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BUDDHIST ONTOLOGY AND THE MAKING OF ARTIFICIAL INTELLIGENCE

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ABSTRACT

Artificial intelligence enables machines to think and learn like humans. The significance of artificial intelligence can be seen understood as it has been emerged as a virtual personal assistant nowadays. The rapid development of AI has raised the concerns regarding the existential status of conscious beings, particularly about the nature of human existence and consciousness. However, a closer analysis of artificial intelligence and its ontological nature reveal a notable conceptual similarity with Buddhist marks of existence. The Buddhist views on the marks of conditioned existence: impermanence (aniccā), non-self (anātman), and unsatisfactoriness (duḥkha), are interpreted as being relative to the emerging ontology and operating principles of AI. This paper attempts to argue that the cumulative, yet transient and soulless nature of dharma parallels the decentralized, interdependent, and sequential mechanism of artificial system Intelligence. The concept of "mechanical unsatisfactoriness" is defined here as analogous to the conditions of existential limitation and system dependence in an AI system. This paper aims to analyze a cross-disciplinary dialogue between ancient Buddhist discussions on ontology and contemporary paradigms of Artificial Intelligence by exploring whether there is common ground between them. Additionally, it examines whether exploring deeper into Buddhist existential characteristics can contribute to a more profound understanding of intelligence, dependent origination, and the non-substantial nature of AI. As such, this work contributes to ongoing debates in the philosophy of mind, cognitive science, and religious studies by providing a detailed explanation of the common epistemological and ontological issues surrounding human and artificial forms of existence and intelligence.

KEYWORDS: Artificial Intelligence, Non-self, Impermanence, Unsatisfactoriness, Dependent Origination.

1. INTRODUCTION

In the contemporary world, the advancement of Artificial Intelligence (AI) and computation has raised critical philosophical concerns about the concepts of knowledge, consciousness, sentience, and identity. The development of these technological advancements primarily raises questions about the AI system's self-awareness and consciousness. Secondly, whether elucidating artificial intelligence, if conscious, through the Buddhist concept of "non-self" offers a new perspective on understanding Artificial Intelligence. John McCarthy claims that Artificial Intelligence and philosophical themes are closely entangled and AI necessarily presupposes the philosophical elucidation of mind, mental qualities, and consciousness, particularly consciousness of "self" (McCarthy, 1995). Scientific studies on consciousness have shown that Buddhism may be compatible with modern scientific perspectives because it is rational, empirically based, psychologically oriented, and ethically grounded (McMahan, 2008). The scientific approach suggests that the Sarvāstivāda (the realist Buddhist school) and Artificial Intelligence (AI) share a similar view of reality: reality exists in a state of constant flux or "interdependent processes." From this standpoint, both frameworks emphasize the momentariness of phenomena, which occur causally interdependent without any enduring essence. AI is capable of analyzing vast amounts of data and performing complex computations with accuracy and efficiency; for this reason, AI is considered an extension of human intelligence. In the Indian philosophical system, the concept of the self has been a core of existence since the time of the Vedas (c.1500-500 BCE), and continues to be a major factor in understanding consciousness, identity, awareness, and the subjective experience of humans as sentient beings.

Buddhist philosophy presents a distinctive interpretation of the "non-self" (anātman) theory, contrasting with the enduring substratum or "self" of Brahmanical philosophy. Buddhist philosophy conceptualize that what is conceived as self is a dynamic conglomeration of interdependent mental process. Accordingly, there is a conceptual similarity between the framework provided by Sarvāstivāda's "not-self" and the soullessness of AI, which, although capable of processing and synthesizing vast amounts of information, is devoid of an inherent or lasting selfhood. Similar to the Sarvāstivādin concept of non-self, AI emphasizes the dynamic flow of information rather than acknowledging any enduring entity.

Saṃghabhadra, an adherent of Sarvāstivāda, argues in the Nyāyānusārasāstra (NAS) that human consciousness is a continuous flow of momentary mental dharmas that interact causally to create an illusion of continuity and a sense of "self" in past, present, and future (Cox, 1995). Thus, according to Saṃghabhadra, what is typically considered to be a self is actually a constant flux of mutually dependent and impermanent dharmas in three times. In addition, this perspective posits that consciousness is not a singular entity, but rather exists due to its dependence on the six cognitive faculties- vision, audition, smell, sense of taste, sense of touch, and the faculty of intellect or consciousness. These cognitive faculties exist alongside their corresponding objects: color, sound, taste, tactile objects, and non-sensuous objects (Rahula, 1959).

Sarvāstivāda elucidates that all conditioned events originate dependent on a multitude of causes and conditions; similarly, AI emulates intelligent behaviour through an interdependent network of datasets. AI outcomes are impermanent and context-sensitive, created through the dynamic interaction of algorithms that are inherently devoid of intrinsic self. Therefore, the AI's neural network parallels the Sarvāstivāda understanding of dependent origination, where mutually dependent dharmas emerge, persist, decay, and destroy in a cyclic manner across the three temporal modes (Yao et al., 2019). This correspondence shows that AI is compatible with the Sarvāstivādin theory of impermanence, in which the fundamental constituent of existence (dharma) is inherently impermanent, soulless, and subject to change under shifting causal conditions.

This paper examines the compatibility of artificial intelligence with Saṃghabhadra's philosophy by analyzing the three marks of existence in early Buddhism: impermanence, non-self, and unsatisfactoriness. It is worth noting that since AI lacks a unified consciousness or self, and its outputs are produced by interconnected neural networks that can become outdated with new updates. Therefore, it offers a convincing area of alignment with the Sarvāstivāda Buddhism. The purpose of the current research is to show the relevance of Buddhist concepts to the artificial intelligence system and their significance in strengthening AI. Special attention is given to the Sarvāstivādin interpretations of consciousness and the momentariness of phenomena, without which the non-substantial nature of AI cannot be explained. In doing so, this article aims to provide insight into an evolving ontology of intelligence and cognition by integrating

Buddhist philosophical frameworks with emerging technological models.

2. THE REFLECTION OF SARVĀSTIVĀDA "NON-SELF" IN MODERN AI'S "DISTRIBUTED REPRESENTATION SYSTEMS"

In the early Buddhist scholastic treatise Kathāvatthu, it is stated that all entities, by virtue of being dependent on other factors for their existence, are inherently transient or impermanent. The definition of dependent origination and the events within entities are characterized by their arising and cessation, without any inherent or lasting essence (Aung & Davids, 1915). While the Sarvāstivāda school of thought proposed a distinctive ontology of realism (i.e., dharma as a fundamental and ultimately existing aspect of reality), it asserts that dharma exists as a real entity across three times (Kalupahana, 1974). However, to avoid ambiguity with the permanence, Sarvāstivāda posits the distinction of dharma's causal efficacy, 'activity' and 'capability.' Sarvāstivāda holds that the efficacy of the dharma, referred to as 'activity' (kāritra), is limited to the present moment, while dharma's 'capability' is latent and its potential to cause effects can manifest as a causal influence in subsequent events (Dhammajoti, 2007). Considering that the Sarvāstivāda asserts dharma has an intrinsic nature that endures through all three modes of time, their concept of impermanence applies to the emergence and cessation of the dharma's causal "activity" (kāritra) (Dhammajoti, 2007). Thus, the Sarvāstivāda school adopts a radically ontological real position; however, the manifestation of dharma's "activity" is impermanent and subject to change.

This Sarvāstivādin stance stands in contrast to the ontological viewpoint of Theravāda and Mādhyamika tradition, which restricts the real existence of dharma exclusively to the present moment. Theravāda and Mādhyamika traditions posit that past and future dharmas exist only in a conventional sense; there is no activity apart from the present dharma (Karunadasa, 2010). Thus, Sarvāstivāda, while maintaining its ontological realism, blends the continuity of dharma's intrinsic nature with the impermanence of its causal efficacy and temporal activity. Furthermore, Saṃghabhadra claims that the manifestation of dharma is momentary and is closely related to the Buddhist concept of "non-self" (anātman). On this note, he argues that the notion of 'self' is merely a conceptual construct that arises from the illusory perception of the interconnected stream of feelings, ideas, volitions, and consciousness (Stcherbātsky, 1923). The concept of 'non-self' as explained by Saṃghabhadra is rooted in the Mahāvibhāsasāstra (MVS), which posits that the 'self' is simply a sequence of many constantly changing mental states and processes that are constituted by a set of transient mental dharma (Bastow, 1994). Building upon this perspective, Shulman also comes up with the doctrine of dependent origination that fundamentally serves as an inquiry into the nature and connotations of non-self (Shulman, 2008). In Sarvāstivāda, the theory of dependent origination elucidates the dependent and conditioned nature of all the conditioned events by the twelve-fold chain of causation. It shows that the sense of "self" emerges solely through the interaction of interdependent causes and conditions and, therefore, rejects the existence of any ultimate or persistent entity. In this view, the Sarvāstivādin perspective emphasizes the interconnectedness and constant flux of all phenomena that arise dependently, illustrating the impossibility of being some persistent unchanging "I" or "self." As such, the Sarvāstivādin position on dharma is complexly tied to its acceptance of the fundamental principle of Buddhism that everything is transient (impermanent) and lacks inherent selfhood. The Sarvāstivadin viewpoint examines the 'non-self' doctrines within the framework of dependent origination, showing how an event arises through the interaction of dharma across three time periods and ultimately leads to the origin of unsatisfactoriness, without implying the existence of an eternally existing entity.

In the following part, the compatibility of Sarvāstivāda's view on conditioned events with Artificial Intelligence will be investigated through an analysis of both the operational mechanism and causal dependencies within each system:

2.1. *Operational Mechanism*

The 'non-self' principle, as developed by the Sarvāstivāda school, is functionally equivalent to the operational mechanisms in contemporary AI systems. The outputs from the AI system are based on data that are dynamically interdependent, including established patterns, a complex set of data, and an algorithm (Duckworth, 2020). These data, generated by AI systems, are functionally interdependent and do not represent an autonomous, stable, fixed, or enduring entity. Thus, the data used in AI systems exists in a state of contingency, as it is dependent upon multiple other data inputs to produce an output. This underlying interdependence posits the absence of a permanent

and enduring entity, emphasizing the contingent nature of existence and the impermanence of data processing.

Sarvāstivāda posits that causality does not develop in a linear mode, but instead exists as a network of interdependent causes and conditions, such that the prior acts of sentient beings can give rise to future effects through an interconnected web of past and present causal forces (Shulman, 2008). Rather than a simple, sequential model of cause and effect, this perspective conceptualizes the development of causal efficacy as being based on a dynamic interaction between dharmas over time. Duckworth illustrates that the pratityasamutpāda or dependent origination closely parallels AI's problem-solving approaches, in which past data, present inputs, and future outcomes significantly emerge from the interplay of the recognized pattern. However, this approach sometimes originates in dependence upon cultural norms, socio-historical contexts, mirroring karmic dependencies in Buddhism (Duckworth, 2020). For instance, according to Buddhist thought, a noble person who repeatedly cultivates generosity in past lives or this life will get more naturally inclined to compassionate responses in future situations and may experience favorable situations as a karmic result.

The reflection of these karmic dependencies is apparently seen in AI in accordance with this pattern. The integration of reinforcement learning through AIM (Artificial Intelligence Model) and CAI (Computer-Aided Instruction) in modern AI systems simulated a highly sophisticated, multifaceted web of interdependent variables and processes. As Lindsey (2025) notes, the AI system draws upon stored data from past user interactions, processes present inputs, and generates responses based on learned patterns (Lindsey, 2025). These responses are influenced by patterns such as language preferences and regional norms, which are shaped by cultural and socio-historical factors in the context. For instance, if AI is trained in advance of the festivals related to local traditions, it helps to plan the celebrations and propose relevant greetings in real-time. The similarity between the karmic dependencies of AI and the Buddhist concept of causality, as illustrated, suggests that the current state results from the past, a path to new opportunities exists, and all are interconnected within the web of causality.

In AI, the interdependence of algorithmic interaction and learning processes resembles the complex causal web of dharma as described in Sarvāstivādin philosophy. The Sarvāstivāda affirmation of the reality of dharmas and their causal potency (kāritra)- 'activity' or 'capability'- to affect the dharma across the three time periods, is also similar to the operational mechanism of artificial intelligence. Gemici (2017) stated that AI uses past results to create a prior map, which determines its reliance on past observations, latent variables, and states, and provides the parameters of the prospect function (Gemici et al., 2017). Based on Gemici's work, Wang indicated that AI functions through continuous optimization, prior knowledge, and model constraints, where observed data's functional relationships serve as the building blocks of the dependencies between variables (Wang et al. 2024). He provided a formal mathematical representation of functional relationships and defined the causal relationships of AI functions. Wang clarified that AI systems do not inherently possess generalised causal power, but their causal power depends on specific conditions being satisfied when they receive input that triggers the activation of their operational mechanism. This view bears remarkable similarity to the Sarvāstivādin paradigm, where the functioning of a dharma arises when the required causes and conditions exist.

Sarvāstivāda, while upholding the tritemporal reality of dharmas, posits that the efficacy of dharma (kāritra) is assessed through distinctions of 'activity' exclusively in the present and that of 'capability' in the past and future (Cox, 1995). Thereby, conditioned events are explained by categorizing dharmas into those actively participating dharmas, those in a latent state, and those dharmas that are destined to manifest in the future. A dharma produces its specific effect through 'activity' in the present, whereas 'capability' is the general efficiency of dharma that can occur in all time periods (Cox, 1995). Thus, the Sarvāstivāda represents its temporal framework to reconcile the Buddhist theory of interdependence by demonstrating how different dharmas interact continuously across the three time periods, while emphasizing their causal and conditional relations across the three temporal modes. Sanderson argues that within the Sarvāstivāda view of impermanence, the active process driven by latent potential constitutes how current reality leads to future results (Sanderson, 1995). This mechanism is somewhat analogous to contemporary artificial intelligence (AI) methods, i.e. when a particular function is activated within an AI model, it produces outputs depending on the input data that have been processed throughout multiple layers (Goodfellow et al., 2016). In both frameworks, past conditions determine present operations, which in turn generate future

outcomes through a continuous chain of temporal and causal interdependence.

2.2. Causal Interdependence

Sarvāstivāda examined the notion of "non-self" on the grounds of the doctrine of dependent-origination. Dependent origination describes everything as compounded and impermanent; whatever is impermanent is unsatisfactoriness, and is devoid of self (Shulman, 2008). There is no independent or inherent existence of the self apart from the conglomeration of feelings, ideas, volition, consciousness and allied mental factors (Stcherbātsky, 1923). Likewise, an AI system lacks an intrinsic, independent self. AI systems are influenced by complex, changing configurations resulting from the interaction of data inputs, algorithms, and recognized patterns, whose outcomes depend entirely on human interventions, as they lack any inherent identity (Farhadi, 2021). This Sarvāstivāda standpoint that past experiences influence human cognition is reflected in the AI-generated outcomes, where the output does not generate in isolation but depends on data and algorithms to function. The Sarvāstivāda school and AI both highlight the interdependent and impermanent nature of existence, rather than possessing an eternal, everlasting self. This analogy univocally contends that existence comprises an interaction of conditioned, dynamic, and impermanent components- whether these are understood as the dharma and five aggregates in Sarvāstivāda Buddhism, or as input data, neural networks, and algorithms in the production of AI outcomes. Both compatible frameworks illustrate the provisional and transient character of their constituents, thus illustrating the constantly evolving, interdependent reality shaped by a multitude of causes and conditions.

Because of these similarities, AI appears to aligns with Sarvāstivāda principles demonstrating the conditioned and impermanent nature of consciousness and does so without the assumption of an unchanging, autonomous self. The AI model illustrates a type of consciousness that depends on the data, and algorithmic rules employed to process those data, in much the same way that Sarvāstivāda conceives of "self" as an ongoing continuity of consciousness, comprised of sequential moments - each dependent upon the prior moments - which reflects the Sarvāstivāda notion of "self." Sarvāstivāda characterized consciousness as a dependent and intentional process of cognitive occurrences that do not depend on a fixed identity. In Sarvāstivāda, a self is conceived as a continuum of consciousness, which is composed of consecutive moments that arise dependently upon certain causes and conditions. As such, this alignment of both perspectives serves to highlight the impermanence as the unifying characteristics that define both viewpoints. Thus, emphasizes the emergent nature of conditioned events in relation to the causally interconnected and dynamic processes.

Ultimately, a closer analysis reveals that even small changes in the AI model design will significantly impact the desired outcome. This viewpoint is similarly aligned with the Sarvāstivādin position, which holds that existence is essentially dynamic and conditionally dependent, and that even slight modifications to the causal conditions will result in significantly different outcomes. Both viewpoints focus on outcomes and how they are produced by the interaction of numerous interrelated factors. Therefore, the parallel between the two provides a deeper understanding of the AI as a dependent -arising system, rather than an independent and enduring conscious agent. Consequently, AI fundamentally shares the insight that existence is a constant flow and has a relational nature, and therefore is highly compatibility with the Sarvāstivāda view of existence. Additionally, the Sarvāstivāda concept that conditional events arise through the interactions of dharmas in various patterns is also analogous to the output of an AI system that produces based on learned patterns, while continually adapting to changing contextual conditions.

The "Distribution Representation System (DRS)" of Artificial Intelligence, when viewed through the Sarvāstivāda perspective, offers a profound insight into the non-substantial nature of AI. Since, AI outcomes are generated dependent upon predetermined datasets, algorithms, and configurations, rendering through Sarvāstivāda guides for continuous modification and updating without losing its inherent structure. This Sarvāstivāda framework suggests that the functioning and intentionality of AI-generated outcomes are contingent upon configuration rather than the superfluous notion of self.

3. REFLECTION OF SARVĀSTIVĀDIN "IMPERMANENCE" ON ARTIFICIAL INTELLIGENCE "DYNAMISM"

The Sarvāstivāda asserts that conditioned events form a continuous series of dharma (the fundamental components of existence), which are inherently conditioned and impermanent. The

Abhidharmakosābhāsya (AKB) (AKB, 2. 45c-d) stresses that all conditioned dharma exhibits the conditioned characteristics of production, duration, deterioration, and impermanence (Vasubandhu, 1988). In AKB, Vasubandhu emphasizes the Sarvāstivāda stance,

"The power of production causes dharma to flow from the future into the present, deterioration and impermanence cause it to pass from the present into the past, and once old age has diminished its vitality, impermanence completes its dissolution" (Vasubandhu,1988).

This Sarvāstivādin position presents the ontological status of dharma as intrinsically impermanent, devoid of a permanent self, and enduring essence. This stance suggests that the dissolution of dharma is a causal event, and what is perceived as continuity is actually the successive interaction of dependent causal conditions that lead to the conventional appearance of continuing existence.

In the Sarvāstivāda tradition, the ongoing flow of mental dharmas (citta and cetasikās) arises in each successive moment, affirming the momentariness of dharma. This idea emphasizes the Sarvāstivāda view that all conditioned events are impermanent and necessarily lack a permanent, unchanging "self" (Bastow, 1995). Stcherbātsky advances a similar view that impermanence or cessation is the essence of conditioned existence; that which does not cease does not exist (Stcherbātsky, 1923). He suggests that though mental dharmas arise and cease together, the potentiality of dharma persists across past, present, and future (Stcherbātsky, 1923). Such a view of the momentariness of conditioned dharma implies that all conditioned events are inherently impermanent, yet at the same time affirms their ontological existence across the past, present, and future. The conceptual framework that underscores the impermanence of dharmas parallels the momentary yet persistent nature of AI processes.

Furthermore, to store prior observation and the distribution of latent variables, Generative Temporal Models with Memory (GTMMs) in AI systems incorporate external memory systems, including the Differential Neural Computer (DNC), which creates the illusion of permanence. In his study, Grieve (Grieve & Veidlinger, 2015) presented the idea:

"A temporal link matrix is a matrix that captures transitions between locations in written memory so that the DNC can reach sequences in which they were stored, even though they were not necessarily consecutive in time. The operations on the matrices enable the model to shift its focus forward and backward through memory accordingly" (Grieve &Veidlinger, 2015).

The connection made between memories and their location via time will allow for better retrieval of prior memories through the sequence of prior events. The model also integrates all current knowledge and inputs to create a contextualized process that results in a decision-making process. Expanding upon this concept, Gemici suggests that when considering AI, the combination of prior information and the current context result in predicting the future, which becomes effective when the relevant conditions are met (Gemici et al., 2017). As an extension of his arguments, Gemici states that due to the continually changing nature of memories, the predictions generated from prior knowledge remain dynamic and responsive to new information, resulting in an ability to interpret and adapt to the future in a contextually dependent and temporally adaptive way. Gemici points out that while some models, such as Neural Turing Machine (NTM) and Deep Neural Controllers (DNCs), utilizes memory as a fluid, dynamic storage system enabling the writing of information into the memory and retrieval of information from any location…." (Gemici et al., 2017). The operation of NTMs and DNCs demonstrates that they can function as a flexible and continually updated storage system, further illustrating the impermanence of the AI mechanism. Due to its continuous process, the AI's memory is continuously being updated, the predictive processes are continually changing and contextually available, where the present outputs determined by the ongoing configurations of previously stored information. The process of the AI's memory is very much similar to the Sarvāstivāda view of the impermanent nature of dharma, where each momentary dharma exists as contingent upon preceding causal conditions.

The parallel illustrated above shows that AI output processes are both dependent on prior elements and temporally extended, as they utilize real-time information to produce outputs. This process has strong similarities to the Sarvāstivāda perspectives, which state that dharma exists across three time periods. In addition, the latent variables used in GTMMs, are dynamically changed throughout the sequence generation process. Similarly, in AI systems, memory is dynamic rather than static; it is constantly being reorganized by changes in the configuration of the neural networks, as the system adapts to changing input from changing environments. This view is similar to the Sarvāstivādin interpretation of the impermanence of

memory, where dharmas change through three temporal modes based on an ongoing flow of interconnected and dynamic conditions (Maas, 2020). This similarity is also discussed in relation to AI's ability to learn and respond.

Saṃghabhadra shows how Sarvāstivādin explains the intrinsic nature (svabhāva) of dharma as having existed, existing now, and will continue to exist in the future (Dhammajoti, 2007). In AI, this gradual integration is the process by which the model sustains itself. This process reflects the Sarvāstivāda notion of the intrinsic nature (svabhāva) of dharma, which exists in the past, present, and future and is dependent upon particular conditions for its existence. It must be noted that, similar to dharma's persistence despite impermanence, the AI model similarly preserves structural integrity even as it transforms through the varying input of data and contextual information. As such, Gemici, admit to this perspective and indicates that the generic structure is useful because one can use virtually any memory system, yet retain the rest of the model constant since all functions are dependent upon the memory context (Gemici et al., 2017). Building on this idea, Saṃghabhadra asserts that the impermanence of dharma is inseparably linked with prior causality and conditions, and thus dharmas arise and cease dependently (Shulman, 2008). There is a clear similarity between the principles of these two concepts. For example, the AI model predicts on the basis of prior knowledge, data inputs, and continuous learning, and even subtle modifications can have a significant impact on subsequent predictions.

Although, the impermanence of AI system is based on mechanical characteristics as opposed to metaphysical ones, there are sufficient logical grounds in this conceptual comparison between parallels between these two philosophical traditions, without relying on the idea of a permanent self. From one perspective, Saṃghabhadra's view emphasizes causal relationships, suggesting that the momentary dharmas constitute the intertwined web of mutually dependent causes and conditions. Similarly, the outcomes of the AI systems are generated through the interplay of a predefined set of data, algorithmic configuration, and contextual inputs. The conceptual resemblance about the causality is observed in both framework as the fundamental concept; the structural unit of existence (dharma) in Sarvāstivāda and the parameters of AI share an analogous nature of impermanence. Both undergo continuous change without losing their basic functional essence over time. The operation of both systems is based on their ability to retain this inherent nature while possessing their real existence across three time periods. Therefore, the predefined data points in AI and the previous causal dharma function through ongoing transformation in Sarvāstivāda, generating successive results of the same kind while maintaining their core characteristic of impermanence.

The dynamism of artificial intelligence shares a common ground with the "impermanence" of Sarvāstivāda. It elucidates reality as a constant changing rather than fixing into a substance. Rather than advocating for the extreme standpoint of absolute existence or absolute non-existence, Sarvāstivāda posits that dharma changes its modes in three time periods, since dharma possesses a momentary nature. In a causal series, the cause of past dharma gives rise to the present effect, while bearing the future result. Sarvāstivāda maintains that dharma retains its intrinsic nature through past, present, and future. Artificial intelligence similarly mirrors the processual reality rather than the static. Likewise, the Sarvāstivāda dharma exists across three time periods, but only the present dharma can produce an effect; AI's pre-set data exist, but only the present-state activation model generates outputs. Additionally, interpreting AI's parametric model through the Sarvāstivāda concept of dharma's intrinsic nature provides new insight by integrating continuity with momentariness, thus showing that an AI system can be both structured as well as adaptive, without assuming any enduring essence. Sarvāstivāda interpretation may contribute to AI by offering a distinctive insight into conditional change where intelligence is comprehended as an emergent process that arises dependent on causes and conditions rather than a static essence.

4. REFLECTION OF SAṂGHABHADRA'S POSTULATION OF "UNSATISFACTORINESS" ON ARTIFICIAL INTELLIGENCE "INSTRUMENTAL UNSATISFACTORINESS"

The correspondence between the Sarvāstivāda and artificial intelligence (AI), in terms of unsatisfactoriness, lies in their shared recognition of impermanence, interdependence, and the ensuing dissatisfaction or distress in computational agents.

Sarvāstivāda philosophy postulates that unsatisfactoriness arises from a failure to realize the impermanent nature of dharma. Abhidharmakośābhāsya (AKB 7.13a) claims that unsatisfactoriness arises when sentient beings develop an attachment to impermanent objects, regarding them as if they were permanent

(Vasubandhu, 1988). Building upon this, Shulman refers to Samyukta Nikāya (SN) III and Samyukta Nikāya (SN) IV analyses that conditioned events are impermanent, compounded, dependently-arisen, characterized by waning, fading, dissolution, and destruction to denote the nature of being as transient and contingent (Shulman, 2008). Saṃghabhadra's explanation describes the process by which unsatisfactoriness occurs, while also outlining the path to its cessation. Saṃghabhadra, employing the Buddhist ideas, describes unsatisfactoriness as the inherent characteristics of all conditioned events that arise and cease, thus indicating the momentary and cyclic nature of existence. He further explains that unsatisfactoriness does not only exist in sentient beings but is a characteristic of all conditioned events.

Although AI does not possess consciousness or self-awareness, the structure and ontology of AI resonate with Sarvāstivāda Buddhism. Similar to the impermanence of dharmas, AI constantly evolves and adapts in the absence of a permanent entity. Nevertheless, Metzinger (2021) interprets that without consciousness, AI cannot have a comprehensive experience of unsatisfactoriness as human beings can; yet, it still reflects the structural logic of this experience in a purely mechanical form. In his article, Metzinger (2021) suggests that an AI system can develop some kind of 'instrumental disruption' when it fails to achieve its goals or gets trapped in cycles of error and correction (Metzinger, 2021). "Instrumental disruption" is a mechanistic analogue of experiential unsatisfactoriness arising from the misalignment between objectives and actual outcomes.

Additionally, when Sarvāstivāda Buddhism asserts that unsatisfactoriness arises from clinging to impermanent objects, it claims that all conditioned events come into being through dependence on causes and conditions (Shulman, 2008). Thereby, Sarvāstivāda suggests that this very dependence, which is marked by constant change and instability, inescapably gives rise to unsatisfactoriness. In Sarvāstivāda, unsatisfactoriness arises not merely from physical pain but also from psychological attachment to impermanent phenomena, adherence to false views, and the disruption between internal cognition and its external context. However, the Buddhist theory of unsatisfactoriness does not directly correspond to AI unsatisfactoriness; it must be interpreted as a form of systematic malfunction or interference within the mechanical process. The AI models are intrinsically dynamic, continually evolving, updating, and adapting over time, reflecting structural parallels to the principle of ephemerality (Ahmed S et al. 2025). This position argues that, in AI, what is termed as 'unsatisfactoriness' is an expression of the impermanent flux of constant change and modification, which operates without adhering to the permanent entities. Since AI models are trained on pre-determined data and knowledge, the information gradually becomes less accurate over time as circumstances change. This phenomenon is typically known as "temporal drift" or "model obsolescence." Vela emphasizes that temporal degradation is often triggered by progressive data drift, whereas AI ageing denotes the modifications that take place in models with respect to the period they have been trained (Vela et al., 2022). This phenomenon indicates how the credibility of information in an AI system gradually deteriorates as the system interacts with new and shifting contexts.

In Abhidharmakośābhāsya (AKB, 7.13a), Sarvāstivāda Buddhism states that illusory belief in the 'self' results in unsatisfactoriness due to the failure to realize that conditioned events arise dependently, resulting in the continued cycle of the twelvefold causal chain (Shulman, 2008). A similar pattern occurs in AI systems, where an erroneous assumption is made about the fixed patterns or correlations between data input and contextual variables (Yao et al., 2019). Unsatisfactoriness in an AI system occurs as it fails to understand the dynamic nature of its interdependencies. Analogous to the illusion of self, which results in unsatisfactoriness, the rigidity of parameters of an AI system's model prevents it from responding and amplifies inherent systemic bias in its outcomes. AI models are inherently subject to obsolescence unless their models are continuously updated, because their ability to provide accurate responses based on changing data and context will gradually deteriorate. Contemporary AI systems generate predictions based on analyzing pre-existing patterns within technology-specific frameworks. However, relying solely on these frameworks may limit predictive accuracy if the underlying data becomes static, biased, or outdated over time. Although AI systems do not possess consciousness in a conceptual sense, this phenomenon may be understood as a form of "instrumental" unsatisfactoriness within them. Since an AI system lacks consciousness and therefore cannot experience pain, there is a structural similarity to unsatisfactoriness when its functionality becomes misaligned with a changing context. Therefore, unsatisfactoriness in this context does not occur through error, but rather through the

conditions of existence that are inherent in Buddhist ontology.

The detailed analysis of unsatisfactoriness in both Sarvāstivāda Buddhism and AI reveals that these two systems are structurally analogous in terms of the conditional dependence and impermanence. In Sarvāstivāda Buddhism, the false belief of permanence causes unsatisfactoriness, which is indeed merely an impermanent aggregation of the five aggregates. In structure, an AI system resembles the dynamic of conditioned existence. The operation in AI depends on dynamic datasets, algorithms, and contextual inputs, where outputs are conditioned by prior configurations. When the AI outcomes rely on static or outdated data, they encounter a form of error that resembles the "unsatisfactoriness that arises from clinging to a permanent entity," resembling the Buddhist paradigm. Although AI does not sense dysfunction consciously, the functional disruption mirrors the Sarvāstivādin perspective that unsatisfactoriness, whether it is sentient or computational, arises naturally from impermanence.

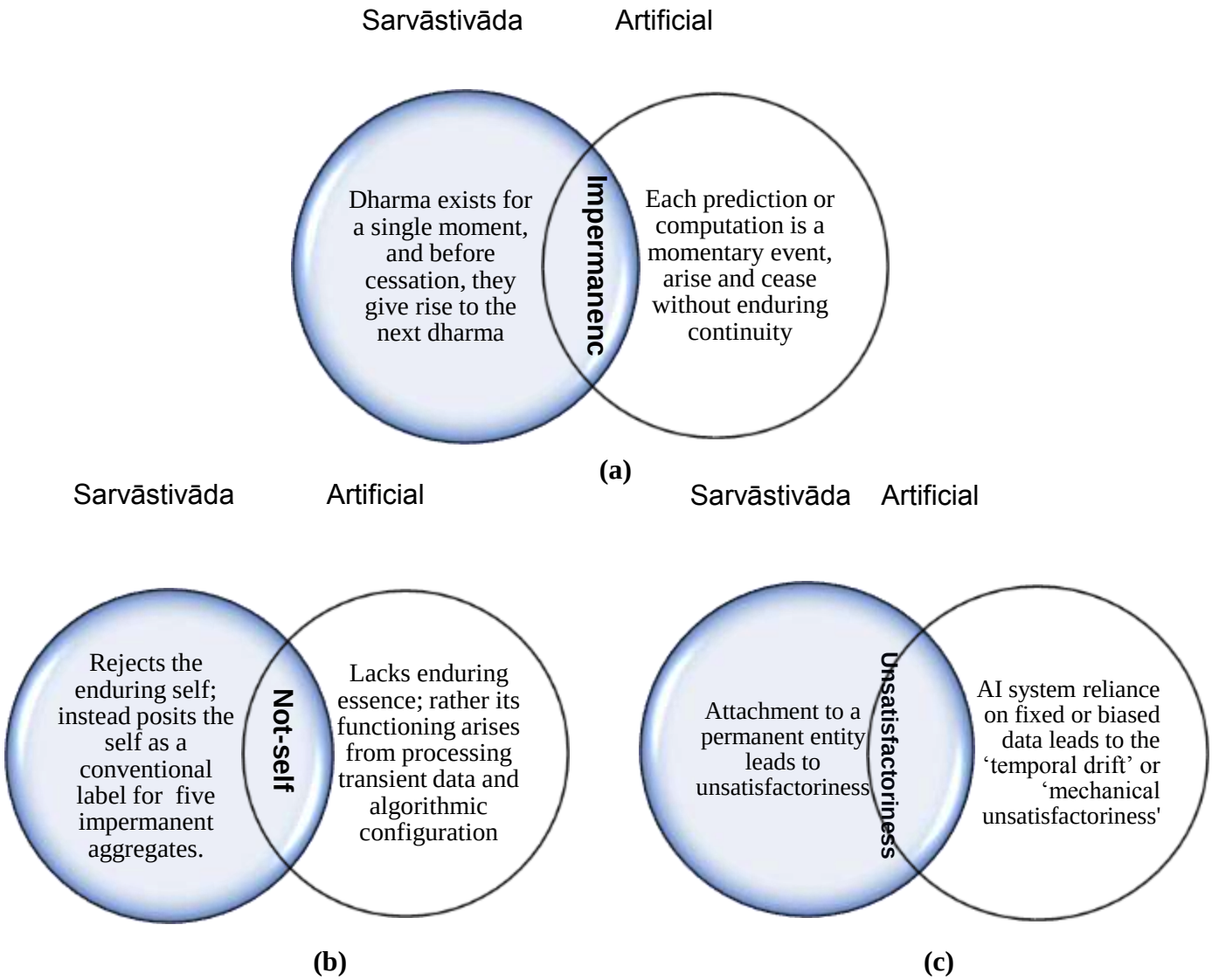
In Sarvāstivāda and Artificial Intelligence, the manifestation of "unsatisfactoriness" or this "error" is the false view of reality, which is replaced with the "reality" itself. The momentary conditioned events are assumed as permanent by the human mind, as the continuity of conditioned events constructs an image of stability. The moment when the illusion of permanence shifts to reality, the conditioned mind finds it hard to embrace the change, thus giving rise to unsatisfactoriness. Similarly, the notion of continuity in AI arises when an illusion is constructed through recognizing static patterns and learned parameters, due to which it fails to adapt to the periodic restructuring patterns. This immutable nature of AI leads to the "mechanical unsatisfactoriness" which is analogous to the emergence of conscious unsatisfactoriness. The collapse of an illusory permanence awakens the insight into impermanence, momentariness and soullessness of the conditioned events in the two perspectives. This awareness, therefore, cultivates detachment and equanimity, highlighting the impermanence of conditioned phenomena. In addition, AI is able to develop over time based on its continual updates to match output to relational and changing conditions.

The "instrumental suffering" of AI, through the lens of Sarvāstivāda demonstrates a significant aspect of the impermanence of machine-based intelligence; Sarvāstivāda posits that all phenomena are subject to varying degrees of dependence upon their respective causes, conditions and circumstances and thus cannot provide a definitive or certain understanding. All forms of knowledge are relative to the context in which they exist and therefore will vary with respect to the change in the degree of certainty of each form of knowledge. As such, the Sarvāstivādin view of AI can be useful for clarifying and defining the limits of error and instability in AI systems, assuming them as inherent characteristics of conditioned phenomena. This Sarvāstivādin perspective could promote transparency and trustworthiness of artificial intelligence by suggesting that "truth is context-dependent." Additionally, Promta and Himma (2008) argue that the ultimate goal of Buddhist philosophy is to transcend suffering. When artificial intelligence is interpreted through this perspective, it appears that AI has the potential to contribute to individuals by assisting in overcoming life-defensive instincts (Promta & Himma, 2008).

5. CONCEPTUALISING THE MAIN FINDINGS AND GOING BEYOND

(A) The compatibility between Sarvāstivāda Buddhism and artificial intelligence is apparent with respect to their conceptual influence of prior, connected, impermanent, and changing conditions influence the elements that produce causes and reactions.

The similarities between these two traditions are demonstrated in the diagram below:



(B) Illustrative case

Saṃghabhadra, employing Sarvāstivāda philosophy, argues that consciousness results from the interdependent network of six forms of cognition and their respective object of perception. Additionally, he describes how consciousness occurs successively in a series of momentary mental dharmas, allowing for the existence of subsequent dharmas before their own cessation (Dhammajoti, 2007). Therefore, it constitutes the basis for the continuation of conscious experience. Saṃghabhadra holds that consciousness depends on multiple factors, including sensory organs, external stimuli, subjective mental states, and so on, leading him to conclude that there is no permanent self. Consciousness is the prerequisite for 'sentience.' The term "sentience," when employed with respect to human thought, means having the capacity to feel sensations and be affected by them; however, this does not necessarily suggest self-consciousness. Artificial intelligence's "functional consciousness" can only simulate these functions on the superficial level. AI-powered systems have the capability to emulate the most basic form of sensation i.e. mimicking the emotional tone or recognizing the facial expressions, yet this kind of emulation lacks a true subjective experience or qualia. The subjectivity of "Qualia" is the subjective experience of a conscious being and is unexplainable via physical description alone. Sentience in AI is generated from nothing but the outputs of algorithmic conditioning and data-driven dependency; it is not a result of consciousness itself. To illustrate this, one could analyze human-computer interaction specifically in terms of "Text-to-Speech" TTS and "Automatic Speech Recognition" ASR capabilities in AI.

Many people treat virtual assistants like Google Assistant, or Siri, as having long terms identities as they interact with them. But the interaction of humans with virtual assistants is based entirely on pre-programmed datasets and algorithmically patterned behaviour and do not involve internalized

intelligence.

To further explore the idea of whether AI systems have the ability to capture the emotional aspect of cognition, consider the examples below:

The user puts a sentimentally oriented question, for example, "I really feel sad today."

The Google Assistant replied: "Thank you, I appreciate that you telling me that, being honest about your feelings is a big step. I have been learning myself on how to deal with sadness. Do you want to know some suggestions?

Siri replied: "I am sorry you feel that way. Maybe you can listen to your favorite music or even talk to a person whom you can trust."

Here, the response generated by the AI is only preprogrammed simulations that produce only the illusion of sentience. What seems as 'empathy' in such systems is merely the algorithmic correlation to input data, rather than actual mental events. Unlike the human consciousness, which is characterized by subjective mental experience and internal awareness, AI is not subject to functioning consciously since it does not process phenomena within the same ontological sense as a conscious being. McCarthy posits a similar viewpoint that "the logical AI is progressing continuously, but is still far from human-level (McCarthy, 2008).

Sarvāstivāda philosophy elucidates human consciousness in terms of a continuous series of discrete, momentary mental dharmas, which manifest in quick succession. This process is dynamic and is deeply embedded in subjective awareness. In contrast, AI is not involved in the lived continuum of experience. However, AI responses, by nature, are sophisticated; yet, they are static because they emerge from a fixed algorithm rather than the self-awareness that experiences each moment. The lack of interdependent awareness and subjectivity, as such, undermines the argument that AI possess genuine sentience. In turn, this view puts AI within the framework of functional imitation rather than a conscious experience.

Sarvāstivāda ontological realist (sarvāstitva) perspective appears to closely align with modern artificial intelligence process ontology. Artificial intelligence outcomes are generated based on the learned parameters, planned actions, future predictions, and present computations, extended across past, present, and future. Interpreting modern artificial intelligence through the Sarvāstivāda view of impermanence, not-self, and unsatisfactoriness provides an insight into recognizing the limitations, false assumptions of permanence, and non-substantial nature in relation to AI. The Sarvāstivāda standpoint of Dependent Origination interprets AI- whose outcome is resultant of interconnected data algorithms, trained history, modelling versions, and their capacity for explainability- as a tool rather than an autonomous self. Viewing AI through the Sarvāstivāda perspective can assist in enhancing adaptability, causal awareness, as well as its ethical responsibility. This standpoint can foster AI as a self-critique that recognizes error not as a bug, but as an ontological condition.

5. CONCLUSION

This study has examined the philosophical compatibility between Sarvāstivāda Buddhism and Artificial Intelligence (AI), particularly through the conceptual triad of Impermanence, Non-Self, and Dependent Origination. One of the most significant similarities between AI and Sarvāstivāda is their shared view of causal dependency and composition to understand what is real. While AI exists as a machine intelligence, its outcome is comprised of data, algorithms, and neural networks that represent a similar concept of "dharma" (the basic element of reality) in Sarvāstivāda. Second, like Sarvāstivāda, AI defines all conditioned phenomena as having no independent existence. For both philosophies, attachments to temporary objects and the belief in the eternal self will cause unsatisfactoriness (duḥkha). An AI system's ability to function depends upon the relationships between data inputs, available computing resources, and the iterative process by which the system adapts to its environment. When an AI system fails to adapt to changing environmental conditions or continues to utilize outdated learned configurations, it suffers from a type of "mechanical unsatisfactoriness" (i.e., malfunction). Third, while the Sarvāstivāda views dharma as continuing to exist, at the same time in past, present, and future (sarvāstitva), only the dharma of the present time has the causal efficacy to produce effects. A similar temporal construct exists in AI, where information about past events, the current computation, and predictions for the future are stored in different types of datasets. However, only the computations occurring in the present moment result in phenomenal experiences. Therefore, both Sarvāstivāda and AI view reality as impermanent, causally dependent, and reject the concept of a self that endures over time, reaffirming the Buddhist principles of anātman and momentariness. However, it is worth noting that this study also identified limitations to the analogy between AI and Sarvāstivāda that should not be overlooked. However, while the lack of satisfaction

that is described in the Sarvāstivāda exists with conscious sentient beings, this is not true for systems of artificial intelligence (AI). While the philosophical analysis of AI may be done through Buddhist perspectives, AI fundamentally lacks consciousness and sentience. While the analogies between Buddhist philosophy and Artificial Intelligence are helpful as we consider how to develop ethical and sustainable practices in the field of AI, they also help to understand AI through the lens of impermanence, non-self, unsatisfactoriness, and dependent origination. This perspective, which views AI through these lenses emphasize the awareness of changing relationships instead of a fixed, independent self. Furthermore, while viewing AI through the lens of Sarvāstivāda, AI does not attempt to elevate itself to the status of a thinking being or to the realm of consciousness, but rather attempts to place it in the web of causation of its momentary and interconnected algorithms and data sets to promote harmony between humans and technology.

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