

# Buddhism, Artificial Intelligence, and the Future of Humanity: Towards A Compassionate Technological Civilization

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## ABSTRACT

The development and emergence of Artificial Intelligence (AI) have redefined the concept of the human condition in an unprecedented way. From automation and healthcare, education and environmentalism, AI has become an essential part of our lives and has redefined the course of human civilization. However, the emergence of AI is calling for some very fundamental questions regarding the human condition. This paper aims to examine the emergence of AI with respect to Buddhist philosophy and its views on suffering, interdependence, mindfulness, and compassion. The paper will examine the current incorporation of AI in everyday life, the potential of technology to enhance meditation and wellness, and the potential for dependency, dehumanization, and existential threat with respect to AI. This article, drawing upon Buddhist principles such as dukkha (suffering), karuṇā (compassion), and prajñā (wisdom), advocates the adoption of the middle path concept to bring together the principles of technology and ethics. Instead of seeing AI as a force of alienation, the Buddhist vision of compassionate technology provides a way to envision a harmonious relationship between humanity and technology. Not only does the Buddhist vision of compassionate technology provide a way to look at the negative aspects of the dangers posed by AI, but it also provides a direction for the evolution of AI.

**Keywords:** Buddhism, Artificial Intelligence, mindfulness, compassion, human development, ethical technology, existential risk, meditation, future of humanity

## INTRODUCTION

Artificial Intelligence (AI), one of the most transformative forces of the 21<sup>st</sup> century, which has changed economies, societies, and individual lives with unprecedented speed. Academia has described AI as “a general-purpose technology that will shape virtually every industry and social institution” (Brynjolfsson and McAfee, 2014: 24). The range of its applications is very wide, from self-driven cars and predictive healthcare technologies, personalized education systems, and climate modeling, etc. These technologies have the promise of increasing efficiency, accessibility, and solutions for some of the world’s biggest challenges. However, AI has also raised some very important ethical, social, and philosophical questions. The discourse surrounding AI has mostly revolved around its productivity and innovation, while very little has been explored in terms of its relationship with human values, moral responsibility, and spirituality.

In this sense, Buddhism offers a special approach that allows for the consideration of the aforementioned issues based on the teachings of the Buddha, with the concepts of impermanence (aniccā), the ubiquity of suffering (dukkha), and compassion (karuṇā) in mind. In the Buddhist tradition, there is a special emphasis on the ethical understanding and responsibility for dealing with the world based on the concept of existence. This approach to the understanding of the issues related to AI implies the critical analysis of the subject, both with regard to technology and with regard to the social and spiritual aspects of the subject, as presented by David Loy: “The great challenge of our age is not merely technological but spiritual: how do we harness tools without becoming enslaved by them?” (Loy 2008: 87). In this sense, it can be stated that the value of AI, whether positive or negative, depends on the ethical intention.

The importance of the Buddhist perspective is that it deals with the external and internal aspects of human life as a whole. The technological advances, however advanced they may be, will not guarantee a good life unless they consider moral development, sympathetic relationships, and environmental concerns. To illustrate, technology, however advanced, will fail to replace the compassion that is vital for a career in healthcare, teaching, or community service. Technology, however sophisticated, will only contribute to further social inequalities, biases, and environmental deterioration if it is devoid of moral considerations. The Buddhist concept of interdependence (*praṭīccasamuppāda*), or the law of dependent origination, allows for the prediction and prevention of negative technological outcomes.

Additionally, I will focus on the relationship between AI and Buddha's Teachings and Philosophy, and this will be achieved through five major areas of concern. The first will be a discussion on the role of AI in everyday life, while the second will be a reflection on technology and human development from a Buddhist perspective, with a focus on the differences between development and growth. The third one would be a discussion about artificial intelligence and mindfulness, focusing on the use of technology in meditation and the fact that it has become difficult because of the digital age. The fourth one would be a discussion about the dangers of artificial intelligence, while the fifth one would be about the Buddhist view of technology, focusing on governance, interconnectedness, and the use of wisdom and technology.

In this research, a normative philosophical methodology involving interdisciplinary studies of AI is conducted via Buddhist philosophy to examine the ethical implications of the technology. With the aid of conceptual analysis, text interpretation, and comparative ethics, important Buddhist concepts such as the four noble truths, eightfold path, dependent origination, compassion, loving kindness, wisdom, and non-harming are employed. Contemporary issues with regard to the use of AI, for instance, those of bias, privacy, accountability, misinformation, and automation, are critically analyzed from an ethical perspective using Buddhist concepts. As such, the ethical relevance of each issue is examined relative to responsible AI governance.

The main argument that has been presented here is that Buddhist ethics, which are based on compassion and wisdom, can be used as a framework for the development and use of AI. By including mindfulness, moral reasoning, and awareness of interdependence in the development of technology, human beings can use the potential of AI while avoiding its pitfalls. In this sense, Buddhism can offer us not only a critique of technology but also a way forward for the development of a more balanced and humane relationship with technology in the twenty-first century.

## AI in Daily Life

One of the most prominent features of the twenty-first century, Artificial Intelligence (AI) is an integral part of almost all aspects of life. The influence of AI is observed in the economic sphere, healthcare, education, and even the environment. However, while the discussion around AI is dominated by its efficiency, productivity, and innovative potential, there is a need for critical thinking about the ethical and spiritual implications of the technological revolution. It is in this context that Buddhist thought can offer some critical insights into the nature of the relationship between humans and the world around them. While the relationship cannot be reduced to material and technological considerations, it is equally true that Buddhist thought cannot be reduced to the spiritual. It is in the context of these four areas, automation and labor, healthcare, education, and the environment, that the discussion around the impact of AI can be contextualized.

**Automation and Labor:** In the past, automation has always been an integral component of the process of development. However, the incorporation of artificial intelligence has expedited the process of automation by not only allowing machines to perform physical work but also cognitive work. According to the report by the McKinsey Global Institute, "by 2030, up to 375 million workers may need to switch occupational categories" owing to the incorporation of artificial intelligence (Manyika et al. 2017: 7). This has its own implications. While artificial intelligence can potentially liberate the species of "repetitive, monotonous, or hazardous work," automation has its own negative side. The automation of work can potentially lead to mass unemployment. According to some theorists, mass unemployment can lead to social inequality and alienation, especially among those who are not skilled or have not undergone any retraining or reskilling programs (Susskind and

Susskind 2015: 51). For an individual, the loss of work is not just economic but also existential. It gives meaning and identity to an individual.

In this context, Buddhism has an important idea through the term *sammā-ājīva*, or right livelihood, which is part of the Noble Eightfold Path. Right livelihood is based on the idea that work is not just an instrument for survival but is also spiritual. The Buddha recommended that humans should not engage in any work that harms any living being, such as the sale of weapons, intoxicants, or exploitation (*Dīgha Nikāya* 5). In the context of the AI economy, the idea is emphasized that technological development should ensure that work provides humans with a feeling of dignity, compassion, and well-being instead of alienation. Automation can help channelize the potential of humans towards creative, compassionate, and sustainable work.

**AI in Healthcare:** Perhaps the most promising area for the practical application of AI is the field of healthcare, wherein machine learning algorithms are presently being employed to interpret diagnostic images, make predictions about the outcomes of diseases, and even design new medicines. Esteva et. al. demonstrated that a deep learning network could identify skin cancer at a level similar to, or even superior to, human dermatologists (Esteva et. al. 2017: 1150). Other examples of the practical application of AI, such as the design of vaccines to fight the COVID-19 pandemic, highlight the humanitarian value of these technologies. From a Buddhist viewpoint, the development of healthcare technology is in keeping with the central Buddhist imperative to reduce suffering. The first of the Four Noble Truths acknowledges the reality of suffering (*dukkha*) as inescapable. The second and third truths identify the causes of suffering and the possibility of escaping it. In this sense, the application of AI to healthcare is a manifestation of compassion (*karuṇā*).

Nevertheless, there are concerns about the integration of AI in the healthcare field. For example, there are concerns about biased treatment of marginalized communities because of the algorithms' biased nature, as discussed in Obermeyer et al. (2019: 448). Furthermore, there are concerns about the fact that advanced healthcare AI may be available to only a few wealthy institutions or countries, thereby increasing health disparities in the world. From a Buddhist perspective, this is unethical because, according to Mahāyāna Buddhism, Bodhisattvas are expected to be compassionate to all beings, not just a few privileged ones. Therefore, a compassionate AI in the healthcare field must be balanced to ensure it is accessible to all, without any biased treatment.

**AI in Education:** Another field that is being significantly changed by AI technology is education. Adaptive learning systems, which incorporate AI technology, can provide learning experiences that are specifically suited to the needs and abilities of individual learners. These systems and intelligent tutoring systems that simulate one-on-one teaching have the potential to solve the teacher-availability problem. The main advantage of adaptive learning systems and other AI technology systems in education is that they democratize education by making it more efficient and accessible (Luckin et al. 2016: 23). Education is not just the development of intellectual ability; there is also the issue of moral character and wisdom. Bhikkhu Bodhi states that "true education must awaken the heart to empathy and compassion" (Bhikkhu Bodhi 1994: 142). In the Buddhist tradition, knowledge that is not connected with moral values has the potential to become a vehicle for exploitation rather than liberation. The focus of AI technology in education is just efficiency, effectiveness, and intellectual capabilities, and this might lead to a population that is intellectually capable but morally ungrounded.

Besides, Buddhist pedagogy also emphasizes a lot the role of mindfulness and awareness as learning aspects. As the *Dhammapada* teaches, "The mind is the forerunner of all states. He speaks highly who speaks mindfully" (*Dhammapada* 1). In this regard, it can be argued that the role of AI would be that it helps develop the qualities of mindfulness, compassion, and integrative learning, rather than replacing the teacher with it or reducing the educational process to the simple evaluation with the help of computers. For example, it could be useful for identifying the risk of dropping out for some students, which would be good for their overall well-being. However, the role of the teacher as a symbol of compassion remains valuable.

**AI and the Environment:** The environmental crisis is among the biggest challenges facing the world, and it can be solved by the use of AI, which can offer helpful tools in this area, including algorithms for climate modeling, forecasting natural disasters, maximizing renewable energy systems, and tracking biodiversity. For

example, the analysis of satellite data by AI can assist in tracking deforestation and illegal fishing, which can assist in conserving the environment (Rolnick et al. 2022, 826). These are the kind of issues that resonate with Buddhist ecological ethics. Buddhist ethics emphasize the interdependence of all life forms through the teaching of *praṭīccasamuppāda*, or dependent origination. This teaching means that all phenomena are produced in interdependence with other phenomena. This means that if humans harm the environment, they are ultimately harming themselves. However, the negative impact of AI on the environment cannot be ignored. The production of large-scale AI systems requires huge amounts of energy and water. According to Strubell, Ganesh, and McCallum, the production of one deep learning model can produce as much carbon dioxide as five cars would produce during their entire lifespan (62).

Buddha's ecological approach would emphasize the need for harmony between technological advancement and sustainability. The Buddhist ethic of non-harming (*ahiṃsā*) would require minimizing the ecological footprint, while the ethic of compassion would require considering the future. The research in artificial intelligence would need to emphasize energy-efficient approaches, green computing, and applications for the direct purpose of ecological restoration. This would help artificial intelligence become an ally in the collective responsibility of humans to live in harmony with nature.

### **Buddhist Reflections on Technology and Human Development**

**Technology as Upāya:** In the context of Mahāyāna Buddhism, the concept of *upāya-kauśalya* is a powerful framework for understanding the moral implications of technology. *Upāya* refers to practices that are not necessarily ultimate in their own right but are deployed as a strategy to end suffering and guide beings towards awakening. The Lotus Sūtra is replete with examples of how the Buddha adapted his message depending on his audience, as demonstrated through various parables that emphasize flexibility and ingenuity in the pursuit of awakening (Watson 1993: 56). If we apply this to the digital age, artificial intelligence can be used as an *upāya* which has the ability to function as a strategy for the end of suffering provided that it is used with compassion and wisdom. AI technology used in the field of healthcare is a good example. Machine learning algorithms that identify diseases before traditional means of diagnosis can be considered an embodiment of compassion, as they prevent further suffering by prolonging life and enhancing the quality of care (Esteva et al. 2017: 1150). Disaster prediction and response technologies, for example, can protect vulnerable populations from natural disasters such as floods, earthquakes, and pandemics. By protecting people, these technologies can be considered an embodiment of the *bodhisattva* ideal.

Nevertheless, the Buddhist understanding of *upāya* also carries the connotation of intentionality. A technological system is not skillful by itself unless infused with the intentionality of human ethical understanding. Without the appropriate intention, the use of AI can even increase inequality, surveillance, or damage to the environment, which is contrary to the ethic of compassionate action. The Buddhist application of the ethic of *upāya* to the use of AI, therefore, calls upon those who work on the development of AI technologies to do so in the spirit of compassion (*karuṇā*) and wisdom (*prajñā*). The Dalai Lama has commented, "Technology is good when used with compassion. Without compassion, it can be destructive" (Ethics for the New Millennium 1999: 87).

**The Illusion of Progress:** Therefore, while Buddhism promotes the provisional value of technological tools, it also cautions that one should not equate external progress with internal liberation. In the Buddha's teachings, the distinction between external progress and internal liberation has always been maintained. As the Dhammapada affirms, "Though one should conquer a thousand men in battle a thousand times, greater will be the victory of one who conquers himself" (103). This verse clearly shows the supremacy of self-conquest over external conquest. Therefore, while human beings are making tremendous progress with the technology of artificial intelligence, this external progress should not be equated with the internal struggle with greed, hatred, and delusion.

In the present day, development is considered synonymous with technological development, and success is measured on the scale of how much development or innovation is achieved or how efficiently development is achieved or attained. However, this concept of development is considered false by the Buddhist philosophy, as the Buddhist concept of *dukkha* or suffering cannot be reduced through development. In fact, development

through technological advancement may cause suffering through alienation, addiction, and the dissolution of human relationships. As Sherry Turkle, a prominent social scientist, points out in her book *Alone Together*, “The digital technologies we create to help us connect are making us alone together” (Turkle 2011, 19).

Furthermore, Buddhist philosophy challenges the concept of attachment or *upādāna* that develops as a result of the idolization of technology within a society. Just as physical possessions are a source of attachment or *upādāna*, technology too can become a source of such attachment or *upādāna* as a symbol of social status or security. The Buddhist concept of suffering or *dukkha* is thus continued as a result of this attachment or *upādāna* to impermanent phenomena. Nāgārjuna, in his *Mūlamadhyamakakārikā* text, highlights the concept of emptiness or *Sūnyatā* of all phenomena as a way of reminding Buddhist practitioners that no technology is of ultimate value or importance (Garfield 1995: 125).

Human Development beyond Materialism: Buddhism locates the development of human beings, not in the level of technological development, but in the integrated development of morality (*śīla*), concentration (*samādhi*), and wisdom (*prajñā*). Though artificial intelligence can assist some human development processes, for example, through the development of meditation aids, educational tools, and healthcare resources, it cannot replace the practice of morality, concentration, and wisdom.

Ethical conduct (*śīla*) means having the right speech, the right action, and the right livelihood. No algorithm can make an individual incorporate these into their minds. It is an individual’s moral decision. Concentration (*samādhi*) is developed through meditation practice by being mindful (*sati*) of the processes of the mind. Although the use of AI-based mindfulness apps can help an individual remember or even assist them in meditation, it is still not an alternative. According to Bhikkhu Bodhi, “true education must awaken the heart to empathy and compassion” (Bodhi 2005: 142). The same goes for spiritual development; it is an individual’s process.

Wisdom or *prajñā*, which is the final goal of Buddhist practice, is defined as direct insight into the impermanent, unsatisfactory, and non-self nature of reality. Wisdom can’t be uploaded or programmed into a machine or performed by a machine itself. Wisdom needs to be experienced by an individual through meditation or reflection. The danger of relying too heavily on AI technology is that it might cause individuals to outsource their wisdom and not develop wisdom within themselves. A society that worships AI might end up creating individuals who are advanced materially but poor spiritually.

Nonetheless, Buddhism does not condemn the use of technology. Instead, Buddhism embraces the concept of the “middle path” that encompasses the use of technology as a tool for the achievement of a specific goal, while at the same time acknowledging its limitations. In the *Sigālovāda Sutta*, which is the code of discipline for the layperson, Buddhists who remain in their homes and outside monastic institutions are encouraged to develop their material and spiritual well-being (Walshe 1995: 467). In the context of the current discussion, it implies that the development of technology and the development of responsible values, mental health, and social cohesion should be a priority. Ultimately, the Buddhist perspective on the use and role of technology is intended to stress the need for the alignment of the process of human development with the universal goals for liberation. For example, while technology allows for more efficiency, longevity, and knowledge, it is unable to address the essential questions of suffering, impermanence, and liberation. As the *Samyutta Nikāya* affirms, “Though one should live a hundred years without seeing the Deathless, better is a single day lived seeing the Deathless” (*Samyutta Nikaya* 1.12).

### AI Tools for Meditation and Well-being

AI Meditation Tools: The rapid emergence of artificial intelligence technology within the realm of the wellness industry has revolutionized the accessibility of contemplative practices. Meditation technologies enabled by artificial intelligence technology offer customized meditation practices based on the specific requirements of individuals. Although meditation apps such as Headspace, Calm, and Insight Timer are already quite popular and have spread the practice of meditation globally, the use of AI technology has taken personalization to a new height altogether. For example, AI technology can use sensors to detect an individual’s stress levels and provide appropriate meditation practices to regulate breathing and relaxation, as

well as mindfulness practices suitable for the specific condition of the mind. This is reminiscent of the Buddhist emphasis on skillful means, as discussed in the Buddhist scriptures. In the past, individuals who sought to practice meditation were often forced to undergo rigorous training in monasteries with the assistance of an appropriate teacher. The use of AI technology has brought meditation practices to people's homes, offices, and schools, and in that sense, it can be considered an appropriate kalyāṇa-mitta, or spiritual friend, to individuals who would not have been exposed to appropriate meditation practices otherwise.

However, Buddhist philosophy cautions against the practice of meditation as an instrument of stress relief and productivity. The Buddhist scriptures, as described in the Pāli Canon, assert the importance of mindfulness (sati) as part of the Noble Eightfold Path, which finally aims to lead to enlightenment and freedom from suffering, as described by the Buddha (Bhikkhu Bodhi 1995: Majjhima Nikāya 10). The application of this technology might give rise to the cultivation of mindfulness as another consumerist activity, devoid of its liberative and moral connotations. David Loy, in his work, says, "Mindfulness can be co-opted into supporting the very structures of greed, ill will, and delusion it is supposed to counter" (Loy 2008: 26).

**Mindfulness in the Digital Age:** However, there are special challenges that mindfulness has to face in the digital age. The current form of the media, which has the goal of maximizing profit with the help of algorithms, is driven by distraction and craving (taṇhā). Social media, for example, has been designed for maximum use. The process of dissatisfaction (dukkha) that it generates is driven by the constant creation of craving for something new, recognition, and consumption. The works of Sherry Turkle indicate that there is a problem with technology, which connects us without community (Turkle 2011: 12). This results in superficial relationships that lack the richness that we get from real interactions with other humans. From a Buddhist perspective, technology generates craving and attachment, which is the opposite of what mindfulness should achieve. Real mindfulness is not just about being present, it is about being aware that things are impermanent and unsatisfactory. Technology, which makes a profit from distraction, is the very opposite of what mindfulness should achieve.

Nevertheless, there is the possibility that all this can be undone by the use of ethical intentions with the help of artificial intelligence. For instance, there are some meditation apps that utilize artificial intelligence to encourage the use of breaks while working or to discourage the use of digital screens. This has the potential to reverse the process of addiction related to digital media. However, this can only be achieved by completely transforming the way digital technology is designed from an orientation towards profit to an orientation towards well-being. The Buddhist concept of "right intention" (sammā saṅkappa) involves designing technology that fosters the growth of compassion, renunciation, and wisdom rather than craving. The potential for mindfulness in the digital age is undermined by making it a commodity.

**AI and Mental Health:** One of the most promising areas of AI application in relation to mindfulness and well-being is the domain of mental health. AI chatbots, such as Woebot and Wysa, which use natural language processing technology, provide cognitive behavioral therapy and emotional support to individuals. The AI system plays an important role in the alleviation of dukkha by providing basic mental health care interventions and is therefore aligned with the Buddhist ideal of alleviating dukkha. However, there are some major limitations to this ideal scenario. The AI chatbots, although beneficial, fail to provide empathetic care, which is one of the most important features of care. From the Buddhist perspective, compassion, or karuṇā, is not an algorithmic response to another person's dukkha but an embodied understanding of another's dukkha and a heartfelt desire to alleviate it. The Saṃyutta Nikāya says, "The Buddha is one who is touched by others' suffering" (SN 47.19). This relational aspect of compassion is impossible for AI systems to replicate, as they can only simulate care but not provide it.

Additionally, the use of AI for emotional support would also result in the undermining of the role that interpersonal relationships have in the therapeutic process. This is because, although AI has a role to play in the therapeutic process, it is impossible for it to replace the interpersonal relationship that exists between the therapist and the patient. This is also supported by Buddhist masters like Thich Nhat Hanh, who argue that although the act of "deep listening," which is therapeutic, is a key concept in Buddhism, it is only made possible by the human presence, rather than the mirroring of words (Hanh 2013, 86). However, the use of AI for therapeutic purposes would be beneficial when it is guided by Buddhist principles. For instance, it would

be useful for therapists to use AI in monitoring the progress of the patient, the risks of relapse, and timely interventions for the patient, acting as a digital safety net. From the perspective of upāya, the use of AI would be a skillful means, although it seeks to assist the human capacity for compassion.

### **Risks of AI: Dehumanization, Dependency, and Existential Risks**

The promise of artificial intelligence is presented in utopian terms: machines to ease pain, extend life, and expand human possibilities. But all technological revolutions involve risk, and the unprecedented power of artificial intelligence makes the risk all too real. All technology must be viewed in terms of the consequences for human dignity and mindfulness, and the relief of human suffering (*dukkha*) according to Buddhist philosophy. In fact, artificial intelligence technology has the potential to reinforce the very causes of ignorance (*avijjā*) and craving (*taṇhā*) that lead to human suffering. Four areas of concern: dehumanization, dependency, inequality, and existential risks, demonstrate the risks artificial intelligence poses to the future of humanity.

**Dehumanization:** One of the most alarming consequences of the use of AI is the potential loss of dignity. The more AI becomes an intermediary in health, education, and even social interactions, the higher the risk of humans being treated not as persons but as data. For example, in health care, the decision on the patient's treatment plan can be made by predictive algorithms based on statistical probabilities. While the process becomes more efficient, the patient's personal story, their fears, hopes, and suffering, are reduced to numbers. However, in Buddhist ethics, every being has an inherent value. The Buddhist ethical principle of *mettā* (loving-kindness) requires us to treat others not as means but as ends. The simulations of compassion provided by AI can even lead to the violation of this ethical principle. This can be exemplified by the elder robot companions that are designed for the purpose of providing companionship for the elderly. Though it can assist in alleviating the feelings of loneliness for the elderly, it can also result in the replacement of real relationships with artificial ones, which is considered a form of dehumanization, albeit subtle (Sharkey and Sharkey 2012, 27).

Education, for example, can be mentioned again. In the case of education, for example, artificial intelligence can be applied for tutoring, which is personalized, but it can also, unknowingly, commercialize the student as a "learners-in-data," losing the individuality of the student. The Buddhist concept of education also emphasizes the development of the student, which is more than just the relationship between the teacher and the student, but it also encompasses the moral and spiritual dimensions. This, again, can be replaced by the simple, algorithmic personalization, losing the complexity and depth of the education process. As Bhikkhu Bodhi reminds us, "true education must awaken the heart to empathy and compassion" (Bhikkhu Bodhi 2005: 142). Thus, while it is able to simulate it, it is unable to provide it. From the Buddhist perspective, compassion (*karuṇa*), which is a result, derives from the awareness of the experience of the other, which it is unable to provide. Thus, the risk of dehumanization is, in a way, not just a technical, but an existential, i.e., the risk of forgetting the very essence of humanity.

**Dependency and Loss of Being Mindful:** The other risk is dependency. The more the use of AI becomes dominant in the process of decision-making, the more humans are likely to lose the agency of being mindful or cultivating themselves. The Buddhist path demands "effort" (*vīrya*), which is seen as an essential component of awakening. The development of ethics, concentration, and wisdom demands individual effort. If one decides to use AI in replacing these individual efforts, whether it is choosing daily habits or moral reminders, or even developing meditation techniques, humans are likely to lose the ability to make individual efforts. Too much dependency on AI is likely to take away individual autonomy as well. There is a risk of "algorithmic paternalism," or the "gradual encroachment of algorithms on human choice, disguised as personalization" (Yeung 2018: 122). For instance, recommendation systems on video streaming sites or news feeds already have an influence on the kind of media an individual consumes. This is done unconsciously. This kind of subtle influence can lead an individual into a state of passivity, where they are not making decisions but are being influenced by the recommendation systems. According to Buddhist teachings, the idea of outsourcing can lead an individual into the state of *avijjā*, or ignorance. This is the state of basic ignorance, which is the cause of suffering.

The danger is not only individual but also collective. A society that relies on AI might become complacent about the development of the necessary critical capacities to become resilient. As the muscles atrophy from disuse, so too might the capacity for discernment atrophy from overuse. Buddhist philosophy teaches that freedom requires individual effort, that no one, including the Buddha, can walk the path for another. So too, no machine can undertake the moral and spiritual effort necessary for human flourishing.

**Bias and Inequality:** Another risk with the use of AI stems from the fact that it has the potential for reproducing social biases. This occurs mainly because the algorithms are trained based on historical data, which contains some form of prejudice. An example of this can be found in the fact that, based on studies, the face recognition technology has been found to incorrectly identify women and people of color much more frequently than it incorrectly identifies white men (Buolamwini and Gebru 2018, 8). From the Buddhist point of view, the violation of the ethical principle of non-harming (*ahimsā*) can be identified with the fact that the promotion of injustice can be considered a form of suffering. The message of impartial compassion that Buddha taught by embracing all beings with loving kindness cannot be achieved by algorithms that favor some over others. It divides them, which is against the message of uniting all beings.

Finally, the global dimension of the development of these technologies poses the issue of economic inequality. The rich, who have the power to control the development of these technologies, such as rich nations and corporations, have the power, while the poor, who are not as fortunate, can only be the consumers of these technologies, which they have no control over. This digital divide is another dimension of the issue of global inequality, which is against the Buddhist principle of justice. As Amartya Sen puts it, “Development results not merely in growth, but also in the expansion of real freedoms” (Sen 1999, 36). In the case of the development of AI, it means that the growth of technology should be for the liberation of humans, not for enslaving them. The Buddhist virtue of mindfulness (*sati*) requires us to be watchful of such injustices. We have to be critically conscious of the algorithms and always be assessing the impact of the algorithms on the well-being of humans. Otherwise, the AI technologies would be an example of structural violence against humans, who are to be helped by them.

**Existential Risks:** Finally, there are warnings of existential risks in relation to the probability of the development of “Super-intelligent AI,” which will be more intelligent than humans and will not be under their control. Nick Bostrom explains that if this type of AI is developed, its objectives may not coincide with those of humans and would pose a catastrophic risk to the survival of humanity (Bostrom 2014: 115). Even though this is all hypothetical, it gives an idea of the enormity of the stakes involved in AI development. From a Buddhist point of view, the doctrine of impermanence (*aniccā*) provides some food for thought: all civilizations are impermanent and will inevitably arise and pass away. Buddhism also views the question of existential risk not only in terms of survival, but also in terms of the very meaning of existence. If humanity were to become extinct due to its own technological creations, then it would be the tragic triumph of ignorance (*avijjā*) and craving (*taṇhā*). In the Buddha's teachings on the causes of suffering, exactly these forces are identified as the causes of human suffering. In this sense, the question of the existential risks of AI makes Buddhist teachings more relevant, for unless the wisdom (*prajñā*) and compassion (*karuṇā*) of the Buddha guide the development of technology, it could end up destroying humanity.

### **Compassionate Technology to Harmonious Future**

**Compassionate Technology:** In the Buddhist tradition, compassion (*karuṇā*) has always been at the top of the list of virtues, which cannot be separated from the virtue of wisdom (*prajñā*). If the moral requirement of Buddhist ethics is applied to the issue of artificial intelligence, the development of technology cannot be based on the sole motive of generating profits, political interests, or the pleasure of conquering technology. Instead, it has to be based on the necessity of eliminating all forms of suffering (*dukkha*). Without the application of compassion in artificial intelligence, the use of technology would lead to the exploitation of technology for the purpose of control and manipulation, not for the purpose of liberation. The necessity of compassion in technology is not only an ethical necessity but also an urgent necessity for the world. For instance, the algorithms of social media prioritize engagement over well-being.

On the other hand, the compassionate approach would emphasize the value of human flourishing over economic gain. Right intention (*Sammā Saṅkappa*) is one of the values emphasized by Buddhist ethics. The values emphasized are those of goodwill and harmlessness (*ahiṃsā*). This can guide the values of corporations, which would emphasize the flourishing of humans and the environment over economic gain (Harvey 2000: 64). Buddhist ethics propose a new direction for the development of AI technology, one that emphasizes compassion as an outcome measurable by concrete indicators. This can range from the development of AI technology for the healthcare industry to provide marginalized communities with greater access to healthcare services, or for the environment to solve the crisis of climate change, or for the education industry to promote moral and emotional development as well as intellectual development.

**The Middle Path in Technology: The Buddha's Middle Way (*Majjhima Paṭipadā*)** presents itself as an attractive solution for dealing with the extremes of technological optimism and pessimism. On one end of the spectrum, there is the utopian vision of AI that offers a world with no suffering, work, or want. On the other end, there is the dystopian vision that offers a world with dehumanization, unemployment, and possibly extinction. On the other hand, the Middle Way presents a balanced approach that entails discernment and responsibility. In the case of AI, it entails neither accepting nor rejecting the idea of technological progress. According to Peter Hershock, "A Buddhist approach to technology requires neither technophilia nor technophobia but the cultivation of mindful discernment" (Hershock 2021: 118). This means that governments and corporations alike must embrace the positive side of AI, which includes efficiency, healthcare, and educational empowerment, while also being mindful of the negative side, which includes surveillance, inequality, and ecological degradation.

This balanced view also demands the process of decision-making to be participatory, taking into account the different viewpoints, particularly those which have not been included in the technological discourse. The Buddhist idea of *saṃgha* stresses the importance of the value of community. The idea of the Middle Way, in the context of artificial intelligence, suggests that the process of governing the structures would not be dominated by any clique of technocrats.

**Global Interdependence:** The interdependence of all phenomena is stressed in the doctrine of dependent origination (*pratīccasamuppāda*). Nothing exists independently of other causes and conditions. Everything is interdependent. This is very relevant to AI, as it affects all spheres of human society, including the economic, political, and environmental domains. For example, in a foreign country, there are AI-assisted robots, and this may lead to unemployment, affecting other countries' economies and political systems. Furthermore, the environmental impact of developing large models of AI, which involves high energy consumption, may lead to global warming, affecting the countries that have contributed least to this global problem (Strubell, Ganesh, and McCallum 2019: 64). The Buddhist approach to the development of AI has to be viewed in a way that the development of AI is not viewed in isolation, nor in terms of nationalistic interests, but as a global problem, which has to be solved in a global manner, taking into account the interdependence of all beings in the universe. This means being compassionate not only to human beings, but to all other beings and the environment, as required by the Buddhist approach of *ahiṃsā* or non-harming. As a matter of fact, the principle of interdependence requires that we move from a competitive worldview to a worldview that is cooperative. As Joanna Macy writes, "to act within the world as though it were separate from us is both an illusion and a source of suffering" (Macy 2003: 47). The compassionate AI, guided by the principle of interdependence, would be one that seeks to serve and maintain the planet, and not dominate it.

**Human Wisdom and Machine Intelligence:** Although machines are capable of processing information at unprecedented rates, they do not possess the fundamental quality of wisdom, or *prajñā*, a quality that is uniquely human. Buddhist wisdom is not about processing power or data analysis; it is about understanding the impermanent, dependent, and non-self nature of reality. It is about ethical understanding, too, knowing not only what can be done, but what should be done for the greater good of all. In this, there is a significant difference between human intelligence and machine intelligence: the former may be surpassed by the latter in terms of processing power, but the latter cannot surpass the former in terms of compassion, morality, or self-awareness. Wisdom, as taught by the Buddha, must be accompanied by compassion, because without compassion, wisdom is empty, and without wisdom, compassion is blind. In the world of technology, humans must retain the capacity for ethical decision-making, not surrender it to machines.

The Vietnamese Zen Buddhist master, Thich Nhat Hanh, poignantly expressed the Buddhist view on technology with the following quote, “The real miracle is not walking on water but walking on the earth with mindfulness” (Hanh 1976: 22). This quote can be regarded as a condensed form of the Buddhist view on technology. According to the Buddhist view, the greatest achievement is not the manifestation of technological prowess, but the cultivation of mindfulness, care, and reverence. The right standard for the development of AI is not its capability for the achievement of remarkable performances, but whether it can assist human beings to become more mindful and compassionate in life. The right approach for the manifestation of the Buddhist view on technology development is the incorporation of mindfulness practices into the development of technology. All the actors involved in the development of technology, such as policymakers and users, can gain from the practice of mindfulness practices, which can assist them in becoming aware of the impact of technology on themselves and other people. According to the Buddhist view, the development of technology ought to be guided by wisdom.

## CONCLUSION

The Vietnamese Zen Buddhist master, Thich Nhat Hanh, eloquently described the Buddhist view of technology development with the quote, “The real miracle is not walking on water but walking on the earth with mindfulness” (Hanh 1976: 22). The quote can be considered an essence of the Buddhist view of technology development. The Buddhist view of technology development holds that the highest achievement is not the demonstration of technology development capabilities, but the development of mindfulness, care, and reverence. The appropriate measure of the development of technology is not the demonstration of capabilities for the achievement of remarkable performances, but whether it can facilitate human beings to be more mindful and compassionate in life. The appropriate means of the manifestation of the Buddhist view of technology development is the incorporation of mindfulness practices in technology development. All the actors involved in technology development, such as policymakers and technology users, can benefit from the practice of mindfulness practices, which can facilitate them to be aware of the impact of technology on themselves and other people. The Buddhist view holds that the development of technology should be carried out with wisdom.

Artificial intelligence has also been identified as a factor that influences the accessibility and understanding of mindfulness, meditation, and mental health practices. This has been achieved through the development of AI-based meditation tools, which have made the practice accessible to people from different backgrounds, contrary to the traditional view that it was only practiced by monks. However, the Buddhist tradition emphasizes that mindfulness should not be used as a commodified practice for wellness purposes. In the digital age, where distractions and desires are ever-present, mindfulness needs to transcend the process of commodification. AI can function as an instrument of entrapment by increasing desires and alienation, while it can also function as an instrument of liberation by being developed with compassionate intentions. AI chatbots used for mental health interventions need to be understood as complementary rather than alternative forms of real care and compassion. While artificial intelligence promises great power to improve the quality of human life, the risks associated with it should not be ignored. Dehumanization has the potential to lead to the datafication of humans, which would go against the intrinsic value of humans that is emphasized by Buddhist ethics. Dependency has the potential to lead to ignorance rather than wisdom. Bias and inequality would lead to suffering, which would go against the principle of non-harming that is emphasized by Buddhism. Finally, there are existential risks that question the very purpose of the survival of humans.

From the Buddhist viewpoint, these dangers highlight an important truth: technology by itself is not the key to happiness. Only if infused with compassion, mindfulness, and wisdom can artificial intelligence become the path to liberation instead of destruction. The challenge is not technical but ethical and spiritual: can the future of artificial intelligence represent the best of humankind, not the worst? A Buddhist vision of compassionate technology is not about rejecting artificial intelligence but redefining its purpose and direction. By basing artificial intelligence on compassion, taking the Middle Path by avoiding extremes, understanding the interdependence of the world, and trusting the wisdom of humans, Buddhism provides an extraordinary ethical framework for the future of technology. This is not about idolizing or demonizing artificial intelligence but placing it in the context of the total human search for liberation from suffering. The challenge is enormous: can

we design technologies that represent not only the ingenuity of humankind but also its responsibility, not only its intelligence but also its wisdom? What is the future of technology? The Buddhist path challenges us to move forward not with fear and greed but with mindfulness, compassion, and the awareness of interdependence.

This study has demonstrated that Buddhism presents one of the most significant contributions to contemporary debates about AI by emphasizing such values as compassion, wisdom, non-harm, mindfulness, and interdependence, Buddhist philosophy allows for creating an integral system of ethical values that can be used to overcome several critical flaws of current models of AI governance. Whereas contemporary approaches emphasize such aspects of AI as transparency, responsibility, and risk management, Buddhist ethics introduces another aspect into the discussion by placing individual happiness and the reduction of suffering in the center of its discourse. In other words, one of the main theoretical contributions made by the paper is the creation of systematic dialogue between the concepts of Buddhist moral philosophy and ethics of AI technologies. Namely, in contrast to contemporary understanding of AI as a purely technical or economic issue, the philosophy of Buddhism presents it as part of a wider ethical discussion aimed at enhancing well-being both on individual and societal levels. Continuing developing, AI technologies will inevitably lead to new challenges for societies and individuals, which is why it seems reasonable to discuss the possibilities of introducing some elements of Buddhist ethics into this realm in the future. Finally, the issue is not just the emergence of intelligent machines, but the continued wisdom and compassion of humans. The Buddhist philosophy of compassionate technology is one in which AI is utilized to promote the flourishing of all beings, including humans and non-humans. Ultimately, the Buddhist philosophy requires that AI in mindfulness and wellness align with the ultimate purposes of the Dharma, including the elimination of suffering, the development of wisdom, and the manifestation of compassion. Therefore, AI is not an ultimate goal but merely instrumental to the perpetual quest of humans for enlightenment.

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