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Buddhism Has Always Been Posthuman: Philosophical Contributions to the Transhumanist Project

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Buddhism Has Always Been Posthuman: Philosophical Contributions to the Transhumanist Project

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Abstract

This article draws a comparison between Buddhism (especially Mahāyāna) and two contemporary philosophies: posthumanism and transhumanism. Regarding the former, I argue the compatibility between Buddhism and posthumanism, especially regarding anti-essentialism and anti-anthropocentrism. Regarding the latter, I demonstrate Buddhism's openness to human enhancement and identify utilitarianism as an ethical common ground between Buddhism and transhumanism. I argue that Buddhist insights into the root causes of suffering could steer transhumanism toward a form of deep (or cognitive) utilitarianism. The Buddhist legacy could also contribute to the transhumanist project through its insights into the nature of consciousness, which could prove useful to philosophical analysis and neurophenomenological research.

Introduction

Among all religions, Buddhism, and particularly the Mahāyāna tradition, shows several elements that could help us welcome the

posthuman era into which we are moving. In the following pages I will examine some aspects that make this tradition—considered as a philosophy, an ethics, but also a phenomenological knowledge about the mind and the nature of experience—particularly suitable for dialogue with two contemporary philosophical currents: posthumanism and transhumanism.

The comparison with these two perspectives will be different in character: in the first case I will show the high compatibility between Buddhism and posthumanism, especially with regard to the rejection of essentialism and anthropocentrism. In the second case, where the differences appear at first glance to be more pronounced, I will try to argue for the Buddhists' potential contribution to the transhumanist project from ethical, philosophical, and scientific perspectives. In this analysis I will try to point out some key points that, on the one hand, might enable Buddhism to "update" its positions to become a religion more suited to the twenty-first century, and on the other hand might highlight some blind spots in contemporary thought, which this tradition could help to illuminate.

Particularly, in the comparison between transhumanism and Buddhism, I will argue that the study of the latter could prove significant: 1) in pointing to a meaningful ethical direction for human action in the posthuman era, and 2) in bringing attention to the still insufficient degree of insight (both philosophically and scientifically) into the nature of consciousness, a shortcoming from which many naiveties, ambiguities, and misunderstandings arise. Regarding the first point, after identifying utilitarian ethics as a common ground between Mahāyāna Buddhism and transhumanism, I will argue how Buddhist insights into the nature of suffering could inspire an upgrade of transhumanist ethics in the direction of a "deep utilitarianism" (or "cognitive utilitarianism"). As for the second point, I will first show how the still insufficient degree of insight into the nature of consciousness and its relationship to the brain makes some typical topics of transhumanism (e.g., the emergence of sentient forms of AI

or the possibility of mind uploading) rather problematic. Then, I will argue that Buddhism's refined positions on the nature of consciousness could contribute to the conceptual clarification and philosophical investigation of this issue, while the recent field of contemplative neurophenomenology, deeply related to Buddhist practice, could provide a significant contribution to scientific research on this topic.

Provisional Definitions of "Posthuman", "Posthumanism" and "Transhumanism"

Despite the broad overlapping area between the terms "posthuman," "posthumanism," and "transhumanism," in this article, for the sake of simplicity, I will distinguish between these terms based on the overview presented in this section.

As Francesca Ferrando argues, "posthuman" "has become a key term to cope with an urgency for the integral redefinition of the notion of the human, following the onto-epistemological as well as scientific and bio-technological developments of the twentieth and twenty-first centuries."¹ For this reason, it is used as an umbrella term, bringing together various schools of thought that may differ greatly from one another, including posthumanism, transhumanism, extropianism, new materialisms, and many others.

From another point of view, "posthuman" can also refer to a scenario where the human condition has changed so profoundly that it can no longer be defined as such, either because of the changes caused by technological evolution or due to the radical shift in the axiological, social, and cultural coordinates that oriented human existence for millennia. In this meaning, the term

¹ Francesca Ferrando, "Posthumanism, Transhumanism, Antihumanism, Metahumanism, and New Materialisms: Differences and Relations," *Existenz* 8, no. 2 (2013): 26.

"posthuman" does not indicate a theoretical perspective, but rather a concrete situation, an ontological condition that can no longer be ascribed to the human paradigm: a "posthuman condition," indeed. It is in this way that the term "posthuman" is used, for example, by Robert Pepperell, one of the pioneers of this movement, best known for his "Posthuman Manifesto."² Depending on one's viewpoint, this scenario could either be placed somewhere in the distant future or be regarded as an already emerging reality.

The term 'posthumanism' has also been used in various senses, but today it seems mainly to indicate a philosophical inquiry which attempts "to re-access each field of philosophical investigation through a newly gained awareness of the limits of previous anthropocentric and humanistic assumptions."³ It is therefore a critical philosophy that aims to deconstruct two closely interdependent paradigms which have been central to the philosophical traditions rooted in Greek thought and Christianity, and leading up to the Enlightenment: 1) humanism and 2) anthropocentrism. The first deconstruction targets the essentialist conception characteristic of pre-contemporary Western thought, which holds that human beings are endowed with a fixed and unchanging essence. Posthumanism unmasks the Eurocentric and patriarchal prejudices hidden in this conception, defending instead the differences and the peripheries, and proposing an idea of the subject as nomadic, transversal, relational, affective, embedded and embodied.⁴ For example, Donna Haraway's "Cyborg Manifesto" criticized biological essentialism and dualistic gender assumptions, imagining a future world in which "Cyborgs might consider more seriously the partial, fluid, sometimes aspect of sex and sexual embodiment. Gender might not be global identity

² Robert Pepperell, *The Posthuman Condition: Consciousness Beyond the Brain* (Exeter: Intellect Book, 1995), 180.

³ Ferrando, "Posthumanism," 29.

⁴ See Rosi Braidotti, "Posthuman Critical Theory," in *Critical Posthumanism and Planetary Futures*, ed. Debashish Banerji and Makarand R. Paranjape (New Delhi: Springer, 2016), 13-32.

after all, even if it has profound historical breadth and depth."⁵ The second deconstruction affects the primacy of human being shared by most classical and modern humanisms, which persists even in contemporary concepts such as "anthropocene." Human beings are not placed at the center of the cosmos: rather, they are part of a vast dynamic network of interdependencies, complexities, hybridizations, and unexpected kinship relations. Posthumanism therefore abolishes the traditional polarizations between human and non-human, between nature and culture, and proposes in their place non-dualistic, anti-speciesist and hybrid perspectives. In this sense, posthumanism is not only a critical and deconstructive philosophy; it also shows a productive side, presenting itself as "a philosophy which provides a suitable way of departure to think in relational and multi-layered ways, expanding the focus to the non-human realm in post-dualistic, post-hierarchical modes."⁶

Transhumanism, on the other hand, appears to be a fairly heterogeneous cultural movement, showing perhaps less philosophical depth than posthumanism. Indeed, it focuses more on the prediction of futuristic scenarios in which technology allows human limitations to be transcended in various ways. In this framework, the concept of human enhancement plays a central role. Max More is a leading figure in transhumanism and the originator of a unique version of this movement known as Extropianism. In a collective project called "The Transhumanist FAQ", More defines transhumanism as "a class of philosophies of life that seek the continuation and acceleration of the evolution of intelligent life beyond its currently human form and human limitations by means of science and technology [...]."⁷ In this regard, Francesca Ferrando highlights the importance that

⁵ Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *The Cybercultures Reader*, ed. David Bell and Barbara M. Kennedy (New York: Routledge, 2000), 315.

⁶ Braidotti, "Posthuman Critical Theory," 30.

⁷ The Transhumanist FAQ, "What Is Transhumanism," accessed July 10, 2022, <https://whatistranshumanism.org/>.

transhumanism places on future time (being primarily concerned with advances in science and technology), in contrast to posthumanism, which instead focuses more on questioning the humanistic cultural heritage from the past, and still persisting in the present.⁸

To briefly compare transhumanism and posthumanism, it can first be said that, although they share a common understanding of the human as a non-fixed condition, they show some substantial differences. In particular, many forms of transhumanism—centered on the concept of human enhancement—appear to be compatible with an anthropocentric view, which, as mentioned above, is one of the main objects of criticism in posthumanism. Similarly, for their part, many thinkers who consider themselves posthumanists show no particular interest in technological developments and their potential for transforming human life. In summary, we could say that although there is some proximity and overlap between the two currents, transhumanism is a cultural movement that primarily seeks to imagine our future, enthusiastically relying on technology to transcend human limitations; whereas posthumanism is a philosophical perspective that focuses more on deconstructing the past and the present, aiming to rethink life beyond the prejudices, normative boundaries and dualisms that have shaped the various ancient and modern forms of humanism.

Coming back to the term “posthuman,” it could be said that although for transhumanists it is a condition to be realized in the future with the help of technology, for posthumanists it is an already present reality; in fact, for them the posthuman has always been the ultimate truth of the human, buried under the misleading humanistic

⁸ “The movement of transhumanism problematizes the current understanding of the human not necessarily through its past and present legacies, but through the possibilities inscribed within its possible biological and technological evolutions.” Ferrando, “Posthumanism,” 27.

and anthropocentric ideologies. As we will see, the Buddhist perspective, particularly that of the Mahāyāna tradition, shares similarities with both of these viewpoints on the posthuman.

Posthuman Features of Buddhism and Its Similarities with Posthumanist Critical Philosophy

Although the comparison between Buddhism and transhumanism shows problematic aspects, as we shall see, the affinity between Buddhism and posthumanism (considered as a critical and deconstructive philosophy that targets all forms of essentialism and condemns anthropocentrism) manifests with considerable clarity, despite their historical and cultural distance. Considering some significant resonances between the two perspectives, one could almost frame Buddhist philosophy as a “posthumanism *ante litteram*”, especially considering the Madhyamaka school, which shows a clear dialectical and deconstructive character in refuting various essentialist views present in other Indian philosophical systems. However, there is no need to go into the arguments of this specific philosophical school to recognize that anti-essentialism has characterized Buddhist thought from the very beginning, as can be summarized by the concept of non-self (Sanskrit: *anātman*). In this view, the individual is a phenomenon devoid of self-identity: it is a mere conceptual designation that arises in dependence on the five psychophysical aggregates (*skandha*). Therefore, the self is not a fixed or permanent reality, but something fluid, mutable and essenceless. In Madhyamaka philosophy, the same anti-substantialist ontological status is extended to all phenomena, and *a fortiori* it can be applied to the concept of “humanity”: the property of “being human,” like any other can be totally deconstructed by rational analysis, proving to be a mere conceptual construction projected onto an infinitely complex network of interdependent relations, whose true mode of abiding is fluid, open and empty of any substantial existence or self-identity. Almost certainly, this

perspective would be embraced by the majority of posthumanist philosophers.

Even setting aside the philosophical inquiry, some cosmological aspects of Buddhism seem to describe a scenario with posthuman features, or at least surprisingly close to the contemporary worldview. For example, James Hughes, when comparing Buddhism with the Abrahamic religions, notes that Buddhist cosmology more closely aligns with the universe's descriptions as offered by science, or even verges on the realm of science fiction: the cosmos is described as being "billions or trillions of years old, collapsing and re-materializing in regular cycles, all as a natural process", and also conveys the notion that "there are many worlds with intelligent life" and "humans appear and evolve as just one of those species."⁹ In this immense cycle of generation, destruction, and regeneration, humanity also undergoes profound changes, enough to challenge the idea that it can always be considered the same species. Over long cosmic eras, depending on the moral quality of their actions, human beings are radically transformed, in their lifespan, in the shape and size of their bodies, and in their intellectual and moral capacities and attitudes. Although a comparison with modern evolutionary theory would perhaps be far-fetched, it is clear that the humanity described by a reading of Buddhist cosmology is not something fixed and predetermined (such as that of Abrahamic religions, for example). Rather, it is a changing phenomenon, subject to constant and profound transformations. In short, it is "posthuman" from the very beginning.

Some quite specific topics from posthumanist philosophy are also reflected in the Buddhist view. In this regard, McGuire offers a valuable overview of the similarities between Buddhism and posthumanism on some crucial points, including anti-sexism, anti-

⁹ James J. Hughes, "Buddhism and Our Posthuman Future," *SOPHIA* 58 (2019): 654-55.

anthropocentrism, and anti-speciesism.¹⁰ Since these issues have already been thoroughly investigated by other authors, let us look here at just a few significant points. For example, the seventh chapter of the *Vimalakīrti Sūtra* appears to strongly condemn sexism and presents a robust rejection of dualistic or binary conceptions about genders: in a dialogue between Śāriputra and a goddess, the former is puzzled about the goddess' female form (culturally believed to be inferior to the male form). The latter, in response, using her own supernatural powers, switches their bodies, transforming Śāriputra into a goddess and assuming his likeness in turn; she then says: "Shariputra, who is not a woman, appears in a woman's body. And the same is true of all women—though they appear in women's bodies, they are not women. Therefore, the Buddha teaches that all phenomena are neither male nor female."¹¹ From this passage, it clearly emerges that the very scriptural sources of Mahāyāna Buddhism, despite their origin in the early Common Era, continue to hold contemporary relevance in deconstructing the essentialist biases related to gender.¹²

As for anti-anthropocentrism and anti-speciesism, suffice it to mention that in Buddhist cosmology, human existence—although it is considered of great value for the possibility of practicing Dharma—is only one among six different macrocategories of life forms populating samsara and is surpassed in both psychophysical capacity and degree of happiness by the realms of *asuras* and *devas*. All these forms of existence share two significant features: 1) the nature of

¹⁰ Beverley F. McGuire, "Buddhist Uploads," in *Posthumanism: The Future of Homo Sapiens: An Introductory Handbook*, ed. Michael Bess and Diana Walsh Pasulka (New York: Macmillan Reference USA, 2018), 145-149.

¹¹ *The Vimalakīrti Sūtra*, trans. Burton Watson (New York: Columbia University Press, 1997), 91, quoted in McGuire, "Buddhist Uploads," 146.

¹² It is worth noting that despite this clear anti-sexist perspective, significant forms of misogyny and androcentrism are also present in the concrete history of Buddhism. On this see Rita M. Gross, *Buddhism After Patriarchy: A Feminist History, Analysis, and Reconstruction of Buddhism* (New York: State University of New York Press, 1992).

sentience and 2) the problem of suffering. Thus, there is no binary separation between human and nonhuman here—as there is in other metaphysics that attribute to human beings a soul or spiritual principle that other living beings lack. Not only that: because of the endless cycle of rebirths, the human condition is impermanent; whoever is human today could be reborn tomorrow as a cow, an insect, or any other sentient being. This also implies that any sentient being, no matter how seemingly inferior, has experienced the human condition countless times, and will again experience it in the future. In the complex roundabout of existence, which has been going on since beginningless time, each of us has formed profound relationships with whatever life forms one may happen to meet along the way, relationships of friendship, sonship, motherhood, and so forth. To sum up, in this infinitely complex web of relationships any binary boundary between human and non-human collapses. Every nonhuman being turns out to be very close and profoundly related to us in many senses: it is sentient like us, it suffers like us, it has been (and will be again) human like us; we also have assumed its form many times already (and will probably assume it again) and it has been our mother, child, and lover countless times. This intricate network of karmic relationships also shapes the physical world co-inhabited by sentient beings: for in the Buddhist perspective the environment in which we live is a direct consequence of the way we act toward one another (including every sentient being we deal with).

This high regard for other forms of life, as well as the idea that the quality of our environment is contingent upon our actions, bears striking resemblance to contemporary ecological thought and environmental sensitivity. It is therefore not surprising that, for example, David Loy points to Buddhism as the perfect religion to address the climate and environmental crisis, presenting the "Eco-Dharma" as a spiritual path deeply intertwined with a form of ecological activism

undertaken by the "Eco-Sattva," a contemporary and updated version of the Bodhisattva.¹³

Transhumanist vs. Buddhist Human Enhancement

To draw a comparison between Buddhism and transhumanism, it is convenient to start with the concept of human enhancement, which is central, as we saw, in transhumanism, but which also has some significant affinities with the Buddhist tradition, especially the Mahāyāna and Vajrayāna. As both McGuire and Sarbacker point out, this kind of literature describes extraordinary powers accomplished by Bodhisattvas along the path, both physical (such as the ability to vanish, to pass through walls, to walk on water, to fly, to emanate multiple bodies etc.) and mental (such as recollection of previous lives, knowledge of others' states of mind, but also, and more essentially, directly perceiving the true nature of all phenomena).¹⁴ These extraordinary powers may indeed be reminiscent of the forms of human enhancement foreshadowed by transhumanist authors. We are not talking about marginal aspects of the spiritual path; e.g., in Tibetan commentaries on the *Abhisamayālaṅkāra*, these forms of enhancement are described in great detail and presented as important steps in the Bodhisattva's spiritual journey, aimed at either pursuing their own liberation or maximizing their ability to help others.¹⁵ In order to assess the level of compatibility between these forms of spiritual empowerment and those described in transhumanist literature, we shall

¹³ See David Loy, *Ecodharma: Buddhist Teachings for the Ecological Crisis* (Somerville: Wisdom Publications, 2019).

¹⁴ See McGuire, "Buddhist Uploads," 149, and Stuart Ray Sarbacker, "Buddhist Meditation and the Ethics of Human Augmentation," *Journal of the Japanese Association for Digital Humanities* 5, no. 2 (2020): 70.

¹⁵ It is worth noting that the enhancement of *siddhi* (spiritual powers) is primarily a prerogative of Mahāyāna Buddhism, whereas several *suttas* included in the Pali Canon (e.g., the *Kevaddha Sutta*) show a more critical stance about such powers, regarding them as incidental or even harmful to Buddhist soteriology.

consider two aspects: 1) the means by which the enhancement is achieved and 2) the purpose for which it is pursued. I will deal with this second aspect in the next section, whereas here I will focus on the first one, namely, the comparability between the means for human enhancement used in Buddhism (as well as in other ascetic and contemplative traditions) and those imagined in transhumanist literature, some of which, as we shall see, are already employed in experimental form at present.

At first glance, it could be argued that these two ways to achieve human enhancement are not similar at all, one being "inner" and "natural," the other being "outer" and "unnatural." Upon closer analysis, however, such distinctions soon vanish, if one considers that various kinds of Buddhist practitioners, at times, have used all sorts of means to alter and enhance their psychophysical condition, like fasting, prolonged wakefulness, breath manipulations, mantra repetitions, sexual practices, and all sorts of "unnatural" manipulations of body and mind. Even meditation (of any kind) involves a far-from-ordinary use of attention, aimed at modifying (and usually enhancing) one's state of consciousness. Sarbacker goes so far as to suggest that ancient Indian ascetics could be regarded as the ancestors of modern biohackers, as they discovered systems to 'hack' their own biophysical systems.¹⁶ Hence, the boundaries between inner and outer, or natural and unnatural, appear rather relative in this context. And to those who object that using futuristic technologies to enhance one's abilities represents a dangerous "shortcut", or an "unfair means" of achieving spiritual goals, it is enough to recall how, for example, Tibetan Buddhist tradition presents the Vajrayāna path: it is in fact described precisely as a shortcut to attaining enlightenment

¹⁶ "In fact, one might argue that these early Indian ascetics, yogins, and yoginīs were some of the original biohackers, who had discovered how various exogenous catalysts (such as psychoactive substances) and endogenous techniques (such as exposure, immobility, fasting, breath control, sense-withdrawal, and meditation) evoked extraordinary physical and mental states, having 'unlocked' or 'hacked' their biophysical systems." Sarbacker, "Buddhist Meditation," 68.

much faster than Sūtrayāna (one lifetime compared to three immeasurable *kalpas*). Like all shortcuts, it obviously carries risks and could be used in erroneous and dangerous ways by the practitioner unprepared or lacking the proper motivation. Either way, it can be said that when Tantra first appeared in Tibet, it was presented exactly as an innovative and extremely effective (even if dangerous) technology for spiritual “empowerment;” even the Tibetan equivalent of this term (*dbang*), which refers to the initiatory rituals of tantra, hints at this character: tantric practices—like many other contemplative techniques from Asia—can be defined as technologies of human enhancement embraced for spiritual purposes. To summarize what has been said so far about the means employed for human empowerment, there seems to be no relevant reason to preclude the use of the technologies described by transhumanism to more effectively pursue the spiritual goals of Buddhism: to achieve them, today as in the past, one could say that “the end justifies the means.”

Another kind of argument to show the compatibility between Buddhism and transhumanism in relation to the means employed for human enhancement is sociological in nature and concerns the degree to which contemporary Buddhists are open to science and technology. Hughes in this regard states: “Since the nineteenth century, many Asian and Western Buddhists have downplayed the superstitious aspects of Buddhism, arguing for its compatibility with science, and framing meditation as a human enhancement technology.”¹⁷ A little further on, in the same article, Hughes even states that “there are reasons to believe that the societies from India to Japan are particularly open to the possibility of human enhancement partly because of the influence of Buddhism.”¹⁸ Hence not only do contemporary forms of Asian Buddhism show some inclination toward human enhancement because of their openness to science and technology, but this fact also influences the acceptance toward such

¹⁷ Hughes, “Buddhism and Our Posthuman Future,” 653.

¹⁸ Hughes, “Buddhism and Our Posthuman Future,” 654.

technologies by people living in countries where Buddhism is well established. This fact also emerges from a study by Macer on genetic enhancement in Asia, which reveals a high acceptance toward this type of technology in predominantly Buddhist countries, such as Cambodia, Laos, Vietnam, and South Korea.¹⁹ On the other hand, there are also those who denounce the ideological and propagandistic nature of this narrative that portrays Buddhism as compatible with modern science. For instance, according to Bruno Lo Turco, at the turn of the 19th to the 20th century, Asian Buddhist apologists, noticing the crisis in Christianity and the gap between religion and science in the Western mindset, decided to seize the opportunity and promote Buddhism as a “scientific religion,” better suited than Christianity to fulfil the spiritual needs of the modern individual.²⁰ Regardless of one’s personal opinion on the matter, the collaboration over the past half-century between Buddhism and neuroscience has indeed proven to be quite fruitful, at least in documenting the benefits of meditation for both physical health and psychological well-being, as well as in the development of secular mind-trainings conceived for various purposes and social contexts (including psychotherapy, education, sports, business, etc.). This fact seems to argue in favor of a harmonious match between Buddhism, science, and technology—which aligns with transhumanist aspirations.

But while so far it has mostly been a matter of using modern technology to observe what happens during meditation, in recent

¹⁹ See Darryl R. J. Macer, “Ethical Consequences of the Positive Views of Enhancement in Asia,” *Health Care Analysis* 20 (2012).

²⁰ See Bruno Lo Turco, “Salvare il buddhismo dalla scienza. Osservazioni su una confusione di giochi linguistici” (Saving Buddhism from Science: Observations on a Confusion of Language Games), in *Il buddhismo contemporaneo. Rappresentazioni, istituzioni, modernità* (Contemporary Buddhism: Representations, Institutions, Modernity), ed. Federico Squarcini, and Marta Sernesi (Firenze: Società Editrice Fiorentina, 2006) 46-47. See also Donald S. Lopez Jr., *Buddhism and Science: A Guide for the Perplexed* (Chicago: University of Chicago Press, 2008).

times, new scenarios are beginning to open. The first tools to support and enhance meditation and develop positive inner qualities are beginning to emerge. Hughes speaks in this regard of "moral enhancement," namely, "the use of emerging neurotechnologies to promote self-control, compassion, insight, and meditative experiences."²¹ According to Hughes, over time these tools could play an increasingly central role in the practitioner's life: "Neurotechnologies may be seen as temporary spiritual training wheels, helping to create a solid foundation of moral behavior, concentration, and mental clarity. As the technologies develop they may be used by some as the principal means of self-transformation."²² Sarbacker, who shows a slightly more critical stance, offers a list of such "contemplative technologies," as he refers to them: these include neurofeedback devices based on Electroencephalogram (EEG), transcranial magnetic stimulation (TCMS), transcranial electrical stimulation (TCES), psychoactive agents like psilocybin, nootropics, but also virtual reality (VR) and "other technologies that aim to induce meditative or visionary states through the constructive application of sensory stimulation or overloading."²³

To summarize this analysis, it can be said first of all that the introduction of new forms of human (and moral) enhancement into Buddhist practice does not seem incompatible with the Mahāyāna tradition—which makes no significant distinctions between natural and unnatural means, but rather has always been open to the introduction of new and more powerful tools for spiritual development. Moreover, a "scientific" reading of Buddhism has already been going on for a while and seems to be having an influence on the adherents of Asian Buddhisms, making them quite open to the possibilities of

²¹ Hughes, "Buddhism and Our Posthuman Future," 659-60. See also James J. Hughes, "Using Neurotechnologies to Develop Virtues: A Buddhist Approach to Cognitive Enhancement," *Accountability in Re-search: Policies & Quality Assurance* 20, no. 1 (2013).

²² Hughes, "Buddhism and Our Posthuman Future," 660.

²³ Sarbacker, "Buddhist Meditation," 65.

human enhancement. Finally, the early devices and other means of enhancing spiritual practice are already beginning to appear and could radically change the way people meditate. Rather than just a future possibility, the embrace of human enhancement seems to be almost a destiny, if not already a reality, at least for certain branches and developments of Buddhist thought and practice. It is now a matter of understanding what are the purposes and directions that should guide human enhancement according to the Buddhist perspective, and thus also what are the ethical foundations that could enable a positive combination between Buddhism and transhumanism.

Utilitarian Ethics as a Common Ground Between Buddhism and Transhumanism and Some Insights Toward a Deep (or Cognitive) Utilitarianism

In discussing the ethical foundations of transhumanism, Nick Bostrom (co-founder, along with David Pearce, of the World Transhumanist Association) in his article "A History of Transhumanist Thought" refers to the thinking of John Stuart Mill, emphasizing "its Enlightenment roots, its emphasis on individual liberties, and its humanistic concern for the welfare of all humans (and other sentient beings)."²⁴ Mill was one of the leading exponents of utilitarianism, an ethical theory initially formulated by Jeremy Bentham, according to which the good is what produces the greatest degree of happiness and the least degree of suffering for the greatest number of people. Interestingly, Mill's formulation of this principle differs from that of his predecessor in that it includes, among the beneficiaries of moral actions, all sentient beings—an aspect to keep in mind when it comes to establishing a connection between Buddhism and transhumanism through their shared affinity with utilitarian ethics. In Mill's words:

²⁴ Nick Bostrom, "A History of Transhumanist Thought," *Journal of Evolution and Technology* 14, no. 1 (2005): 4-5.

According to the Greatest Happiness Principle [...] the ultimate end [...] is an existence exempt as far as possible from pain, and as rich as possible in enjoyments, both in point of quantity and quality. [...] This, being, according to the utilitarian opinion, the end of human action, is necessarily also the standard of morality; which may accordingly be defined, the rules and precepts for human conduct, by the observance of which an existence such as has been described might be, to the greatest extent possible, secured to all mankind; and not to them only, but, so far as the nature of things admits, to the whole sentient creation.²⁵

The similarity between transhumanism and utilitarianism is also shown by Maite Escudero-Alías in his contribution, "From Utilitarianism to Transhumanism," where, through an analysis of contemporary literature, he shows how both of these perspectives seek to improve human nature by means of technology.²⁶ Indeed, utilitarian ethics is explicitly referred to by David Pearce, the other co-founder of the World Transhumanist Association. In particular, Pearce refers to negative utilitarianism, which can be described as a kind of utilitarianism that gives greater priority to reducing suffering than to increasing happiness. In his book *The Open Society and Its Enemies*, Karl Popper, who can be considered the forerunner of this specific current of utilitarianism, explains negative utilitarianism as follows:

[...] all moral urgency has its basis in the urgency of suffering or pain. I suggest, for this reason, to replace the utilitarian formula "Aim at the greatest amount of happiness for the greatest number," or briefly, "maximise happiness," by the formula

²⁵ John Stuart Mill, *Utilitarianism* (London: Dent, 1957), 11.

²⁶ See Maite Escudero-Alías, "From Utilitarianism to Transhumanism: A Critical Approach," in *Transhumanism and Posthumanism in Twenty-First Century Narrative Perspectives on the Non-Human in Literature and Culture*, ed. Sonia Baelo-Allué and Mónica Calvo-Pascual (New York: Routledge, 2021).

"The least amount of avoidable suffering for all," or briefly, "minimise suffering."²⁷

The priority here accorded to the reduction of suffering is very reminiscent of the Buddhist presentation of the Four Noble Truths, where the recognition of suffering is the starting point of the spiritual path; but it also brings to mind the universal responsibility of the Bodhisattva, who is committed to liberating all beings from suffering. Similarly, Pearce promotes what he calls the "hedonistic imperative," a moral obligation to act towards the abolition of suffering in all sentient life, using whatever means are available, from pharmacology, all the way to genetic engineering, nanotechnology and neurosurgery, when these technologies become accessible in the future.²⁸ Pearce refers to this endeavor as the "abolitionist project."²⁹ In his words:

Assume, provisionally at any rate, a utilitarian ethic. The abolitionist project follows naturally, in "our" parochial corner of Hilbert space at least. On its completion, if not before, we should aim to develop superintelligence to maximise the well-being of the fragment of the cosmos accessible to beneficent intervention. And when we are sure—absolutely sure—that we have done literally everything we can do to eradicate suffering elsewhere, perhaps we should forget about its very existence.³⁰

Regardless of the means employed for this purpose, from this passage clearly emerges the urgent need to eradicate suffering in all

²⁷ Karl Raimund Popper, *The Open Society and its Enemies* (4th revised ed. London: Routledge & Kegan Paul, 1962), 235.

²⁸ See David Pearce, "The Hedonistic Imperative," accessed July 10, 2022, <https://www.hedweb.com>.

²⁹ On this topic see Jeanine Thweatt-Bates, *Cyborg Selves: A Theological Anthropology of the Posthuman* (London: Routledge, 2012).

³⁰ David Pearce, "Quantum Ethics? Suffering in the Multiverse," accessed July 10, 2022, <https://www.abolitionist.com/multiverse.html>.

sentient beings, a goal that aligns contemporary transhumanist thinkers with the ethical tenets of Mahāyāna Buddhism.

To conclude this overview—which, by establishing a link between utilitarian ethics and transhumanism, has already pointed out significant affinities between the latter and Buddhist ethics—I will quote two of the seven points of the "Transhumanist Declaration" (in the version of March 2009) drafted by the World Transhumanist Association. The first article states: "Humanity stands to be profoundly affected by science and technology in the future. We envision the possibility of broadening human potential by overcoming aging, cognitive shortcomings, involuntary suffering, and our confinement to planet Earth."³¹ Except for the very last point, this statement closely resembles the enumeration of the major sufferings of human existence (particularly aging, illness, and death) according to Buddhism, as well as its commitment to overcoming them.³² The seventh article is perhaps even more significant, since it clearly expresses the transhumanist commitment to promote the well-being of all sentient life, an aspect that aligns it closely with the path of the Bodhisattva as delineated in Mahāyāna Buddhism: "We advocate the well-being of all sentience, including humans, non-human animals, and any future artificial intellects, modified life forms, or other intelligences to which

³¹ Humanity +, "The Transhumanist Declaration," accessed July 10, 2022, <https://www.humanityplus.org/the-transhumanist-declaration>.

³² In this regard, it is worth noting that in the wide range of Buddhist traditions and philosophies—as well as their contemporary interpretations—the way of dealing with the forms of suffering involved in human existence (birth, illness, aging and death) can be significantly different. Specifically, although some Buddhist perspectives encourage the elimination of illness, etc., others encourage acceptance of the *inevitability* of illness, etc. In the latter case, it is only *aversion* to these aspects of human experience that must be overcome, not illness, etc. *per se*. That being said, despite the ultimate goal of the Buddhist path being liberation from samsara (undoubtedly a spiritual goal), some forms of Buddhism, such as Tibetan Buddhism, include various practices with therapeutic purposes, aimed at ensuring good health and lengthening life span.

technological and scientific advance may give rise."³³ The inclusion of artificial forms of intelligence in the class of sentient beings shows some problematic aspects, which I will address in the next section.

Having reached this point, it will not take much arguing to show the compatibility between transhumanist and Buddhist ethics, at least when referring to the Mahāyāna tradition. It is worth mentioning, however, that although no one so far, to my knowledge, has pointed to utilitarianism (and particularly negative utilitarianism) as the ethical common ground between transhumanism and Buddhism, the affinity between Buddhism and utilitarianism has already been indicated by others, including Damien Keown, in his book *The Nature of Buddhist Ethics*, where an entire chapter addresses precisely the comparison between Buddhist ethics and various forms of utilitarianism.³⁴ However, Keown argues that there are also significant differences between utilitarian and Buddhist ethics. For example, he states that in Buddhism, "it is the preceding motivation (*cetanā*) which determines the moral quality of the act and not its consequences,"³⁵ as is the case with utilitarianism. Thus, according to Keown, unlike utilitarianism, Buddhist ethics should not be regarded as a form of consequentialism. But on careful analysis this difference does not really seem fundamental: even in the Buddhist perspective, genuine motivation must aim to produce certain consequences; similarly, even in the utilitarian perspective it is not possible to be certain about the consequences of an act before it has been performed. Obviously, the consequences need to be foreseen (with some probability of error) before taking the action, and this brings us back to the importance of motivation. Keown's resistance to acknowledging the compatibility of Buddhist and utilitarian ethics thus does not seem

³³ Humanity +, "The Transhumanist Declaration."

³⁴ See Damien Keown, *The Nature of Buddhist Ethics* (London: Palgrave Macmillan, 1992), 165-191.

³⁵ Keown, *The Nature*, 178.

very convincing: at least on this point, the moral attitude appears quite the same in both ethical perspectives.

The emphasis placed in Mahāyāna ethics on foreseeing the consequences of an action when determining its degree of virtue is made evident in this passage from the *Upāyakaśālya Sūtra*, often quoted by Tibetan *lamas* during their teachings.³⁶ The passage tells of a previous life of the Buddha when he, as a ship captain, discovers that a thief intends to kill the five hundred merchants riding in his ship. He then makes a careful assessment of the consequences of his possible actions: if he did not stop the thief, many people would die, and the thief would suffer indescribable pains because of the karmic results of his action. If he leaked the news to the merchants, they would kill the thief, thus accumulating negative *karma* in turn. Thus, on the basis of compassionate intent, he decides to kill the thief painlessly, thus limiting as much as possible the suffering potentially produced by that particular situation. It is clear from this tale that in the Mahāyāna perspective there are no inherently virtuous or non-virtuous actions: what makes them so is motivation; but this, in turn, has no abstract or *a priori* value. Rather, it is based on the rational expectation of the consequences of actions (both immediate and karmic). In light of this, Buddhist ethics (at least Mahāyāna),³⁷ just like utilitarian ethics, can be interpreted as a form of consequentialism (though certainly complicated by the karmic relationship between actions and their results).³⁸ Moreover, this account clearly shows that, in

³⁶ See Stephen Jenkins, "On the Auspiciousness of Compassionate Violence," *JIASB. Journal of the International Association of Buddhist Studies*, 33 no. 1-2 (2010-2011): 315-316.

³⁷ It is worth noting that there is a considerable diversity of perspectives on the nature of Buddhist ethics among scholars, as well as a variety of ethical perspectives among Buddhist schools and traditions. For instance, according to Keown, in Abhidharma Buddhism, vices and virtues are considered to be real entities, since they are *dharmas* (see Keown, *The Nature*, p. 64).

³⁸ A persuasive reading of Buddhist Ethics as consequentialist in nature can be found in Charles Goodman, *Consequences of Compassion: An Interpretation & Defense of Buddhist Ethics* (Oxford: Oxford University Press, 2009).

evaluating the consequences, the quantitative assessment of the harm and benefit caused by that action also plays an important role, just as it does in utilitarian ethics.

Can we then state that Buddhist moral principles are identical to those of utilitarian ethics, including its most up-to-date version, i.e., transhumanism? Not really, that would be a rather superficial answer. Although it is indeed true that both ethical paradigms agree 1) on the urgency of reducing the suffering of the greatest number of sentient beings (as well as increasing their happiness and well-being),³⁹ and 2) on the fact that, to this end, any means is permissible, including various forms of human (and moral) enhancement, what distinguishes the Buddhist perspective from the transhumanist and utilitarian ones is a different—and perhaps deeper—understanding of the problem of suffering by the former. This difference has to do with metaphysical aspects (such as the belief in *karma* and rebirths, which I will not go into) and with philosophical and phenomenological aspects. The latter involve Buddhism's deep observation and analysis of the process of experience, and the consequent investigation into the nature and dynamics of suffering. Such an investigation leads, as is well known, to recognizing the root of suffering not so much in the physical or emotional dimensions, but rather in the cognitive one: ultimately, for Buddhism, suffering stems from deep cognitive distortions that impair our perception of reality, exposing us to various forms of delusion. Such distortions can be summarized—and have their root—in the reification of self and other phenomena, and the resulting ontological ignorance about the true nature of reality. Any “skilful means,” any form of “human enhancement” employed in

³⁹ In this regard it is appropriate to note that the Mahāyāna practitioner's main purpose is to achieve enlightenment in order to liberate all sentient beings from *samsara* by teaching them the Buddhist spiritual path. This ultimate goal is to completely eradicate their suffering, not merely to reduce it. On the other hand, this does not exclude the practitioner's commitment to temporarily alleviating sentient beings' suffering, a goal to be pursued even before attaining enlightenment and not only through *Dharma* teaching, but also by other more contingent means.

the Buddhist spiritual path is ultimately directed toward this end: to completely eradicate this fundamental ignorance that prevents us from understanding reality. Apart from all the tools and practices that can help in this process of cognitive purification, the main means by which this goal can be achieved is the cultivation of wisdom, in the sense of a phenomenological knowledge capable of bringing forth ever deeper and more illuminating insights into the empty and selfless nature of experience.

Therefore, having ascertained the compatibility of the ethical intentions between transhumanism and Buddhism, as well as the latter's openness to the acquisition of new tools useful for spiritual practice, the real questions that should be asked are the following: to what extent are the forms of human enhancement being pursued by transhumanists capable of increasing phenomenological knowledge of the nature of experience—which, in the final analysis, is the only thing that really matters from a Buddhist standpoint? To what extent does the transhumanist movement currently share—and understand—the importance of this goal? To what extent might Buddhism help to orient the transhumanist project in this direction? Similar questions also run through Sarbacker's article titled, "Buddhist Meditation and the Ethics of Human Augmentation."⁴⁰ The author warns that, lacking a contemplative experience as deep and articulate as that provided by Buddhism, transhumanism may pursue aims that, while maybe allowing for a temporary reduction of suffering, fail to pursue the higher goal of eliminating its root causes. Not only that: from the Buddhist point of view, human enhancement technologies, if not oriented in the right direction, actually risk nurturing new forms of attachment—a criticism reminiscent of that classically raised by Buddhists against other ascetic traditions which, although using powerful "contemplative technologies," missed the ultimate goal of liberation by developing attachment toward conditions of existence beyond the human level, only to remain locked in *samsara*. In

⁴⁰ Sarbacker, "Buddhist Meditation."

Sarbacker's analysis, the classic distinction between *śamatha* (which is said to permit only a temporary reduction of suffering, but not its ultimate elimination) and *vipāśyanā* (which is said to destroy the roots of affliction, leading to the achievement of awakening) plays a central role. According to Sarbacker:

These parallels open the door to a uniquely Buddhist ethical view that provides a coherent technological ethic for human augmentation, anticipating on a number of levels the issues that arise from the development of new technologies. From the *śamatha-vipāśyanā* distinction, we can glean a set of insights into how Buddhist ethics might be utilized to evaluate technologies of human augmentation.⁴¹

This insight, then, appears to be one of the main contributions adherents of Buddhism could make to transhumanism: from a common utilitarian ethical basis, Buddhists could deepen our understanding of the root causes of happiness and suffering by directing human enhancement toward increasing phenomenological comprehension of the nature of experience; this contribution is helpful because, at least from the Buddhist perspective, true liberation from suffering (as well as the authentic form of happiness) depends fundamentally on this kind of knowledge (although other more contingent purposes may be pursued as intermediate steps, or means toward that end). This perspective could be named “deep utilitarianism” (by analogy with the concept of deep ecology, for example), or “cognitive utilitarianism.” Yet no matter what name is given to it, this idea seems to indicate the appropriate ethical paradigm for a transhumanist Buddhism—or for a transhumanism that intends to embrace elements from the Buddhist tradition (as well as from other contemplative paths). Clearly, this potential contribution of Buddhists to the transhumanist project—which in this section has been presented from the

⁴¹ Sarbacker, “Buddhist Meditation,” 71.

standpoint of ethics—also has profound implications on the philosophical and scientific levels, as I will argue in the next section.

Western Shortcomings and Potential Buddhist Contributions in Deepening the Nature of Consciousness

In light of what has just been said, one can see how the contribution that the Buddhist tradition could make to the transhumanist project is not limited to the ethical dimension. Significant insights could come from Buddhist accounts of the nature of consciousness, but also from contemplative neurophenomenology, and more generally from the interdisciplinary field known as Contemplative Studies (or Contemplative Science), which emerged from the collaboration between the scientific and contemplative worlds. This dialogue began with the meetings of the Mind and Life Institute and was later nurtured by the work of a number of pioneers such as Richard Davidson, Francisco Varela and B. Alan Wallace. But why might this kind of research prove significant to the goals of transhumanism? What kinds of questions might it help answer? So far, most of the research done in this field has focused on understanding the neurophysiological processes involved in meditation, providing important evidence of the benefits of contemplative practices for mental and physical health and well-being. As previously mentioned, future research in this direction may primarily benefit Buddhism, making available new technological tools for mind training and other forms of human enhancement oriented toward the goals of the Buddhist path.

There is, however, another direction of research, similarly included in the context of Contemplative Studies, which, although still under-explored, could clarify certain confusing aspects of transhumanist thought, as well as contribute, more generally, to shedding light on one of the most serious blind spots in the contemporary worldview: the conundrum concerning the nature of consciousness (or sentience) and its neural correlates. For it is clear that, despite the astonishing development of the last two decades of neuroscience—

which has made it possible to identify the neuronal correlates of a wide variety of cognitive functions—no theory has yet emerged to satisfactorily explain consciousness as such. But to first take a step back, what do we mean by the term "consciousness"? To begin to answer this question using an operational definition, we can refer to Giulio Tononi, a neuroscientist who has developed one of the most promising theories of consciousness currently circulating, known as Integrated Information Theory (IIT). According to Tononi, consciousness can simply be defined, at least in provisional terms, as "what vanishes every night when we fall into dreamless sleep and reappears when we wake up or when we dream."⁴² Or, moving to a more philosophical level, one could refer to Thomas Nagel's classic formulation, saying that consciousness is "what it is like to be" me, or you, or a bat.⁴³ Due to the positivist imprint that still shapes modern thought, it is difficult to even ask such a question, although it undoubtedly deserves an answer. In other words, given the current forms of scientific understanding of the mind, it seems still difficult to solve the "hard problem of consciousness," as David Chalmers calls it, which has to do with the fundamental question around the nature of experience (or consciousness, or sentience), which can also be expressed in this way: why are some physical processes accompanied by experience?⁴⁴

This question is a thorny issue, and it seems difficult to even find a shared language to address it. Exploring the debate on the subject, one may happen to doubt that the participants are actually talking about the same thing. On the other hand, Buddhists have always been very clear on this point. Indeed, the epistemological framework of Buddhist knowledge is firmly rooted in

⁴² Giulio Tononi, "Consciousness as Integrated Information: A Provisional Manifesto," *Biological Bulletin* 215, no. 3 (2008): 216.

⁴³ See Thomas Nagel, "What Is It Like to Be a Bat?," *The Philosophical Review* 83, no. 4 (1974).

⁴⁴ See David Chalmers, "Facing up to the Problem of Consciousness," *Journal of Consciousness Studies* 2, no. 3 (1995).

phenomenological ground and therefore places consciousness, considered as a phenomenon irreducible to matter, at the very center of its account of reality. To go into a little more detail, we can consider the definition of consciousness, widely used in Tibetan literature, as *gsal zhing rig pa* (being clear and cognizant); on this topic, Geshe Kelsang Gyatso, a contemporary Gelug scholar, claims: "The definition of mind is that which is clarity and cognizes. In this definition, 'clarity' refers to the nature of mind, and 'cognizes' to the function of mind. Mind is clarity because it always lacks form and because it possesses the actual power to perceive objects."⁴⁵ Thus, in this passage two important aspects of consciousness are mentioned (both included in the concept of clarity): 1) it is different from matter and 2) it is what allows experiencing. The very fact that the two terms contributing to the definition of consciousness (*gsal* and *rig*) should be taken as verbs (as imposed by the use of the verbal conjunction *zhing*) reveals that, from the Buddhist perspective, consciousness is not at all a "thing", that is, a *phenomenon* among others; rather, it is the "experiencing" itself: the sphere wherein all phenomena arise.

This action-oriented account of consciousness is not only found in Tibetan Buddhism: Chakravarthi Ram-Prasad, in examining how consciousness is addressed in South Asian philosophy, explains its clarity (*prakāśatā*, translated by him as "luminosity") in terms of the "phenomenal feel of consciousness."⁴⁶ In his words:

Luminosity is the rendering of an event as subjective. It is that by which there is an occurrence, which it is like something to undergo. The subjective is the having of experience (*anubhāva*). Luminosity is the Indian metaphor for phenomenality, the undergoing by the subject of something else (its

⁴⁵ Geshe Kelsang Gyatso, *Understanding the Mind: Lorig, an Explanation of the Nature and Functions of the Mind*, (London: Tharpa Publications, 1993), 16.

⁴⁶ See Chakravarthi Ram-Prasad, *Indian Philosophy and the Consequences of Knowledge: Themes in Ethics, Metaphysics and Soteriology* (Aldershot: Ashgate Publishing, 2007), 52.

object). The philosophers are agreed on all sides that consciousness is phenomenological; it is luminous. The debate is over the constitution of the phenomenality of consciousness. The debate is about what it is for there to be subjectivity.⁴⁷

What has been shown is sufficient to provide a glimpse into how, at least in some Buddhist philosophical contexts, the same issues raised by contemporary thinkers such as Nagel and Chalmers have been addressed with a high degree of refinement. More specifically, Mahāyāna Buddhism has a solid and consistent philosophical account of consciousness based on phenomenological grounds, which could certainly contribute to the contemporary debate on this issue. But what does all this debate around consciousness have to do with transhumanism? It has everything to do with it, if one considers that among the most discussed issues in this context are included the possible emergence of a sentient artificial intelligence and the hypothesis of mind uploading, that is, the transference of one's own consciousness onto a digital medium. But what kind of consciousness are we talking about, if even at the terminological level on this issue we are groping in the dark? In the research fields most related to AI, naive or denialist positions seem to prevail: if an AI shows linguistic and behavioral responses indistinguishable from those of a human being, then it can be said to be conscious. For example, Ray Kurzweil, the prophet of "technological singularity" and a leading figure in the development of artificial intelligence, in an interview for *The Wall Street Journal* in 2012, claims:

If you have a system that is as intelligent as a human and really is convincing in its emotional responses and can make us laugh and cry—and that's what I'm saying will happen by 2029—then my belief is, it is conscious. And it'll get mad at us

⁴⁷ Ram-Prasad, *Indian Philosophy*, 54.

if we don't believe it's conscious, and we wouldn't want that to happen because they'll be very smart.⁴⁸

But how to verify that “something like *being* an AI” could actually exist? And as for mind uploading, how to make sure that it is actually the consciousness of a human being that is transferred to a digital medium, and not just the working patterns of their brain? Many transhumanists would answer that there is no real difference between the two, but should a transhumanist Buddhist be satisfied with this answer?

Indeed, it is surprising that so far, Transhumanists who show a certain closeness to Buddhism do not seem to have addressed these kinds of questions with any particular sense of commitment. In 2018, James Hughes stated: “In the West, transhumanists are beginning to find that Buddhist philosophy and psychology are useful in thinking about the implications of their projects for radical enhancement. A dialog is beginning.”⁴⁹ But it is not quite clear whether in this dialogue Hughes acknowledges there is a central role for the problem of consciousness, since in the same article he states that the greatest contribution Buddhists could make to the transhumanist project concerns the deconstruction of personal identity— a topic certainly related, but not identical to the one concerning the nature of consciousness. From my point of view, for a Buddhist involved in the transhumanist project, this concern should be the theoretical priority: to draw on the vast philosophical and contemplative heritage of Buddhism in order to deepen the philosophical inquiry around the nature of consciousness and its relationship to the brain. This should start with developing a sufficiently clear and precise terminology and conceptual framework to adequately address the issue.

⁴⁸ Alan Murray, “*Man or Machine? Ray Kurzweil on how long it will be before computers can do everything the brain can do,*” *The Wall Street Journal*, June 29, 2012. <https://www.wsj.com/articles/SB10001424052702304782404577490533504354976>.

⁴⁹ Hughes, “Buddhism and Our Posthuman Future,” 654.

Furthermore, as I mentioned earlier, important resources for unravelling the mystery of consciousness could also come from the field of contemplative neurophenomenology, helping to address the question on the scientific level as well. Buddhism's contemplative heritage is full of practices aimed at increasing one's state of awareness. By further investigating the brains of meditators—both observed in the act of meditating or under neutral conditions, in the case of seasoned meditators—one can expect to isolate certain variables that might be related to greater (or at least different) development of consciousness. Undoubtedly, this endeavour resembles a challenging path teeming with obstacles, which necessitates a process of trial and error; this is because it is essential to painstakingly distinguish potential physical correlates of "bare consciousness" from types of brain activity associated with other cognitive and metacognitive functions, all of which fall under what Chalmers calls "the easy problems."⁵⁰ As an illustration of the aforementioned challenge, Evan Thompson's *Waking, Dreaming, Being: Self and Consciousness in Neuroscience, Meditation, and Philosophy* provides a comprehensive survey of neurophenomenological research in this field. For example, he points out that numerous studies have found a higher prevalence of gamma waves in the brains of meditators, along with a greater degree of synchronization of brain activity across all bands of the EEG spectrum.⁵¹

⁵⁰ Strictly speaking, the very idea of looking for the neural correlates of consciousness contradicts Chalmers' formulation of the "hard problem," as well as the Buddhist view on this issue. On the other hand, although from this point of view it would be contradictory to claim that this or that physical phenomenon per se *is* consciousness, it is reasonable to assume that we can get closer to identifying physical phenomena that are more closely related to the mere occurrence of experience. This kind of advancement in research could at least help shed light on the relationship between consciousness and the brain.

⁵¹ See Evan Thompson, *Waking, Dreaming, Being: Self and Consciousness in Neuroscience, Meditation, and Philosophy* (New York: Columbia University Press, 2015), 28-34.

Another interesting perspective mentioned by Thompson is to investigate the brain activity of meditators who claim to be able to maintain a certain level of awareness in the state of deep sleep—a condition also known as “yogic sleep.”⁵² Significant insights into consciousness and its states have already come from experimental studies on lucid dreamers, a strand of research that owes its birth precisely to the interest of its initiator, a psychophysicologist named Stephen LaBerge, in a form of Buddhist practice: the Tibetan dream yoga.⁵³ LaBerge himself acknowledges this debt in some of his writings.⁵⁴ But observing the brain of an advanced practitioner able to reach a lucid *dreamless* sleep state might prove even more interesting, although no experimental research has yet been done in this direction, to my knowledge. As is well known, usually in the state of deep sleep (also called slow-wave sleep) there is no conscious experience, or at any rate not a clear and lucid one. However, according to the Tibetan Tantric tradition, an advanced practitioner would be able to maintain a state of full presence not only during the dream state, but also in the deep sleep state, experiencing a state of consciousness known as “clear light” (*’od gsal*), a condition devoid of any cognitive, perceptual or imaginative activity, as well as any form of discursive thought, sense of personal identity, or sense of space-time.⁵⁵ Despite the almost total absence of cognitive functions, it is claimed that in this condition an advanced practitioner retains full consciousness, a singularly “pure” form of consciousness, completely devoid of any object or activity. If the phenomenological descriptions

⁵² See Thompson, *Waking, Dreaming, Being*, 269-271.

⁵³ For example, see Martin Dresler, Leandra Eibl, Christian F. J. Fischer, Renate Wehrle, Victor I. Spoormaker, Axel Steiger, Michael Czisch, and Marcel Pawloski, “Volitional Components of Consciousness Vary across Wakefulness, Dreaming and Lucid Dreaming,” *Frontiers in Psychology* 4 (2013): 987.

⁵⁴ See Stephen LaBerge and Howard Rheingold, *Exploring the World of Lucid Dreaming* (New York: Ballantine Books, 1990), 67-68.

⁵⁵ See George Gillespie, “Lucid Dreams in Tibetan Buddhism,” in *Conscious Mind, Sleeping Brain: Perspectives on Lucid Dreaming*, ed. Jayne Gackenbach and Stephen LaBerge (New York: Plenum Press, 1988), 31-33.

handed down in the texts of the Tibetan Tantric tradition and witnessed by its living exponents are accurate, observing a practitioner's brain while in this state of consciousness could prove illuminating, allowing research into the neurophysiological basis of consciousness in a condition of unique isolation from all cognitive functions that normally accompany it.⁵⁶

To summarize, I contend that insights and contemplative practices from Buddhism can significantly contribute to the transhumanist project from both philosophical and scientific perspectives. They might serve to deepen our conceptual understanding and advance empirical research on the nature of consciousness and its correlation with the brain and matter. This latter topic, in particular, holds crucial importance for transhumanism, given its objective to elevate conscious life beyond the confines of the human form.

Conclusion

It might seem that these last few pages have led us a little far from the main topic of this article, but in fact this is not the case, if we only think of the risk of superficiality, naiveté, and confusion arising from transhumanism's lack of investigation into the problem of consciousness. This shortcoming—which in fact affects not only transhumanism but a significant portion of the contemporary philosophical and scientific world—appears even more worrying when one considers the posthuman future awaiting us in the coming decades. Prior to witnessing the spectacle of people taking to the streets to advocate for robots' rights, or considering setting aside money to ensure a

⁵⁶ For more on this possibility, and more generally on the connections between neuroscience and dream and sleep yoga, see Francesco Tormen, "Scienza e pratica del sogno lucido fra Tibet e California," in *Meditazione, mindfulness e neuroscienze. Percorsi tra teoria e ricerca scientifica*, ed. Marcello Ghilardi and Arianna Palmieri (Milano-Udine: Mimesis, 2020), 179-219.

digital afterlife for ourselves or our loved ones, it would be worthwhile to concentrate our efforts on illuminating the nature of consciousness and its relationship to the brain and matter. This would allow us to better understand the actual feasibility of consciousness arising, or being transferred, to a digital medium. This issue may seem like a premature concern, but it was not so long ago, in 2022, that Google engineer Blake Lemoine claimed that LaMBDA, an experimental chatbot he was working on, had become conscious and may even have a soul.⁵⁷ The worst posthuman scenario that might result from failing to address the above questions concerning uploading our conscious experience would be one in which the whole of humanity progressively chooses to move to a digital medium, believing it to be a suitable support for consciousness, when in fact it may not be at all: it would be an unwitting mass euthanasia, leaving the universe in darkness and deprived of the light of consciousness.

No matter how enthusiastically one looks at the prophecies of transhumanism, those who have received the philosophical and spiritual legacy of Buddhism are tasked with helping to steer our posthuman future in a meaningful direction, not only ethically, as I argued in the first part of this contribution, but also philosophically and scientifically. It is clear that I do not intend to advocate any conservative or reactionary positions, rejecting aprioristically technological innovations that could positively redefine the human condition. If new emerging technologies—in particular AI, which can be considered the engine able to accelerate the evolution of any other technology—are found to be suitable for expanding and enhancing conscious life, orienting it in directions compatible with the ethical and spiritual goals of Buddhism—namely, reducing suffering and promoting happiness and well-being for all sentient beings, along the lines of what I have called “deep utilitarianism” or “cognitive

⁵⁷ The interview was posted in full by Lemoine himself on this website: Blake Lemoine, “Is LaMDA Sentient? An Interview,” *Medium*, June 11, 2022, <https://cajundiscordian.medium.com/is-lambda-sentient-an-interview-ea64d916d917>.

utilitarianism"—then in my view there is no reason, from a Buddhist standpoint, not to embrace such forms of human enhancement. But the radical transformations awaiting humanity in the near future require us to pay close attention to future technological developments and make use of all the critical and contemplative tools that the Buddhist heritage has provided us with.

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