Na jayate mriyate vā vipascin
Nāyam kutaścīn na babhuva kaścīn
Ajo nityah sāśvato'yam kaścīn
Na Hanyate Hanyamane Sarire*

The omniscient friend was never born, nor did he die any time. He arises from nothingness and nothingness emerged from him. He is not born, is eternal, continues, and who first of all. He is not killed when the body is killed (Mantra, n.d.) *Atma* is eternal, cannot be destroyed and created just like the opinion of quantum physics scientists, about energy that energy also cannot be destroyed and created, energy can only change form, energy in the view of quantum physics is the same as *ātma*, *ātma* has eternal properties such as explained in Bhagavad Gita 2.23-24:

*Nainam chindanti astrāni nainam dahati
pāvakah*

*Na caiman kledayanty āpo na osayati
mārutah*

The *Atma* can never be cut, into pieces by any weapon, burned by fire, moistened by water, or constricted by the wind.(Mantra, n.d.)

*Acchedyo 'yam adāhyo 'yam akledyo 'sosya
eva ca*

*Nityah sarva-gatah sthānur acato 'yam
sanātanah*

This individual spirit cannot be broken and cannot be dissolved, burned or dried. It lives forever, is everywhere, cannot be changed, cannot be moved and remains the same forever (Mantra, n.d.)

From the sloka explanation above, it is clear that humans come from a great spirit (soul), which is eternal, cannot be destroyed either by any weapon. *Atma* is the eternal form of God's energy which has the same properties as God, but in a much smaller quantity, the same in quality but different in quantity.

The computer cannot run if it is not powered by electricity and also cannot operate if the computer system is not given a basic program or operating system that controls the entire system of the computer's life. In other words, although computer hardware devices have been designed and built to the most sophisticated specifications, intelligent application software has been inserted into the brain of the computer, all of which will not function if the computer is not powered and does not have a basic operating program.

Electricity and the operating system that will turn on the computer, so he can behave intelligently like a human. So, electricity and the operating system can be said to be the lifeblood of the computer. In other words, electricity and the operating system function as the soul of the computer. Meanwhile, application programs are indispensable for the life of a computer so that it can live properly according to its function. We can enter various operating programs into the brain of the computer so that it can become a smart and intelligent computer and have various kinds of expertise.

1.2. Artificial Human Brain

In terms of capabilities, computers can be used to calculate, create text, create tables, draw and

design, and various other applications. In the computer there is also a program that controls these functions. It is obvious that there are people who do it on purpose. All computer equipment (hardware) is just a mere facility or infrastructure. What has made the computer function intelligently is the intelligent programs (software) it contains. Both in the form of operating system programs, as well as various kinds of application programs that are "planted" in the computer's CPU. And in order to create intelligent software and computers can also behave intelligently, it requires the intelligence of the maker's brain (brainware) (Luckin, Rose; Holmes, Wayne; Griffiths, Mark and Forcier, 2016)

When the intelligent programs have been entered into the computer's brain (in the CPU - Central Processing Unit), then the computer just runs according to its nature. Once turned on, the computer will automatically enter directly into the operating system program. And after that, the new computer can function according to the existing application programs on the computer, depending on the wishes of the user.

The working mechanism of such a computer is more or less similar in humans and their brains. Humans were created by *Ida Sang Yang Widi Wasa* by following a certain pattern commonly referred to as *fitrah*. In that basic nature, humans are given certain abilities to function in living life and living in the world. That's the nature of the operating system in humans. Meanwhile, various kinds of abilities and talents possessed by humans are application programs for the gifts of *Ida Sang Yang Widi Wasa*. This is as revealed by *Ida Sang Yang Widi Wasa* in Bhagavad-gita 6.5

*Uddhared ātmanātmānam
nātmānam avasādayet
tmaiva hy ātmano bandhur
ātmaiva ripur ātmanah*

One must save oneself with the help of one's mind, and not cause oneself to degenerate.

The mind is the friend of the conditioned spirit, and the mind is also the enemy (Mantra, n.d.)

The word *ātma* in the above *loka* denotes the body, mind and soul depending on various

circumstances. The mind is the focal point of yoga practice, and *ātma* in this sense is associated with the mind. The purpose of the yoga system is to control the mind and draw the mind out of attachment to objects senses. *Atma* is bound in this world because his mind is entangled with the notion of the body, forgets his true identity, and considers himself to be the body. Therefore, the mind must be trained not to be attracted to the brilliance of material nature. In this way, the conditioned soul can be saved. The more one is attracted to sense objects, the more one is attached to material life. A balanced mind is needed so that the awareness is maintained that the real human being is not only a body but a soul that must be given spiritual knowledge in order to realize himself, and can be free from the suffering of birth, death, old age, and disease.

With the nature of *Ida Sang Yang Widi Wasa*, which is called the Spirit. It is like a Windows program on a computer. With the existence of the Spirit, humans in their lives are already in an operating system that is in accordance with the nature of *Ida Sang Yang Widi Wasa*. It's just how he runs the application program. Human perfection as a high creature is because humans were created to 'imitate' the nature of *Ida Sang Yang Widi Wasa*, but on a small scale. In the above terms part of our Spirit. Because of the existence of the Spirit, humans can hear, see, and feel. The process of hearing, seeing, and understanding itself is the potential of the soul which is facilitated by the body, namely the five senses, the heart and is centered in the structure of the brain.

The computer cannot turn on if it is not powered by electricity. The computer also cannot operate if the computer system is not given a basic program or operating system that controls the entire system of the computer's life. So, electricity and the operating system can be said to be the lifeblood of the computer or the soul of the computer. While the application program is necessary for the life of the computer so that it can live properly according to its function. We can enter various operating programs into the brain of the computer so that it can become a smart and intelligent computer and have various kinds of expertise. It's just that, to

be able to create a computer like that, it's incredibly difficult.

1.3. Artificial Intelligence by Humans

Humans were created by *Ida Sang Yang Widi Wasa* as very intelligent creatures and have mental and thought capacities that are very important in their lives, so that they can perform many tasks. Artificial intelligence is a collection of concepts and ideas related to the development of intelligent systems. Artificial intelligence which is also called Artificial Intelligence is the study of how to make computers do things that at that time humans were better at it. In Artificial Intelligence computers are designed to be smart and smart so that they can do work as and as well as humans do, by imitating some of the functions of the human brain.

The Gross Body which is the creative medium for humans in the Bhagavad Gita is called *ksetra* and *ksetrajna*, has a temporary nature, undergoes decline, and experiences growth. *Ksetra* in Sanskrit means field, the human body is likened to a field for activity for the bound spirit to be able to do karma as well as possible to achieve liberation so that it is not bound by birth and death. The field of activity also means the body bound by the senses, the body given to man according to his nature in order to fulfill the desires of the soul. (Sumertini, 2021)

Ksetrajna means he who knows the body. The human body experiences growth from infancy, children, adolescents, adults, to old age, but people who know this change are only limited to the growth and development of the body but the soul that inhabits the body remains the same. Over time the human body undergoes growth and development but each person does not lose his identity, whether he is male or female, and as an individual being. The explanation of *ksetra* and *Ksetrajna* is explained in Bhagavad Gita 13.2 as follows:

*Ksetra-jnam capi mām viddhi
sarva-ksetresu bhārata
Ksetra-ksetrajnayoṛ jñanam
yat taj jñanam matam mama*

O son of the Bharata family, you must understand that I too am the knowing in all

bodies. Knowledge means also knowing in all bodies. Knowledge means understanding this body and he who knows this body. That's my opinion.

(Antropologi et al., 2016) says "Body" and "Spirit" are an inseparable unity, which is ultimately called "humans". According to the figure of western philosophy "Rene Descartes", that humans must use their minds in carrying out every step of their lives towards perfection. So it is with the union of body and spirit that man, uses his mind as a tool to explore all doubtful mysteries, to dispel his doubts. As stated by Watra in his book Philosophy of Man in Hindu Perspective, confirming the existence of body and spirit in the verse above, it is stated that if a human can know the nature of his body or who knows his body as a field of activity, it is called *Ksetrajna*. The constituent elements of the body or *ksetra* are also mentioned in 13.6-7:

*Mahā-butāny ahankāro
Indriyāni dasaikam ca
Iccha dvesah sukham duhkam
Etat ksetram samāsenā*

The five gross elements, ego, intelligence, the unmanifested, the ten faculties and mind, the five sense objects, desire, hatred, happiness, sorrow, the aggregate, the symptoms of life, and the beliefs-in summary, all these elements constitute the field of activity and the things that influence each other from the field of activity.

The physical body or *sthula sarira* is the outermost display of the human form, which in the Bhagavad Gita is called *ksetra*, while to know the nature of this life one must become *Ksetrajna*. The understanding of *Ksetrajna* is in accordance with the nature of human philosophy, man must know his identity and know his body. The intelligence of a system requires the ability to predict and control the system iteratively like someone who has a certain intelligence. An artificial intelligence has two dimensions, namely the imitation of human behavior and the imitation of human thinking. While systems that are able to imitate human thinking consist of two categories, namely:

- 1) imitation of thought processes, including systems capable of emulating one's expertise

(knowledge based expert system) which then develops towards intelligent programming.

- 2) Imitation of computational processes, including systems capable of performing intelligent computations based on computational intelligence known as fuzzy systems, artificial neural networks, and genetic algorithms.

In general, the definition of artificial intelligence can be grouped into four categories, namely:

- 1) Systems that can think like humans (thinking humanly).
- 2) Systems that can behave like humans (acting humanly).
- 3) A system that can think rationally.
- 4) A system that can behave rationally (acting rationally).

Although artificial intelligence technology has succeeded in making computers smarter and more sophisticated, but to become a duplication of the human brain or a substitute for the human brain, computers are still far from the working system of the human brain. The field of artificial intelligence tries to understand intelligent entities in humans which is then implemented in the form of automation of intelligent behavior with computer media. But not like the field of philosophy and psychology, which is also related to intelligence, Artificial Intelligence tries to build intelligent entities according to human understanding.

In Artificial Intelligence, it allows computers to receive knowledge through human input and use their knowledge through simulating human reasoning and thinking processes to solve various problems. Although it is impossible to gain knowledge, experience and research like humans, computers can obtain the knowledge they need through the efforts of a human expert. Input is given to a system that uses artificial intelligence in the form of a problem domain. The almost system is equipped with a set of knowledge that is in the knowledge base. Knowledge can be obtained from experts, or maybe automatically from libraries, or from databases. The system must have this inference

engine or inference engine in order to be able to draw conclusions based on facts or knowledge. So, the inference engine acts as an executive who decides the running of the system. The output given is a solution to the problem as a result of inference.

In fact, almost all artificial intelligence program products are implemented with tracking and pattern matching techniques based on the knowledge base given to them, leading to the conclusion that computers are not really smart. No matter how much information the user provides to the computer, with a rapid information processing process based on the applicable rules and criteria, the computer can still find a solution. Everything it does, it is experimenting with alternatives and trying to find some combination that fits the designated criteria. If everything is done, then a specific solution can be reached. Thus, even though computers are not exactly smart, it does not seem wrong to mention that computers like thinking and often provide amazing solutions.

1.4. Artificial Intelligence Tree

Artificial intelligence is a collection of concepts and ideas related to the development of intelligent systems. Concepts and ideas related to the development of intelligent systems can be developed in different areas and applied to different domains. Therefore, to understand the scope of artificial intelligence, we need to look at the group of application areas of artificial intelligence that can be called the AI family. The rapid development of technology has led to the development and expansion of the scope that requires the presence of artificial intelligence. Intelligent characteristics have begun to be needed in various disciplines of science and technology. Artificial intelligence is not only dominant in the field of computer science (informatics), but has also penetrated in various other disciplines. AI branches as depicted in the AI tree, can be briefly described as follows:

1. Expert System (Expert System)

A system that uses human knowledge recorded on a computer to solve problems that normally require human expertise.

2. Natural Language Processing

By using natural language processing technology (NLP) it allows computer users to communicate with a computer using their native language (everyday language).

3. **Speech Recognition (Speech Understanding)** Computer recognition and understanding of spoken language. So, through speech recognition, it is hoped that humans can communicate with computers using voice
4. **Robotics and Sensory Systems (Robotics & Sensory Systems)** Intelligent robots have several types of sensor devices, such as cameras, that collect information about the robot's operation and environment.
5. **Computer Vision**
The basic purpose of computer vision is to try to interpret images or objects visible through the computer, rather than produce images.
6. **Intelligent Computer-Aided Instruction**
The intelligent CAI system was developed to create a computerized teacher who forms teaching techniques that are suitable for student learning patterns (individual).
7. **Artificial Neural Network**
A set of mathematical models that simulate how the human brain functions.
8. **Game Playing**
It is the perfect area to investigate new strategies and heuristics and to measure their results. Deep Blue is a great example of successful development.
9. **Language Translation**
Automatic translation uses computers to translate words and sentences from one language to another without much human intervention.
10. **Fuzzy Logic**
It is a technique for processing linguistic terms. In fuzzy logic, true or false values are replaced by degrees in the membership set.
11. **Genetic Algorithm (Genetic Algorithm)**
It is an intelligent method of using a computer to simulate the Darwinian evolutionary process and genetic operations on chromosomes to find patterns from a set of data.

12. **Intelligent Agents** A small program located on a computer to perform certain tasks automatically. Virus detection programs are a good example.

1.5.Future Artificial Intelligence Technology

AI researchers are getting closer and closer to smart computers every year, but there are still many problems to be answered. For example, how can you elect skills in dealing with human problems, ability to learn, taste, imagination, emotion, creativity, and courage. To answer the above problems, experts return to related fields, such as philosophy, psychology, linguistics, and neuroscience and of course computer science itself. Thus, the field of interdisciplinary cognitive science will be born.

Maybe it won't be too much of a problem if we can't imitate the work of the human brain completely. The goal of human duplication will never be realized through any advanced technology, including artificial intelligence technology. Furthermore, we can only partially imitate the work of the human brain. It will more useful and better than nothing because our main goal of making smart and intelligent computers is not to match or replace humans, but only to be a tool for humans to live their lives in the world. Furthermore, what will happen to artificial intelligence technology in the future A lot. Research and development of artificial intelligence techniques will continue and all subfields will progress and improve. New software techniques will begin to unfold. More sophisticated software development tools will facilitate the development of expert systems and other artificial intelligence programs.

The concept of integration of science has begun to mushroom. It does not rule out the possibility that this concept will occur in the development of artificial intelligence technology in the future. The art of collaboration between sub-fields of artificial intelligence technology to build integrated advanced systems will be an interesting topic for AI researchers. Many advanced technologies will emerge as a manifestation of the real application of intelligent system integration to handle a wider



range of information and solve more complex problems.

Artificial intelligence technology is a very sophisticated technological invention. Artificial intelligence technology is not the only panacea that can cure all diseases. Therefore, we should not expect too much for a miracle. We have to look at the reality we are facing. Artificial intelligence technology may be able to provide a solution that looks like a miracle, but it is only a pseudo and not really a miracle. Artificial intelligence technology only provides evolutionary progress and not revolutionary progress. And what needs to be believed is that artificial intelligence technology is a fascinating and extraordinary technology, which is interesting to learn.

1.6. Artificial Intelligence and Natural Intelligence

Vedanta explains that consciousness is beyond the reach of mind and intelligence. (Yunairi et al., 2019). Vedanta hierarchy of the human body, mind and intelligence. The description of the hierarchy is as follows

Bhagavad-gita 3.42: *Indriyani
parany ahur Indriyebhyah
param manah That's
manasas buddhir
Yo buddheh paratas*

“ the senses operate more subtly than the inanimate realm; the mind is more subtle than the senses; intelligence is still more subtle than the mind ; and he (the spirit) is more subtle than intelligence.”(Mantra, n.d.). The relationship between consciousness and intelligence, mind and senses are explained in the Katha Upanisad (1.3.3-4)

*Atmanam rathinam viddhi
Sariram ratham eca va
Buddim is full of viddhi
Mana pragraham eva ca*

*Indriyani Hayan Ahur
Visayams tesu gocaran
Atmendriya-mano-yuktam
Bhoktety ahur sweetinah*

"The individual (the jiva or "spriton" is the passenger in the chariot of the material body, and intelligence is the charioteer. The mind is the reins, and the senses are the horses. The self (jiva or "spriton") is the enjoyer or sufferer depending on the mind and the senses. Indeed this is understood by scholars."
(Mantra, n.d.)

The potential value of artificial intelligence can be better understood by comparing it with natural intelligence, namely the intelligence created by *Ida Sang Yang Widi Wasa* in humans. The advantages of artificial intelligence, namely:

- a. Artificial intelligence is more permanent. Natural intelligence is rapidly changing. This is possible because human nature is forgetful. Artificial intelligence will be permanent as long as the system and computer programs are not changed.(Nasution, 2019)
- b. Artificial intelligence offers easy duplication and deployment. Transferring core knowledge from one person to another usually requires a long learning process, even a skill can rarely be fully imitated. However, knowledge embedded in a computer system can be easily transferred from one computer to another.
- c. Artificial intelligence is cheaper than natural intelligence.
- d. Artificial intelligence is consistent and comprehensive. Natural intelligence is disorganized, they don't always act consistently.
- e. Artificial intelligence can be documented.
- f. Artificial intelligence can complete certain tasks faster and better than natural intelligence.

Antah karana Sarira is the most subtle layer of the body, namely atman. *Antahkarana sarira* is also called the causative body. Atman is what animates humans so that they live and do activities. (Muliadi, 2017) humans actually have several layers of consciousness. Human consciousness has three layers, namely ordinary consciousness = physical awareness (consciousness), subconscious = soul spirit consciousness (sub consciousness), and super consciousness = spirit consciousness (super consciousness). Super consciousness is consciousness on a high personal level (spirit). This is the true consciousness of a human being. Because the high person has divine elements, the vibration of the high person is very high. To enter

the lowest vibration physical body as a human being, it takes multiple layers of intermediaries. This is why the human body is made up of many layers. Ordinary consciousness is consciousness that comes from the physical body, so the memory of knowledge possessed at this level of consciousness is limited to this life. Between the super-state and the ordinary consciousness, there is an intermediate consciousness, which is ordinary. This is called mental awareness (subconscious). Different from ordinary consciousness, soul consciousness and spirit consciousness are more permanent consciousness. All memories and knowledge from previous lives (*karma wasana*) are still possessed by soul consciousness and spirit consciousness. A person who can attain either spirit consciousness or soul consciousness, can have all the memories and knowledge from his previous life. Spirit never dies. The purpose of the spirit being in this world is to learn. With the physical body, then the spirit can learn from actual experience. Therefore, the soul chooses different experiences through *punarbhava*. The one experiencing the *punarbhava* is the gross body, while the spirit or *atma* never experiences birth or death, as stated in Bhagavad-gita 2.20:

*na jāyate mriyate vā kadācin
nāyam bhutva bhavita van a bhuyah
let's go nityah sāsvato'yam purano
na Hanyate Hanyamane Sarire*

There is neither birth nor death for the soul at that time anywhere. Prayer was not created in the past, it is not created in the present, and he will not be created in future. He was not born, exists for forever and everlasting. He is not killed when the body killed. (Mantra, n.d.)

According to its nature, the *ātma* is not subject to change like the body, the soul is called the steady or *kuta-stha*. The body underwent six changes. The body is born from the mother's womb, endures for some time, grows, produces something, gradually declines, and finally disappears. However, the spirit does not undergo such changes.

The soul is not born because the soul accepts the body the body is born. *Atma* is not born and *ātma* does not die. Whatever is born is bound to die, because the *ātma* is not born, there is no past, present or future for the *ātma*. *Atma* is eternal, exists forever, and is eternal that is, there is no record in the historical treasures of the realization of *atma*. Only impressions from the body, humans look for birth history, and so on. *Atma* is never old at any one time, as the body does. Changes in the body do not affect the *ātma*, because the *ātma* does not degenerate over time like other matter. The *atma* also does not produce anything or reproduce, as the body does. The body develops because of the *ātma*, but the *ātma* has no offspring or other changes, such as changes experienced by the body, this is also confirmed in the Kathā Upanisad (1.2.18)

*Na jayate mriyate vā vipascin
Nāyam kutaścin na babhuva kaścit
Ajo nityah sāsvato'yam kaścit
Na Hanyate Hanyamane Sarire*

Translation:

The omniscient tman was never born, nor did he die at any time. He arises from nothingness and nothingness arises from him. He is not born, eternal, eternal, and first of all. He is not killed when the body is killed (Mantra, n.d.)

Atma is eternal, cannot be destroyed and created just like the opinion of quantum physics scientists, about energy that energy also cannot be destroyed and created, energy can only change form, energy in the view of quantum physics is the same as *ātma*, *ātma* has eternal properties such as explained in Bhagavad Gita 2.23-24:

*Nainam chindanti astrāni
nainam dahhati pavakah
Na caiman kledayanty āpo
na osayati mārutah*

The *Atma* can never be cut, into pieces by any weapon, burned by fire, moistened by water, or constricted by the wind (Mantra, n.d.)

*Acchedyo 'yam adahyo yam
akledyo 'sosya eva ca
Nityah sarva-gatah sthanur
Acato yam sanātanah*



This individual spirit cannot be broken and cannot be dissolved, burned or dried. It lives forever, is everywhere, cannot be changed, cannot be moved and remains the same forever.(Mantra, n.d.)

From the *loka* explanation above, it is clear that humans come from a great spirit (soul), which is eternal, cannot be destroyed either by any weapon. Atma is an eternal form of God's energy that has the same properties as God, but in a much smaller quantity, the same in quality but different in quantity. By knowing their true identity, humans can reflect themselves as representatives of God in this world who are always, peaceful, always spread kindness and empowerment, without being overwhelmed by anxiety, anger, and negative desires, what do humans need to worry about if they know their identity, can create peace or whatever with the ability he has, because the understanding of the body is not limited to matter, flesh and blood, but universal power, such as mind, and spiritual *atma*. The quality of *atma* that humans have has the same creative power as God, he should practice this well to achieve a peaceful and happy life, and provide benefits to the environment.

(Anggreni, 2015) mentions that *Atma* knowledge is the most important element of all creation, he has power over the body he enters, he controls the body, until later the body is damage, he will leave the body and switch to another body, or can unite with the body. The *ātma* knowledge that opens the way for unity in diversity remains eternal in destruction. One who has acquired *ātma* knowledge becomes all-knowing, and cultivates a sense of universal brotherhood *vasudaiva kumbakam* that all creation is the same *ātma* originating and part of God.

The Upanishads say that one who knows one's true self can overcome sorrow. All knowledge about the world is aimed at making a living (looking for work). But if the knowledge of *atma* is known then all that is the basis of other sciences and arts will be very easy to obtain. If a person can communicate with God who is the source of all knowledge, power and eternal wisdom, then that person has access to every kind of knowledge. Therefore, everyone

should strive to gain true self-realization through purification of the mind and heart so that later they can draw closer to God. The concept of *atma* in Hinduism is so complete, in harmony, and logically with the development of science throughout the ages. Natural intelligence also has several advantages over artificial intelligence, namely:

a. Natural intelligence is creative, while artificial intelligence is boring. The ability to add or fulfill knowledge is inherent in the human psyche, but with artificial intelligence, to add artificial knowledge must be built into a carefully constructed system.

b. Natural intelligence allows people to harness and use the experiences of the five senses directly, whereas most artificial intelligence systems have to work with symbolic input and representation.

c. Natural intelligence can be used widely and unlimited, while artificial intelligence is very limited.

IV. CONCLUSION

Although the artificial intelligence method shows more value than others, it cannot duplicate or imitate the working system of the human brain as a whole perfectly. Because human duplication will never be realized through any sophisticated technology, including artificial intelligence technology. We can only imitate part of the work of the human brain.

However, in retrospect, artificial intelligence techniques show how we think and apply intelligence better. By applying human intelligence to computers, we are forced to learn how we store knowledge in the brain and how to apply it. First of all, we must really understand our own thinking patterns, how to use reasoning techniques, and how to approach them in solving a problem

On the other hand, we have to learn from ourselves, how we learn and to what extent our weaknesses and strengths. In short, we must learn how we learn to understand a process. Thus, we can gain a better understanding of our thinking and will be able to lead to better learning methods and be able to apply our intelligence to real world problems.

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