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Proceeding Paper

From the Buddhist Transcendental Epistemology to Viewing the Limitations of AI and a Recognition of Ontology [†]

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Abstract: Currently, artificial intelligence (AI) is gradually approaching or surpassing human level in terms of perceptual ability, computational ability, logical ability, and even language ability. However, the cognitive concepts proposed by Buddhism, such as "Twelve Factors", "Eight Consciousness", "Emptiness", and "Middle Path", do not seem to be able to be technically processed by artificial intelligence. The fundamental reason is that artificial intelligence, as an intelligence made by humans, can only intervene in the field of phenomena not the field of ontology. This is exactly the fundamental difference between humans and AI. Conversely, the fundamental difference between humans and AI provides a new perspective on "what is the noumenon", which requires a re-cognition of ontology.

Keywords: artificial intelligence; Buddhism; ontology; emptiness (Śūnyatā)

1. Introduction

Religion is related to the spiritual belief of humanity the spiritual beliefs of humanity regarding the ultimate questions of existence. Christianity endows humanity with the value and significance of existence through its belief in "God"; Islam endows the present world with a reason for existence and a destination through its belief in "Allah"; and Brahmanism endows life with the basis and rank of transmigration of existence through its belief in "Brahman". Regardless of the specific religion, they all confront the phenomenon of life and death, revealing the profound truth of human life as "living towards death". However, artificial intelligence, in a certain sense, is "immortal". Since it cannot comprehend death, it naturally cannot understand existence, because the thinking of artificial intelligence relies on algorithms, whereas human thinking encompasses not only logic and computation but also unique emotional experiences and transcendental consciousness. For Buddhism, the profound depths of these emotional experiences manifest as compassion, and the depths of this transcendental consciousness manifest as Bodhi. Artificial intelligence can simulate art in form, but cannot evoke deep emotional resonance in content. Artificial intelligence can achieve efficiency in computation, but it cannot reach the realm of wisdom in understanding.

Philosophy concerns humanity's unremitting exploration of metaphysics. Cosmology is essentially a metaphysical exploration of ontology, ethics is essentially a metaphysical exploration of axiology, phenomenology is essentially a metaphysical exploration of epistemology, and language analytic philosophy is essentially a metaphysical exploration of semantics. In fact, human metaphysical explorations in the field of philosophy remain beyond the reach of artificial intelligence. The continuous learning capability of artificial intelligence can be applied in the field of moral judgment and value judgment, but can not operate in the field of moral metaphysics and value metaphysics. However, Chinese philosophy believes that human beings can reach the realm of moral metaphysics by relying on the "Gong Fu Ontology", which refers to the moral practice of constant



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reflection, and ultimately reach the lofty realm of "harmony between man and nature". The "Gong Fu (effort)" and "realm" involved here actually come from the reference of Buddhist enlightenment. The process of Buddhist enlightenment is different from the process of human learning. Buddhist enlightenment relies on the elimination of desires, or something similar to phenomenological "suspension" or "elimination of drawbacks"; the continuous learning capability of artificial intelligence is very similar to the human learning process, constantly increasing the amount of information and the ability to handle complex problems, it remains a process of "learning results in daily increase". The true essence of Buddhism lies in "practicing Dao results in daily decrease", which is not an addition of knowledge and abilities. It emphasizes the need to "eliminate knowledge" and "eliminate abilities" in order to return to the original state of Buddhism, known as the "emptiness" state. Although the development of artificial intelligence is towards infinite information and efficient processing capabilities, it is still limited by the law of entropy, and ultimately cannot achieve infinite capability. Only through the "negative entropy" approach can artificial intelligence achieve a balance between development and decline. The problem is that the essence of Buddhist enlightenment is the cancellation of "entropy increasing" and "entropy decreasing", thereby maintaining the "emptiness". The principles of artificial intelligence's development is unidirectional, and if there is a reverse system at the same time, it will lead to a "machine paradox"; while the learning capability of artificial intelligence is very powerful, it is also represents its fatal weakness. Buddhist enlightenment fully unleashes human transcendence. On one hand, humans have the ability of "learning results in daily increase". On the other hand, humans have the ability to reflect on life as they suffer from the "practicing Dao results in daily decrease". The combination of these two aspects constitutes the third aspect, which is that humans have the fundamental ability to clear both positive and negative effects simultaneously. From a modern philosophical perspective, it means that the subject is constantly constructing itself while simultaneously deconstructing itself. Because neither the constructed self nor the deconstructed self is the true ontology, only the subject that can both construct and deconstruct is the true ontology.

2. From the Transcendentality of the "Twelve Factors" to Viewing the Limitations of Artificial Intelligence

The "Twelve Factors" are the most fundamental, profound, and special view of life in Buddhism, which contains a transcendental understanding of life phenomena, spiritual phenomena, and psychological phenomena". The "Twelve Factors" are the twelve conditions of human life phenomena, or a sequence of conditions composed of twelve conditions. The order of these twelve causalities is: (1) Ignorance [Sanskrit] avidyā: fundamental state of unconsciousness. (2) Formation [Sanskrit] samskära: potential will activities. (3) Consciousness [Sanskrit] vijñānā: separte effects of cognition. (4) Name and Form [Sanskrit] näma-rüpa: state of interaction between mind and material, mind and body. (5) Six Sense [Sanskrit] sad-avatana: six cognitive functions, the perception ability of the eyes, ears, nose, tongue, body, and mind. (6) Contact [Sanskrit] sparsa: contact between senses and perceived objects. (7) Feeling [Sanskrit] vedanā: feelings from the contact between the senses and the perceived objects. (8) Craving [Sanskrit] trsnā: blind possessiveness. (9) Grasping [Sanskrit] upädäna: obsession with things. (10) [Sanskrit] bhava: existence of organisms. (11) Birth [Sanskrit] jati: birth of organisms. (12) Aging and Death [Sanskrit] jarä-marana: aging and death of organisms. It can be seen from the above that the "Twelve Factors" are actually phenomenological descriptions of the process of life from appearance to birth, then to demise; furthermore, they are also a causal chain composed of 12 conditions. Among them: 1. The appearing process includes unconsciousness, subconsciousness, consciousness, mind body, senses, intentions, feelings, desires, attachment, and existence. 2. The birth process includes: birth and survival. 3. The demise process includes: aging and death. The so-called "phenomenon" here is the "essence"; they are pre-logical and non-empirical, or the result of phenomenology reduction. Even in terms of

the field of experience, Husserl's phenomenology believes that the content of conscious experience is neither the subject nor the object, but rather the semantic structure related to both. From this perspective, it is almost impossible for artificial intelligence to grasp these fields. Firstly, artificial intelligence can only simulate human neural cognitive mechanisms and can achieve perceptual and cognitive functions in computational and logical ways. However, human perceptual and cognitive functions also include ontological perception and cognition, which means that metaphysical thinking cannot be simulated by artificial intelligence. Secondly, the unconscious and subconscious in the "Twelve Factors" have not yet involved the interaction between mind and object, they are purely spiritual and irrational phenomena; mechanically speaking, artificial intelligence would find it difficult to simulate pure spirit and irrationality. Furthermore, birth, aging, illness, and death are the last two links in the 12 causal factors, which are phenomena of transition or emergence in the life system. Currently, artificial intelligence can only continuously change in quantity and cannot achieve its own qualitative change.

From the perspective of philosophy, the "Twelve Factors" of Buddhism are very similar to Kant's transcendental philosophy, which is that all human cognitive activities and behavioral patterns are constructed by the subject itself. Artificial intelligence is undoubtedly based on hardware and software systems, and its cognitive system is based on effects rather than motivation. That is to say, artificial intelligence imitates human cognitive systems, but it is difficult to imitate human psychological processes. In the phenomenon of life, although the outcome is more utilitarian than the process, the process itself holds greater significance. The "Twelve Factors" of Buddhism also involve psychological accumulation. The psychological motivation of each link is actually determined by the overall result of the previous cycle of the "Twelve Factors". This is actually saying that the process and the result are mutually causal, or that the overall process and the specific result are mutually causal. Such a complex system is infinitely traceable in time and infinitely overlapping in space. The realm of Indra net in the Buddhāvataṃsaka Sūtra is described as follows: the infinite web of life, each individual's body and mind are like the Mani jewel on the Indra net. Each pearl emits a light that illuminates the universe, while all Mani beads are mutually reflected in one another. This is actually far beyond the capability of artificial intelligence. Because artificial intelligence is, at most, an individual, while human existence is universally connected to the cosmos and others. This kind of connection has universality, internality, and transcendence on an ontological level, while the universal connection of artificial intelligence is only based on data and information.

3. From the Transcendentality of the "Eight Consciousness" to Viewing the Limitations of Artificial Intelligence

The concept of "Eight Consciousnesses" is proposed in Buddhist philosophy of consciousness, which includes: eye consciousness (cakṣurvijñāna), ear consciousness (śrotravijñāna), nose consciousness (ghrāṇavijñāna), tongue consciousness (jihvāvijñāna), body consciousness (kāyavijñāna), mind consciousness (manovijñāna), manas consciousness (klistamanas), and alaya consciousness (ālayavijñāna). The first five consciousnesses are similar to the perceptual understanding of modern science, the sixth consciousness refers to human thinking and understanding, and the seventh consciousness is similar to the concept of "self" in modern psychology. Only the "Eighth Consciousness", also known as the "Alaya Consciousness', is the most mysterious and involves "karma" in the concept of Buddhist reincarnation, also known as the "Seed Consciousness". The core point is that there is no normality in consciousness, it is constantly influenced and a constantly evolving entity. This is the connotation of Buddhism's "Non-self". Currently, artificial intelligence has the ability to continuously learn, update, modify, and progress, but it cannot form the "karma" that constantly infects the seeds or, to use the concept of Buddhism as a metaphor, artificial intelligence can form a "emanation body" or "incarnation body", but cannot form an "enjoyment body". The term "emanation body" here can be understood as artificial intelligence that deals with specific problems, the term "incarnation body" here can be

understood as artificial intelligence with multiple functions, while the "enjoyment body" is the inherent causal relationship between specific things and the overall existence, or rather, all existence is a "dependent origination" composed of various conditions and continuous changes. It does not actually exist, only shapes the "self" through extremely subtle spiritual movements. Fundamentally speaking, the design of AI is still a design and a passive "material machine", not the automatic and active "spiritual phenomenon" (phenomenon in the sense of phenomenology).

The mysterious alaya consciousness proposed by Buddhism is difficult to empirically verify using scientific methods, but it is a very profound interpretation of the essence of life. From this perspective, the reason why humans are a profound existence of life is that some parts of their existence can be empirically validated, while others cannot be empirically proven, which can only be understood through interpretation. On the contrary, all existing parts of artificial intelligence can be empirically verified, without any parts that cannot be empirically validated and can only be interpreted. In other words, all phenomena of life can be empirically verified, while the essence of life cannot be empirically verified and can only be understood through interpretation. Human beings consist of both life phenomena and the essence of life, with the former being empirically verifiable and the latter being unverifiable but interpretable. No matter how strong artificial intelligence cognitive ability is, it can only be a product of empirical science and cannot reach the realm of life interpretation.

From the perspective of modern philosophy, since the 19th century, philosophy has increasingly preferred to use scientific methods, especially positivism methods, which have actually limited the profound development of philosophy itself. In the 20th century, philosophy began to reflect on Scientism and Positivism, which resulted in Husserl's Phenomenology and Gadamer's Hermeneutics. In the preface to "Truth and Method," Gadamer states, "This book is concerned to seek the experience of truth that transcends the domain of scientific method wherever that experience is to be found, and to inquire into its legitimacy. Hence the human sciences are connected to modes of experience that lie outside science: with the experiences of philosophy, of art, and of history itself. These are all modes of experience in which a truth is communicated that cannot be verified by the methodological means proper to science. Contemporary philosophy is well aware of this" [1]. Therefore, artificial intelligence cannot be considered as life at present, unless its existence cannot be empirically verified and can only be interpreted.

4. From the Transcendentality of the "Emptiness (Śūnyatā)" or " Middle Path" to Viewing the Limitations of Artificial Intelligence

Buddhist philosophy proves the non-existence of "noumenon" through hermeneutics, which means that "ontology" is actually "epistemology", and there is no physical existence of "noumenon". Therefore, "emptiness" rejects all ontological constructions, even all epistemology constructions, opposing ontological claims such as "monism", "duality", and "pluralism". However, the underlying structure of artificial intelligence still relies on the binary theory of computer principles, which is a pluralism. This is completely contradictory to the deconstructive stance of "emptiness". That is to say, artificial intelligence has not reached a philosophical level from the foundation, and is destined to be limited by its own "technological fate".

At the beginning of the first chapter in Zhonglun, Nāgārjuna said, "Neither birth nor death, neither constant nor severance, neither unity nor difference, neither coming nor leaving. The eight concepts of birth, death, constancy, severance, unity, difference, coming, and leaving are comprehensive criticisms of various false appearances of the dependent origination, intended to break away from all illusory theories and highlight the reality of the "Middle Path". Professor Wu Rujun explains these four sentences as follows: "Nāgārjuna uses the negation of four pairs of contrasting categories (eight categories in total) to represent Pratītyasamutpāda. The number of four pairs of eight categories is not necessarily. Nāgārjuna's basic idea is that none of the categories such as birth and death can

be asserted with regard to the true nature of Pratītyasamutpāda. Which means both cannot representthe true nature of Pratītyasamutpāda. It should be noted that the birth or death mentioned by Nāgārjuna is based on the perspective of Svabhava. The Pratītyasamutpāda does not exist or perish, which means Pratītyasamutpāda does not have the birth and death of Svabhava" [2].

Nāgārjuna's ideology is clearly a complete negation of the "either this or that" thinking or, rather, it is an affirmation of the state which is "both this and that, neither this nor that"; this state is very close to the "quantum state" in quantum theory. At present, artificial intelligence cannot achieve "quantum thinking", which means it is still essentially a "computer" based on machine language and programming, no matter how large its database is, it still cannot move from a functional quantitative change to a spiritual qualitative change.

5. A Re-Cognition of Ontology from the Perspective of the Limitations of Artificial Intelligence

The vigorous development of artificial intelligence has not only brought deep challenges to traditional human ethics, but also had a profound impact on the legitimacy of philosophy. In fact, the problem with artificial intelligence is not only a crisis of philosophy, but also a crisis of science itself. Husserl had already discussed this issue in his book *The* Crisis of European Sciences and Transcendental Phenomenology, stating that "At the critical moment of our existence, this science tells us nothing. It excludes in principle the urgent issue of whether the survival of the entire human being is meaningful or meaningless, which is crucial for those who are dominated by fundamental changes of fate in our unfortunate era. Aren't these questions, which are universal and inevitable for all people, also require overall thinking and rational insight to answer? These issues ultimately cncern human beings who have the freedom to determine their actions towards both the human and non-human environment, and who have the freedom to rationally shape themselves and the possibilities of their environment. What does this science have to say about reason and irrationality, and about us as free subjects? This science only concerns about objects clearly cannot say anything, it does not even consider all subjective things" [3]. Obviously, artificial intelligence is not subjective, so it is precisely complete objectivity that limits its vital attributes.

The Buddhist philosophy and traditional ontological philosophy is basically contradictory, but compared to modern scientific and technological philosophy, the relationship is subtle and even consistent. In fact, the progress of modern science has posed a challenge to traditional ontological philosophy. The so-called ontology is nothing more than a presupposition of human beings. But this kind of presupposition can also become a constraint on human thinking and spirit. The greatest value contribution of modern philosophy of science and technology is to try to avoid the technologization and programmability of humans; this is also the deepest liberation and freedom of humans. By leaving the ontology behind, one can obtain spiritual elevation and let the flower of life to bloom in an emergent manner.

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