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From Meditation to Techno-Mindfulness: On the Medicalization of Contemplative Practices and Future Prospects

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Abstract: This article explores the historical transformation of mindfulness, through a process of transculturation and commodification, into a biopolitical tool and analyzes possible future scenarios in which this tool will acquire even greater biopolitical strength through the integration of technological devices and artificial intelligence applications, particularly focusing on the growing divide between mindfulness-based therapies and traditional meditation. While both methodologies share the common objective of providing health and psychophysical benefits, they differ fundamentally in their theoretical frameworks, with mindfulness being egolatric and performance oriented while traditional meditation emphasizes transcending psychophysical identity. The development of mindfulness has been influenced by the sociocultural context of neoliberal and capitalist societies, resulting in a model that fosters self-regulation and emphasizes social control. The article also examines the potential biopolitical risks arising from the integration of AI-powered tools into mindfulness-based therapies. The increasing use of digital devices and applications for monitoring physical and mental health may contribute to a society characterized by constant self-surveillance and self-monitoring, reinforcing biopolitical control of the body. Consequently, this raises critical questions regarding the limits of surveillance and the potential exploitation of vulnerabilities through the incorporation of AI-powered tools.

Keywords: global history of mindfulness; contemplative practice; technology and medicine; anthropotechniques; mindfulness therapy



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1. Introduction

This article aims to reflect on the history of the integration of Buddhist contemplative practices as a therapeutic device within the Western biomedical tradition. This integration has occurred through a process of transculturation, enabling the Western medical tradition to assimilate meditation as a psychotherapeutic device suitable for clinical needs within well-defined and standardized protocols, thereby transforming meditation into what is now commonly referred to as mindfulness.

The rapid proliferation of mindfulness-based interventions (Cullen 2011) can be ascribed to a burgeoning interest within the scientific community. This interest initially stemmed from the structured frameworks pioneered by Kabat-Zinn (2003), prompting clinical investigations into this specific contemplative practice and subsequently expanding to encompass more traditional forms of meditation. In both contexts, multifaceted benefits have been documented, particularly notable for their efficacy in alleviating symptoms of depression, anxiety and stress (Schreiner and Malcolm 2008). Research indicates that mindful meditation has discernible effects on enhancing the mind's focus, proving to "impact various components of attention, although the precise effects may depend on the meditation style practiced and the level of experience of the practitioner" (van Vugt 2015, p. 194). This success has precipitated the swift adoption of mindfulness as a therapeutic instrument (Harrington and Dunne 2015).

However, this transformation prompts historical inquiries. Despite evidence demonstrating the tangible benefits of traditional meditative practices on the mental and psychophysical well-being of practitioners (Pascoe et al. 2021; Horowitz 2010; Monk-Turner 2003), questions persist regarding whether meditation per se can be regarded as a medical apparatus. Conversely, criticism has been leveled at mindfulness for its perceived departure from traditional Buddhist contemplative practices (Sharf 2014).

Jessie Sun (2014) underscores the historical narrative of mindfulness, traditionally centered around the seminal contributions of Jon Kabat-Zinn. His pioneering endeavors in integrating mindfulness into medical contexts via the mindfulness-based stress reduction (MBSR) program significantly contributed to the popularization of secular mindfulness. Nevertheless, it is imperative to recognize that Kabat-Zinn's advancement of mindfulness within what is often referred to as the "Kabat-Zinn tradition" was not conceived in isolation but rather was influenced by existing psychological frameworks. Notably, Kabat-Zinn's conceptualization of mindfulness, shaped by his appreciation for the writings of Nyanaponika, emphasized the concept of "bare attention" (ibid., pp. 398–99). This influence is discernible in Kabat-Zinn's initial clinical endeavors, where he underscored the significance of detached self-observation in attaining a state of "bare attention" and "choiceless awareness".

Subsequently, Kabat-Zinn provided a seminal operational definition of mindfulness as the intentional cultivation of attention in a particular manner: with focused purpose, in the present moment and devoid of judgment. This definition served as the cornerstone for subsequent refinements, theoretical constructs and assessment methodologies within the burgeoning field of mindfulness inquiry. While variations exist in the conceptualizations of secular mindfulness, they all bear a strong resemblance to the notion of "bare attention". Moreover, unlike the multifaceted historical applications of mindfulness across Western and Buddhist contexts, contemporary secular mindfulness is characterized by distinct operational definitions composed of identifiable constituents.

Although the term "mindfulness" has historical roots —the word *mindful* meaning "attention, heedfulness" dates back to the 16th century before it was adopted, roughly two centuries later, as a possible English translation of the Pāli *sati*— its secularization has yielded profound societal implications. This concept has permeated diverse societal spheres, with recent years witnessing a surge in public interest in mindfulness practices. Notably, media coverage, exemplified by Time magazine's feature on "The Mindful Revolution", underscores mindfulness's mainstream assimilation into contemporary culture.

A comprehension of Kabat-Zinn's rationale for secularizing mindfulness is enlightening. Despite his extensive immersion in various Buddhist traditions, Kabat-Zinn embarked on a deliberate process of "de-Buddhicisation" (ibid., p. 402) to render the essence of meditation and yoga practices accessible to a broader audience without overt religious connotations. Inspired by a *vipassanā* retreat in 1979, his vision aimed to offer meditation practices devoid of cultural or religious affiliations, thereby eliminating potential barriers for individuals seeking solace from distress.

Throughout the inception of MBSR, Kabat-Zinn meticulously structured and conveyed the program in a manner that mitigated associations with perceptions of "New Age" or "Eastern Mysticism" (ibid., p. 403). This strategic approach was pivotal in positioning mindfulness as a pragmatic, evidence-based modality within mainstream medical care, particularly during an era when meditation was perceived as unconventional. By emphasizing mindfulness as a mechanism for attention regulation and stress mitigation, Kabat-Zinn aimed to foster wider acceptance and integration of mindfulness practices into conventional healthcare paradigms.

Nonetheless, "some therapists have suggested that the oversimplification of mindfulness may reduce its clinical utility and potential for lasting change" (ibid., p. 406). This statement is consistent with the most recent literature regarding MRAEs (meditation-related adverse events), which have been documented on multiple occasions (Binda et al. 2022; Aizik-Reebs et al. 2021).

The adverse effects of meditation are nonetheless recorded only on particular occasions, and the success ensured by the documented health benefits has also progressively propelled towards a "scientification" of Buddhism. Its enculturation in the Western dimension has often aimed at presenting it as a "scientific religion" in order to emphasize those therapeutic aspects perceived as delegitimized without the support of the technoscientific framework (Lo Turco 2006). Since the formulation of mindfulness protocols in the 1970s, the influence of medicalization on contemplative practices has progressively propelled towards an integration between Buddhism construed as a religion or form of spirituality and technoscience (Morris 2022).

This gives rise to perspectives centered on foreseeable advancements, whereby the incorporation of mindfulness devices into biomedical clinical protocols is poised for enhanced integration with existing technological apparatuses employed in biomedicine. This integration could manifest as a form of what might be termed "technomedicine", facilitating an increasingly close relationship between mindfulness and technological devices, particularly those associated with artificial intelligence (AI), which constitutes the latest historical culmination of the development of the medical history of mindfulness in the contemporary world.

The advantage of this integration lies in the potential for greater customization of mindfulness therapy, tailored to the subjective needs of the patient utilizing it. This implies not only a progressive medicalization of mindfulness but also anticipates its natural convergence into "techno-mindfulness", increasingly integrating automation and predictive capabilities offered by the growing power of AI. This convergence occurs within a clinical device marked by a strong tendency towards medicalization and protocolization.

Contemplative practices, once integrated with these technological tools, have been transformed into something radically different, better suited to the expectations and needs of an allopathic biomedicine rooted in established cultural principles throughout Western medical history. This transformation reflects a trend towards the progressive technicization of medicine, foreseen by Jaspers as the concept of "technomedicine". This trend has been inherent in Western biomedicine since its clinical formation, necessitating increasingly protocol-oriented forms of care management, inevitably leading to an alliance between technology and clinical practice.

The present article posits a thesis contending that applications of artificial intelligence in the realm of mindfulness serve to reinforce prevailing tendencies that associate health with performance and conformity to contemporary social norms, while concurrently downplaying the higher purpose traditionally associated with meditative practices, commonly described as a "spiritual dimension". This investigation constitutes a component of a broader critical analysis situated within the contemporary landscape of AI, an entity whose rapid acquisition of capabilities has rendered prethreshold considerations to some extent obsolete. We intend to contribute to ongoing discussions on the neoliberal nature of mindfulness and its historical transformation as a marketable and reconstituted capitalist product aimed at enhancing productivity (Purser 2021) and on the relationships that are being established in this social context between contemplative practices and AI (Hershock 2021).

2. Brief "Medical" History of Meditation

Medicine has consistently remained a crucial component of Buddhism from its inception through its subsequent evolution and is indeed sculpted into the form of meditative practice by Buddhists. This practice is intrinsically tied to notions of purity, freedom from mental afflictions and psychophysical integrity, aligning harmoniously with the Buddhist conceptualization of medicine. The ancient Buddhists themselves are frequently depicted as figures associated with medicine or as individuals trained in the practice of medicine (Divino 2023b).

Meditation serves a dual purpose; achieving purity or optimal health is not the primary objective, but rather the outcome of liberation. The prerequisite state to this liberation is inextricably linked to existential discomfort, also known as *dukkha*, and its psychophysical manifestations identifiable as illness (*roga*).

Western fascination has led to the supposition that meditation, akin to phenomena such as yoga, could be transposed and assimilated into Western culture, examined through the lens of technoscientific disciplines. Consequently, meditation undergoes a process aptly described as transculturation, where it is recalibrated to meet the demands of Western cultural constructs, primarily cognitive-behavioral psychology (Herbert and Forman 2011; Singh et al. 2008). This adaptation, however, truncates a significant aspect of meditation, transforming it into an exercise of control and focused attention exclusively.

The mindfulness technique purports to draw inspiration from Indian meditation traditions, with a particular emphasis on Buddhist practices. The construction of a distinct identity often involves the utilization of foundational myths and this practice is no exception. It is not the intention here to refute that mindfulness is profoundly influenced by Buddhist practices. The architect of mindfulness himself, Jon Kabat-Zinn, unequivocally references Buddhist practice.

However, this introduces a complex discussion about the authenticity, interpretation and adaptation of such practices within different cultural and philosophical contexts. The process of transculturation plays a significant role in shaping these practices, their reception and their impact on different societies, especially when the medical dimension is implied since it recalls a complex process of legitimation, authority and credibility in the scientific discourse.

Numerous attempts have been made to trace a global history of mindfulness, aiming to contextualize the clinical technique developed by Kabat-Zinn within a continuum with the contemplative tradition of Buddhism (Sujato 2012). Undoubtedly, these attempts hold significant merit, and one cannot assert a clear historical rupture between Buddhist meditation and clinical mindfulness. However, for historical accuracy, one must consider how conceptions of meditation have evolved from the historical and cultural context of ancient Buddhism to the clinical mindfulness of Western biomedicine. Over two millennia separate these two disciplines, and while it is evident that mindfulness now possesses a clinical aspect due to its integration into a cultural framework where this facet of medicine exists, one might raise doubts regarding the clinical nature contemplative practice *tout court*. Although undeniably a part of a context that sought healing in some form of "therapy" and aimed to establish a genuine "medicine" within its tradition, we cannot equate the idea of self-care accompanying the meditation described in Buddhist texts with the nature of the clinical-therapeutic idea that mindfulness embodies today.

If we consider meditation within the historical-religious context of Buddhism, it would not be far-fetched to assert its assimilation into a medical practice. Buddhists have consistently demonstrated a keen interest in medicine (*bhesajja*), evident particularly in the earliest references within the *Pāli Canon*, which represent the oldest instances of Indian medical literature (*Zysk* 1991, 1993, 1995, 1982). These texts contain terminologies later found exclusively in *āyurvedic* literature, such as references to the three basic bodily humors and the issues associated with their interaction (*Divino* 2023a). This traditional form of Indian medicine will be also explicitly endorsed by Buddhists (*Subbarayappa* 2001, p. 139).

In general, the notion of establishing a medical practice was implicitly ingrained in Buddhist doctrine (Salguero 2018, 2022), which fundamentally centered on liberation from suffering (dukkha), encompassing not only psychological distress but also physical ailments (roga). Ancient Buddhist texts also display a remarkably detailed attention to anatomy and physiology, indicating their significant medical expertise even in antiquity.

A particular emphasis is directed towards what we now define as "mental" health, although during the time of the Buddha, this concept did not conform to a mind–body duality but rather denoted a form of existential distress and suffering experienced and embodied physically. Its origins were rooted in dynamics that today we would identify as socio-cultural. In this text, our focus naturally gravitates more towards contemplative practices rather than medical traditions aimed at addressing bodily dysfunctions (*kāyika roga*).

When meditation is described in the earliest texts it is sometimes connected to the elements and thus to the primeval humoral theory.

The meditator should maintain mental presence throughout every aspect of the breathing process, cultivating awareness of their presence in the moment and immersing themselves in a state of unification (*samādhi*) until they apprehend the true nature of impermanence. This meditation technique is considered to be healthful and advantageous (*mahapphalā*, *mahānisaṃsā*). (Divino 2023a, p. 44)

The Buddhist contemplative practice outlined in these texts is thus a technique aimed at enhancing the practitioner's awareness, consequently reducing factors contributing to psychophysical suffering. It tends to be considered a bona fide therapy, with the Buddha often likened to a physician or even the greatest of physicians (Granoff 2011). The benefits of this practice have been acknowledged from the outset, drawing interest from the West on clinical grounds (Troy et al. 2013). Meditation has demonstrated clear psychological benefits, particularly in stress reduction, and has facilitated the development of mindfulness-based interventions (MBIs). The mindfulness method developed by Jon Kabat-Zinn was grounded in the concept of evidence-based medicine to lend a perception of scientific rigor to meditation. This approach isolates it from its historical-cultural context and its associated Buddhist spirituality, asserting that a methodology exclusively focused on biomedical observable benefits, reinforced by a stringent protocol emphasizing only those aspects, was the winning key to formulating a fruitful therapy.

Our contention is that these adaptations do not necessarily signify a drive toward scientific rigor but rather a cultural reworking to render this clinical device more acceptable within the confines of allopathic biomedicine's demands.

3. From Meditation to (Clinical) Mindfulness

We arrive at the contemporary era, wherein mindfulness, a concept transculturated into the historical-social milieu of the Euro-Atlantic world, functions presently as a therapeutic tool targeting mental health. Endeavors are relentlessly undertaken to legitimize this role, primarily through the formulation of theoretical frameworks that integrate it into pre-existing biomedical structures. This is evident in the plethora of investigations on meditation that are centered around neurobiological phenomena and related mechanisms (Raffone et al. 2019).

There is also a cultural problem. The ancient Buddhist physician was an itinerant ascetic, who rejected social norms and practiced his asceticism in a specific external space, outside the organized space of society (Divino 2023b). On the other hand,

Rather than cultivating a desire to abandon the world, Buddhism is seen as a science of happiness—a way of easing the pain of existence. [...] Mindfulness is promoted as a cure-all for anxiety and affective disorders including post-traumatic stress, for alcoholism and drug dependency, for attention-deficit disorder, for anti-social and criminal behavior, and for the commonplace debilitating stress of modern urban life. (Sharf 2014, p. 472)

Sharf accurately identifies that the early Buddhist institution was fundamentally a renunciate community, literally embodying a critique of prevailing societal values and cultural norms (ibid., p. 478). Based on his personal encounters with Buddhist meditation in a monastic environment, Sharf expresses skepticism regarding the congruence of traditional mindfulness with its contemporary clinical representation. It is crucial, from an anthropological perspective, to note that mindfulness was adopted as a strongly Euro-American-centric clinical methodology. It assumed Western models of health and disease, along with corresponding healing expectations for conditions deemed pathological. In examining traditional meditation practices, Sharf questions whether they even aspire to conform to our established model of mental health.

Paramount among these considerations is also the profound state of meditative absorption, which appears to be fundamentally irreconcilable with the mindfulness doctrine of presentism (Sheldon et al. 2015) although we do not always realize that flow absorption is actually an important element for traditional meditation as well as in exercises that require a certain type of skill and concentration.

Meditation likely did not fall within the biopower tools envisioned by Foucault when he wrote about surveillance and discipline. Yet, upon closer examination, we can discern in mindfulness the signs of a self-surveillance apparatus, perfectly adapted to the needs of neoliberal society, perhaps even beyond Foucault's bleakest expectations. This is to the extent that the foreseeable subsequent steps in the development of mindfulness anticipate its integration with technological dispositives, which, having already arisen from the necessity of social surveillance, intersect with mindfulness to enhance and refine its aspects geared towards controlling dispositions.

In this phase, meditation is progressively "digested" by Western culture to be rendered more akin to a product. It is thus made appealing and "thinkable" in Western terms, resorting to the reinforcement of stereotypes and commonplaces concerning the allure of the exotic and its association with universal medicine. The process goes from enculturation to transculturation: meditation is transformed into a Western cultural product that could be entirely independent of its Asian counterpart. Even in the preliminary stages of therapeutic mindfulness, when meditation was considered in clinical terms, it had to necessarily be rendered analogous to psychotherapies for two fundamental reasons: firstly, to absorb the authority conferred only to "official" clinical practices, substantiated by scientific episteme, and secondly, to definitively appropriate meditation as a marketable product subject to therapeutic logics.

Consumption of a product "is a process of self-construction through differentiation, and marketing often capitalizes on the recognition that consumers who buy to satisfy their desires often do so with a concern for identity—but also with a need to authenticate their identity in very particular ways" (Guth 2012, p. 21). We cannot ignore that Orientalism, as described in Said's influential work, continues to function effectively as a label or a true brand that imported goods, such as yoga and mindfulness, can now proudly bear. Initially, the "East/Orient" served a different purpose, primarily concerned with defining the identity of the Western and Euro-Atlantic world through well-known anthropological mechanisms of opposition. The East was meant to represent an exotic otherness that contrasted with the familiar and reassuring world of Christianity and the West, which defined itself in part by opposing a hypothetical "other" (Said 1972, p. 58). Obviously, a certain idea of "oriental medicine" is not exempted from this process (Ikemi and Nagata 1986).

Within the clinical framework, mindfulness fully adheres to the logics of medicalization and the use of therapies as instruments of patient control. The identification of mindfulness with psychotherapies enables this transition that, without the filter of the authority of professional medical dimensions, could not have been imparted to simple meditation. In a transformation mechanism akin to that occurred to yoga, biopolitics appropriates meditation, transforms its intentions, turns it into a cultural consumption product and then into a clinical means of biopower.

Naturally, these forces do not act autonomously and independently but are part of processes made possible by the will of the masses and cultural subjects who have "demanded" the consumption of meditation as a product, thereby allowing the cultural milieu around the clinical world to conceive of mindfulness in current biopolitical terms. This is a synthesis of the major criticisms that can be levied against mindfulness. However, I also intend to address future prospects, hypothesizing new phases of evolution that await mindfulness, now perfectly integrated into the framework of biopolitical control.

These phases envision the combined union of another tool known to the medical world and surveillance studies (Zuboff 2019): technology. To better understand why this union is foreseeable and what we can expect from it, speaking in terms of "technomindfulness",

a brief introduction on what I actually mean by "technology" and to what extent it is already coming into contact with mindfulness in the perspective of a biopolitical-flavored metamorphosis is necessary.

Thus far, we have examined how mindfulness can be described as the product of a long process of transculturation, which eventually gained favor within the prevailing medical system of the Western world, allopathic biomedicine, to be ultimately transformed into a marketable product: a psychotherapeutic technique stripped of its Indian origins and the cultural tradition that constituted its context and presented as an innovative tool, approved by science and directed towards health protection. Mindfulness, reborn in these highly Westernized forms, is undoubtedly something else entirely and is fully integrated into market logistics, which are now overflowing with courses, books, seminars and tangible "products" that generate considerable economic revenue for mindfulness. This process, commodification, the transformation of mindfulness into a sellable product, would not have been possible without the preceding phase of transculturation, which absorbed meditation into the Western cultural context and "digested" it by eliminating elements that would have been intolerable to the neoliberal mindset, rendering it, in fact, "fit to be eaten", and therefore "fit to be thought". This final phase represents the ultimate biopolitical culmination of mindfulness, as it will allow for the maximization of its biopolitical intentions through its integration with technological devices, thereby eliminating the need for intermediation with instructors and therapists and gradually replacing them with digital interfaces that enable the biopolitical device to be self-administered by the patient/meditator.

This last transformation, which we have merely hypothesized but appears perfectly plausible given the current state of affairs, is possible because mindfulness aligns perfectly with what Sloterdijk has described as "anthropotechnics" (Rodeschini 2008). We should not be surprised by these assumptions about the future integration of mindfulness with technological systems since what has transpired thus far with mindfulness is nothing but a repetition of a script already witnessed, with another anthropotechnic being transformed into a biopolitical device by the Western world, namely, yoga. If we were to learn from yoga, we would observe the recurrence of the same patterns that have characterized mindfulness. From there, postulating its integration with technological devices should not be difficult, as mindfulness, even more so than yoga, lends itself well to being utilized in such a manner. This would not be the first time: speaking of technical discoveries to exercise power in the seventeenth and eighteenth centuries, Foucault states:

what I find most striking about these new technologies of power [...] is their concrete and precise character, their grasp of a multiple and differentiated reality. [...] It becomes a matter of obtaining productive service from individuals in their concrete lives. And, in consequence, a real and effective "incorporation" of power was necessary, in the sense that power had to be able to gain access to the *bodies* of individuals, to *their acts*, *attitudes*, and modes of everyday behavior. (Foucault 2020b, p. 125, my italics)

Regarding the analogous transformation of yoga, a recent work by Squarcini (2022) sheds light on the biopolitical aspect underlying commodification intentions. Although not explicitly discussing transculturation, it is evident from Squarcini's analysis that this step preceded the commodification aspect. Squarcini focuses particularly on Resolution 69/131 adopted by the United Nations on 11 December 2014, which established the International Day of Yoga, an event of "biopolitical significance" (Squarcini 2022, p. 1171), considering that this resolution established "a relationship between *yoga* and *global health*" that greatly benefited yoga, now regarded as a technique for overall health (ibid., pp. 1172–73). This transformation was sponsored by the Indian Prime Minister Modī himself and generated, it must be acknowledged, a completely new form of yoga, entirely detached from its history within the Indian cultural context or, as Squarcini states, "an unprecedented version of the ancient "health market" (ibid., p. 1174). The secularization of yoga effectively corresponds to its transculturation, the transformation into something conceivable by Westerners as intriguing, fascinating, yet still "usable", and this transformation progresses towards its

medicalization, assimilation into the allopathic biomedicine context that turns yoga into a health control device but is essentially a "disciplinary practice" (ibid., p. 1180). Squarcini also draws on Sloterdijk and the use of anthropotechnics in a biopolitical sense. Furthermore, there is the commercial aspect: the yoga industry is, in fact, a billion-dollar business with millions of practitioners, which increases exponentially following the announcement of its "official" (albeit within the Western and Westernized cultural framework) recognition of its therapeutic value. In the context of a decolonization effort, there is not enough reflection on the utilization of these devices, which are still improperly perceived as exogenous to Western culture.

The endogenization (or, if you prefer, "acculturation") of mindfulness is virtually identical to that of yoga, whose history "can be written in the same way one would write the history of any other exotic consumer goods, such as tea, coffee, corn, cocoa, or potatoes" (ibid., p. 1183). Just like with mindfulness, the subversive origin of the cultural device in question is neglected in yoga as well. The historical context of Buddhist practice is anything but ascribable to an idea of officialdom or acceptance of the established order, whereas modern mindfulness and yoga, whose proponents "present themselves as the modern expression of these traditions and claim their formal affiliation with those same 'ancient lineages', overlook—until it is hidden—the aforementioned distinctly disruptive, 'antithetical' (nivrţtika) and 'reversive anamnestic' (pratiprasava) character of their perspectives" (ibid., pp. 1184–85).

Although anthropological considerations have yet to fully emerge, studies in this realm offer valuable perspectives. Bruder's recent article highlights the prevailing significance of mindfulness training programs and apps (Bruder 2022), suggesting that North Americans and Europeans are increasingly conceptualizing mindfulness, as well as their lives more broadly, in algorithmic terms. Technologies play a pivotal role in this process, as observed also by Ruckenstein and Schüll, wherein applications, trackers and devicebased pedagogies imbue machinic agency into the way humans define, categorize and comprehend existence. Concurrently, researchers in machine learning are exploring the implementation of rudimentary cognitive principles in artificial neural networks, thereby paving the way for marketing these networks as generative models for human perception and learning. While algorithmic modeling of cognitive processes aims to enhance artificial intelligence, neural networks and neuromorphic devices purportedly advance our comprehension of cognition in the human brain. In other words, contemporary neuroscience, together with neuroscience-inspired machine learning research, appears to converge upon algorithmic understandings of cognition in both humans and machines. This tendency is further compounded in neuroscience-inspired artificial neural networks, as they provide operational models of cognitive labor under conditions of overload and lend themselves well to experimentation with technological remedies for the consequences of working at or beyond capacity. Another recent article by Wang and Uysal (2023) is dedicated to outlining prospective avenues for investigating the escalating trend of artificial intelligence (AI) research in the hospitality literature. This critical reflection paper specifically seeks to identify AI-assisted mindfulness as a critical yet underexplored issue and contribute plausible directions for future research.

The prevailing and continuous acclaim for the advantages of mindfulness within virtual or digital settings in general should be approached with greater caution (Yildirim and O'Grady 2020). While acknowledging the potential existence of such benefits, it is crucial to consider the historical and cultural milieu in which they are defined and their relationship to the respective instrument. It is important to note that medicine, as commonly recognized, lacks singularity and absoluteness (Gaines and Davis-Floyd 2004; Singer 2004; Hahn and Kleinman 1983). When examining its foundational aspects from a cultural standpoint, it becomes apparent that we should be wary of embracing a unified and universal perspective, even if it appears to be all-encompassing. Mindfulness gained acceptance and endorsement in scientific circles solely after its incorporation into the clinical realm of allopathic biomedicine. The integration of mindfulness with digital technologies

only serves to fortify this perspective, disregarding the contextual factors involved. The development of a critical and ethical framework that centers on individual autonomy and privacy is necessary to maximize the potential of AI-powered tools while minimizing the biopolitical risks associated with their use.

There are two images, then, of discipline. At one extreme, the discipline-blockade, the enclosed institution, established on the edges of society, turned inwards towards negative functions [...]. At the other extreme, with panopticism, is the discipline-mechanism: a functional mechanism that must improve the exercise of power by making it lighter, more rapid, more effective, a design of subtle coercion for a society to come. (Foucault 2020a, p. 209)

The convergence of AI with mindfulness practices signifies a revolutionary landscape within modern therapeutic approaches that can also enhance dispositives of self-discipline. We should scrutinize the integration of AI within acclaimed platforms like Headspace[®], Moodfit[®], Woebot[®] and other tools such as Flowtime (Entertech Ltd., Cardiff, UK) and MuseTM. These are just some examples that in the space of a few years could be only an infinitesimal part of a vast panorama of AI models that can be integrated with technomedical practices such as mindfulness. An assessment of their roles in tailored therapy and cognitive research underscores their significance.

4. Medicine and Technology

The esteemed British cultural theorist, Mark Fisher, is recognized for an assertion that may incite perplexity or disheartenment, yet which currently appears to possess profound prophetic qualities and unveils a tendency that necessitates the cultivation of heightened awareness within the discipline of medical anthropology. Succinctly, Fisher posited that it is easier to imagine the end of the world than the end of capitalism. This assertion, transcending mere implications on sociocultural and historical-economic dimensions, significantly impacts those engaged in the realm of healthcare.

The eminent harbinger of this historical reality was Jaspers, who expounded upon the role of the physician within what, in Heideggerian terms, he characterized as the "age of technology". Jaspers posited that it is through the endorsement of a protocoled therapeutic model that the medical practitioner has metamorphosed into a functionary of the technical apparatus. According to Jaspers (1989), this technocratic transformation renders therapy a calculable and increasingly complex application of instruments to a case that has already been dissected through the aforementioned diagnostic data. The patients perceives themselves enmeshed within a world of analytical apparatuses, unable to comprehend the meaning of procedures that transpire above their cognizance. Consequently, they encounter a plethora of medical professionals, none of whom can be identified as their personal physician. In this context, even the physician appears to have evolved into a technician.

This role inversion, in which technology presently governs the field of medicine as opposed to the converse, aligns impeccably with Fisher's prognostication. This alignment is particularly evident insofar as neoliberalism exploits technocracy and the technological apparatus as a conceptualization of authority, or more specifically, biopower. Within the framework of this scholarly investigation, we aim to employ the concept of "dispositif" (commonly referred to as "apparatus" or "dispositive") as articulated by Agamben, building upon the foundational ideas of Foucault (Frost 2019). Our objective is to comprehensively grasp the overarching impact of this concept, not only in relation to the pervasive influence of artificial intelligence that currently governs the underpinnings of novel biomedical methodologies but also in elucidating the application and conceptualization of mindfulness as a device for managing mental well-being, predating its amalgamation with technological apparatuses. A tight interrelation exists between the notion of dominion, as anticipated by a bureaucratic conception of technical potency, and the power exerted under the guise of health over the corporeal entities of individuals embedded within the sociocultural matrix. This framework constitutes the realm of influence upon which the technical force affirms its presence.

Barker presents an examination of mindfulness within the context of integrative medicine, characterized by purposeful and nonjudgmental awareness in the "present moment" (Barker 2014). There has been criticism of the attention that mindfulness places on the desire to tether the subject to the present (Hyland 2014, 2016).

Therapeutic mindfulness also presupposes the observing subject is located at a position "here", who is instructed to pay attention to "the present" located over "there". The present moment is viewed as a graspable existent, that is, as a place or location in which to relocate one's attention. [...] Therapeutic mindfulness urges us to "live in the present moment" and to try to live mindfully, by "being here now". However, this heavy emphasis on locatedness subtly reinforces an achievement and self-orientation, as we are constantly in a mode of self-surveillance, checking up on our selves, gauging our progress and ability (or, more often than not, inability) to "be present". (Purser 2015, p. 682)

This mindfulness practice derives its foundations from Zen Buddhist traditions and is posited to contribute to holistic well-being across physical, mental and spiritual domains. Jon Kabat-Zinn assumes a seminal role in the integration of mindfulness into mainstream Western medical discourse, notably accomplished through the establishment of his widely recognized mindfulness-based stress reduction (MBSR) program, as well as his influential literary and auditory works. The widespread adoption of mindfulness is indicative of a growing interest in alternative therapeutic methodologies and the accessibility of extensive health-related information. This aspect in particular would be included in what Foucault called "economy of health"; that is, "the integration and improvement of health, health services, health consumption in the economic development of privileged societies" (Foucault 2020b, p. 135).

In the realm of mindfulness, what we are likely to see in the near future is a growing trend to consolidate and augment control through the implementation and utilization of Alpowered tools. One prevalent proposal for integrating AI could involve adopting previously used tools, this time in conjunction with the data processing capabilities and predictive models offered by AI. This notably entails measuring brain waves and monitoring every aspect of subject's daily experience in order to construct models of meditation functioning, ultimately subjecting the practice to technical control and a more stringent execution regime. AI could potentially predict instances of decreased focus as required by the mindfulness model, alerting the meditator to incorrect practice or the need to refocus their concentration, even developing customized exercises.

The biopolitical risks of implementing such AI-powered tools to control and measure meditative practices are numerous. One major risk is the potential for these technologies to undermine the fundamental principles of mindfulness, which emphasize cultivating awareness and acceptance of one's internal experience. The use of AI could promote a rigid and overly prescriptive approach to meditation, where the practitioner's subjective experience becomes subservient to technical data and algorithms. Such an approach could result in a loss of the very qualities that make meditation a valuable tool for promoting mental health and well-being.

Another risk is that the use of AI in meditation could reinforce problematic notions of individual responsibility for health outcomes. In the biopolitical model, individuals are expected to take personal responsibility for their health, and technology is often framed as a means to achieve this end. However, this approach can ignore the broader social, economic and environmental factors that shape health outcomes, reinforcing the view that health is an individual responsibility rather than a collective concern.

Mindfulness has been studied and has even been applied by some anthropologists as a method of integrated ethnography. It is believed that above all the aspect of conscious attention could be valid for mindfulness, a fact that starting from the well-known work of Scheper-Hughes (Scheper-Hughes and Lock 1987) is perhaps prodromal for the developments of what will later be called "Mindful Ethnography" (Orellana 2019). This is not the place to probe the aspects of the integration of mindfulness into ethnography, but this

episode is enough for us to point out the pervasiveness of the method. This proposition warrants a comprehensive discourse, elucidating both its inherent strengths and potential areas of critique.

The work of Scheper-Hughes has served as an inspiration for many in the field of medical anthropology and anthropological studies of health. The concept of the mindful body has been scrutinized, particularly in relation to its capacity for metaphorical expressions of illness and discomfort (Di Giacomo 1992). Furthermore, the notion of mindfulness, in a broader sense, has become an exceedingly significant phenomenon that cannot be overlooked by anthropology as a whole. The utilization of mindfulness as a mechanism for safeguarding mental health has indeed become an ongoing fact, steadily integrating itself into Western culture (Cook and Cassaniti 2022).

As Yates-Doerr writes, descriptive research also challenges anthropologists and medical practitioners to rethink their competencies. While cultural competency is aimed at respectful translation between different sites or constituencies, it has sometimes perpetuated stigmas and reduced care quality due to stereotypical representations of "culture" (Yates-Doerr 2017). Some medical anthropologists propose the concept of structural competency, which requires health workers to consider how systemic oppressions influence health disparities.

5. Mindfulness and Modern Technology

Beyond mere clinical instruments, a plethora of combined methodologies have been established, which revolve around the surveillance, regulation or administration of meditative practices. Certain instances of these methodologies have garnered immense popularity and are disseminated through mobile applications. Conversely, others exhibit a more intricate nature. Some have been extensively utilized as a predominant instrument for investigations within the domain of mindfulness and cognitive research (Bonfim and Lamas 2023; Gourlay 2023).

Our conviction, predicated upon compelling reasons, is that efforts previously undertaken by the collective of researchers in psychology and cognitive sciences to combine surveillance techniques with mindfulness methodologies will witness further, unprecedented advancements with the incorporation of artificial intelligence. This progression, while impressively swift, is also extraordinarily intricate. Indeed, numerous initiatives related to this topic are already underway (Fujino et al. 2018; Cao 2022; Indrianti et al. 2022). Analogously, in another sphere, discussions are already in progress concerning the integration of digital methodologies and artificial intelligence for health-related matters, with mindfulness being a recurring theme in these discussions (Denecke et al. 2021; Ahuja et al. 2023).

A common theme appears to permeate the experiences of mindfulness practitioners: the necessity to "maintain control". We must interrogate whether and to what degree these forms of control, which they derive benefit from, are embedded within these systems in a biopolitical context, thereby naturally predisposing them towards a technicization of biomedical processes, which have been espoused by medical practitioners as the optimal approach.

The issue of the technicization of the medical profession in general, as initially mentioned by Jaspers, resonates today in the problem highlighted by Severino in his studies, which can be summarized as the dangers of using the technics (*tékhnē*) for purposes of power. Incidentally, Severino has demonstrated that technics possesses the capacity to invert its own nature as a means and become the very end of humanity. Various cultural actors, whether political powers or, in our case, medical institutions, that choose to adopt the technical principle (which consists of an ideology aimed at achieving maximum results with maximum saving of resources), are destined to be overwhelmed by the technical means itself, which, through its utilization, amplifies uncontrollably and eventually supplants the very nature of the user, leading to their technicization: "if human beings were to truly realize the fundamental truth of their belief in the *lógos* of *téchne*, they would fall into unbearable despair" (Pitari 2023, p. 5).

The process of technicization, which entails not only the use of technological devices in medical practice but also the adoption of mechanistic and functionalistic ideology in the organization of medical practices, is more than evident in the context of mindfulness. Several solutions have been proposed to address this issue, recognizing that mindfulness itself has become purely standardized and technicized. Purser and Milillo have suggested a return to a purely Buddhist-inspired practice as the only solution to address the intrinsic problems of mindfulness. However, we must consider the possibility that these problems have become systemic, and Purser's subsequent critique of "McMindfulness" (Purser 2019) serves as evidence of this (Purser and Milillo 2015). At this point, the process of transculturation of mindfulness within the techno-medical sphere opens up possibilities for the continued technicist evolution I have outlined in this study. In light of future research projects on this topic, the neuroanthropological perspective (see Lende et al. 2021) should intervene as well in research on the subject, as we can expect a significant influence of neuroscience and technology guided by these studies in the development of technology-integrated meditation and AI.

Commonly, it is postulated that mindfulness is a methodology drawn from the Buddhist tradition; however, it notably harbors structural divergences that render it discordant with the core tenets of Buddhist meditation. Simultaneously, the terminology of "mindfulness" is contemporaneously associated with a more neutral concept of concentration and is, in my viewpoint, incorrectly equated with prayer or other bodily techniques inherent in diverse religious cultures.

I am skeptical. Anything that offers success in our unjust society without trying to change it is not revolutionary—it just helps people cope. However, it could also be making things worse. Instead of encouraging radical action, it says the causes of suffering are disproportionately inside us, not in the political and economic frameworks that shape how we live. And yet mindfulness zealots believe that paying closer attention to the present moment without passing judgment has the revolutionary power to transform the whole world. [...] Mindfulness is nothing more than basic concentration training. Although derived from Buddhism, it's been stripped of the teachings on ethics that accompanied it, as well as the liberating aim of dissolving attachment to a false sense of self while enacting compassion for all other beings. (Purser 2019, p. 7)

The inaugural point to be deliberated, which, in my assessment, epitomizes a vast divergence between Buddhist meditation and mindfulness, pertains to the philosophical substratum. Mindfulness, having been calibrated to fulfill the requirements of cognitive-behavioral psychology, has evolved into a relaxation methodology and a practice of "mental presence"—a construct that necessitates in-depth exploration.

Upon its integration into the realm of technical scientific methodology, mindfulness has earned a degree of academic respectability, but this entry has necessitated an eradication of the ethical, moral, philosophical or seemingly "irrational" elements, which, paradoxically, represent some of the aspects most in opposition to capitalist norms. Consequently, the seductive appeal of affiliation with esteemed scholarly circles has granted mindfulness a degree of protection. However, this protection comes at the cost of a disavowal of its essential function: although purporting to be derivative of Buddhist practices, mindfulness lacks a tangible resonance with Buddhist principles.

6. Modern Biopolitics of Mindfulness and the MSS

Purser was among the pioneers to put forth a well-structured critique of mindfulness, taking into account the risks highlighted by Foucault regarding the "docilization" of bodies in modern neoliberal societies.

Corporate mindfulness has become the new brand of capitalist spirituality, a disciplined but myopic self-help doctrine, that transfers the risk and responsibility for well-being onto the individual. As individuals are compelled to constantly self-monitor and self-regulate their internal states and "destructive emotions"

by "being mindful", they become as Foucault warned "docile subjects". The formation of a neoliberal self is one that is autonomous and free to make rational choices that enhance human capital, bearing sole responsibility for its own welfare and happiness. (Purser 2018, pp. 105–8)

There exist two concepts to which I solicit the reader's engagement and reflection concerning the metamorphosis of Buddhist meditation into mindfulness, essentially the transition from an apparatus of liberation from suffering to a mechanism for bodily (self-)regulation. Should we take Foucault's notion of correct training, as articulated in *Discipline and Punish* (Foucault 2020a, p. 192), we discern it analogously expressed in the proposition that modern mindfulness is the resultant of a consistent and enduring regimen, wherein the desired effects materialize from the subject's habituation to new modes of focused attention (Arthington 2016).

We also witness the authentic construction of a panoptic inner eye. Foucault's panoptic mechanism, initially conceived to explain the function of an ideal tool for control authorities to maximize their supervisory power using the least expenditure of energy, has herein morphed into an internalized form of self-regulation (Foucault 2020a, p. 195): with mindfulness, the dispositive of inspection is substituted by that of introspection (Wrenn 2022). The focused attention advocated by mindfulness prompts a form of ceaseless surveillance and vigilance over one's own actions, diverging from the concept of active, conscious presence typical of the traditional meditator. This adapts to the needs of a biopolitical subject who is subject to self-regulation, thereby effecting the operation of result maximization and medicalization (Reveley 2016).

The incorporation of mindfulness in professional and educational spheres, intended to augment physiological self-discipline, constitutes a hopeful methodology for the promotion of well-being and the optimization of performance. These practices, with roots entrenched in ancient contemplative traditions, have garnered noteworthy consideration in recent years due to their prospective advantages in numerous life domains. By fostering the cultivation of immediate-moment cognizance and nonjudgmental acquiescence, mindfulness techniques aspire to amplify individuals' capacities to regulate their cognitions, emotions and actions.

Within the context of professional environment (Hyland 2014), the deployment of mindfulness is praised as a means to increase productivity, reducing stress, augmenting emotional resilience and escalating job satisfaction. Mindfulness-based interventions, inclusive of mindfulness-based stress reduction (MBSR) and mindfulness-based cognitive therapy (MBCT), have been employed in occupational settings, engendering encouraging results for both employees and organizations. In a similar context, the gradual integration with AI of these productivity enhancement (mindfulness-based) systems can only be something hoped for by companies (Indrianti et al. 2020). But this emergence of technomindfulness began at least a decade before the advent of AI.

A scholarly piece published in 2010 explored the emerging practices of mindfulness exercises conducted wholly within a digital milieu, wherein practitioners congregated through their virtual avatars, engaging in meditation as if they were in a conventional setting or physical meditation training center. This investigation underscored the manifestation of a tangible virtual embodiment, necessitating the formulation of a theoretical framework significant to the tripartite aspects of online religion study. Firstly, the concept of virtual embodiment underscores the feasibility of ethnography within cyberspace, facilitating the construction of models to elucidate online identity and community dynamics, specifically the constructs referred to as "residents" and "cloud communities". Secondly, virtual embodiment illuminates the unique characteristics of virtual worlds, inclusive of both three-dimensional graphical and text-based platforms, as distinct fields of inquiry, contrasting them from other online environments such as websites and blogs (Grieve 2010, p. 38). Lastly, virtual embodiment emphasizes the corporeal dimension required by religion, including its virtual counterpart, challenging the perception of religion as purely cognitive and consequently revealing these bodies as "cultural signs". Virtual embodiment

suggests that the body does not exist as a static canvas upon which an identity is inscribed, but rather emerges as a condensation of performances, emotions and desires, all rooted in lived practices.

The establishment of virtual domains and the proliferation of virtual reality (VR) is an intrinsic aspect of AI development, and indeed, it is plausible to anticipate that AI will expedite the evolution of VR spaces. These spaces will likely encompass not only professional and educational environments but may potentially extend to therapeutic ones, as it is presently enacted within the entrepreneurial context (Indrianti et al. 2022). However, within the VR space, where prospective digital meditation may be executed, the arbiter of correct performance may no longer necessarily be human; it might instead be the AI entity, which could engender substantial anthropological implications. At present, the synergy between mindfulness and AI is employed in various contexts, such as creating AI-rendered music to aid meditation focus (Williams et al. 2019), or in collecting data to aid machine learning in delivering bespoke mindfulness-oriented emotional intelligence training (Sturgill et al. 2021).

The social model advanced by this form of biopower historically manifests through the development of Western allopathic biomedicine but is closely intertwined with its historical and cultural dimensions. Mindfulness can indeed emerge as a therapeutic model, yet it also posits a model of social control, something that we can identify as real Mindful Social System (MSS). Within this widespread therapeutic framework, a social control model is established through the means by which mindfulness is taught and disseminated as a technique for molding compliant bodies. Its zenith lies in integration with artificial intelligence models capable of generating increasingly efficient self-control techniques adaptable to individual peculiarities, eliminating the need for external controllers as seen in the old biopolitical model (teachers, law enforcement, prison wardens or clinicians). Mindfulness, akin to other systems controlling social actors, could be taught to, and implemented by, individuals without the need for human control figures, thereby ensuring that the MSS becomes a standard anthropological model in the society of technology. The MSS does not imply a theoretical framework centered around a mindfulness-based social system; rather, it suggests a form of biopolitics wherein self-discipline and self-surveillance constitute the natural evolution of biopower. Given that techno-mindfulness is currently poised to become one of the mechanisms most conducive to this system, it leads me to believe that other forms of biopower will also gravitate toward a similar trajectory towards an MSS.

7. Concluding Remarks

τέχνη δ' ἀνάγκης ἀσθενεστέρα μακρῷ

[Aeschylus' Prometheus Bound, v. 514]

Historically situated within the field of biomedicine, mindfulness devices have adapted to clinical requirements by employing standardized protocols, primarily geared toward control rather than fostering self-care through introspection, self-questioning and, when necessary, inducing a state of crisis (Divino 2023b). Within the biopolitical framework, these mindfulness devices have adeptly aligned with desires for increased control over social bodies.

The symbiotic relationship between the concept of mindfulness and AI, therefore, appears destined for harmonious coalescence. The emergence of AI mind(fulness)-monitoring has already become a subject of scrutiny, particularly with regard to the agency of automated systems such as algorithms (Véliz 2021). A major example of this phenomenon can be seen in programs and products such as MindfultextTM, designed to adapt the exercise during a constant exchange of information with the subject that allows the AI to increase its information and learning in order to offer outcome-based meditation objectives.

The integration of technological devices and artificial intelligence applications in the study of contemplative practices has already a well-established tradition. Since the conceptualization of mindfulness as a psychological technique acknowledged by the scientific community, the divide between mindfulness-based therapies and traditional meditation has progressively expanded. Both meditation and mindfulness-based therapeutic models appear to share the common objective of conferring health and psychophysical benefits to practitioners (Schlieter 2015).

However, numerous distinctions necessitate differentiating between these two methodologies, ranging from the fundamental understanding of health and illness, ascribable in the case of mindfulness to the widely recognized biomedical tradition to which cognitive-behavioral psychology belongs, and where mindfulness is currently situated, to the absence of a spiritual dimension or, at the very least, a distinct focus on the subjective-experiential aspect that is conceived quite differently between mindfulness and traditional meditation, culminating in a fundamentally dissimilar theoretical framework: egolatric in the case of mindfulness, which relies on ego psychology and the association between personal health and a robust identity, versus a contrasting perspective in traditional meditation, which emphasizes transcending the psychophysical identity (Samuel 2014; Epstein 1988).

Indeed, the very development of mindfulness has been favored by the pre-existing complex and sophisticated psychological theories elaborated by Buddhists (Kelly 2008; Vyner 2008). The subsequent developmental models of mindfulness have been linked to the sociocultural context of neoliberal and capitalist societies (Purser 2019), which consequently impose a performance-oriented psychology rather than a spiritual journey. From the perspective of mindfulness, health is conceived as seamlessly integrated with the discourse on bodily control and self-surveillance, which advances the biopolitics of a society centered on these values (Jackson 2019). Mindfulness encourages concentrated attention and an emphasis on the "here and now", consistent with the need to enhance individuals' performance in their daily lives (Purser 2015), fostering an acceptance and "harmonization" of one's life with contemporary society rather than a profound critique of the religious model of Buddha's India that typified ancient Buddhism, which essentially pioneered meditation as well as a philosophically very critical thought towards that type of society based on models of authoritarian and hierarchical power (Divino 2023b). Consequently, while the ascetic once withdrew to meditate outside the confines of orderly society, we now witness biomedicine, a proponent of the modern neoliberal biopolitical paradigm (Peters 2007), advocating for mindful attention, a model that does not critique society but instead emphasizes social control. The biopolitical regulation of bodies, facilitated through the notions of health and community management promoted by biomedicine and its entanglement with politics, is transformed in mindfulness into an internalization of that external controlling gaze, resulting in an attentive model that fosters self-regulation and encourages the adoption of new standards predicated on performance and productivity to shape mindful (and docile) bodies.

The integration of AI-powered tools into the field of mindfulness-based therapies has the potential to compound these biopolitical risks (Stingl and Weiss 2014). The increasing utilization of digital devices and applications that monitor and assess individuals' physical and mental health has the potential to create a society of constant self-surveillance and self-monitoring, further reinforcing the biopolitical control of the body; this is in perfect analogy with what Foucault had described with regard to the power that uses surveillance in order to constitute "docile bodies" subjected to a given social model (Foucault 2020a, pp. 135–94). The incorporation of AI-powered tools into this equation raises new questions about the limits of such surveillance and the potential for the technologies to exploit vulnerabilities and exacerbate already existing power imbalances.

In conclusion, in this article we provided a scholarly exploration of the historical integration of mindfulness practices within the context of Western biomedical traditions, and their subsequent evolution into a marketable commodity, influenced by neoliberalism and propelled by advancements in artificial intelligence. The discourse presented in this study elucidates the historical trajectory of mindfulness, tracing its origins from traditional meditative practices to its assimilation into clinical settings. Despite garnering significant attention within the scientific community for its documented efficacy in addressing mental health concerns, inquiries persist regarding the authenticity of mindfulness in its contemporary, secular guise and its alignment with traditional Buddhist contemplative practices.

The analysis of the transculturation process reveals a nuanced interplay between cultural appropriation, diffusion and the commodification of mindfulness, culminating in its integration with AI-powered technologies. To analyze this process of enculturation and transculturation, we examined the history of the introduction of meditation into the Western clinical world, comparing it to a similar phenomenon involving analogous transformations for yoga, which we discussed in relation to its integration into the clinical framework and the themes of biopower.

The future integration between meditation and AI represents an anticipated outcome hypothesized through the examination of the historical trajectory and development of mindfulness in the Western world, including its most recent manifestations. This transformation prompts significant ethical and biopolitical considerations, as AI-driven mindfulness tools have the potential to exacerbate existing power imbalances while pursuing a form of self-surveillance. Moreover, the discussion underscores the imperative for a critical framework that prioritizes individual autonomy and privacy amidst technological advancements in the healthcare sector.

Additionally, the discourse surrounding the technicization of medicine and the proliferation of AI-driven surveillance underscores also implications for changing societal structures and transformations in well-being. The convergence of mindfulness and AI indicates a significant paradigm shift in our conceptualization of health and self-care, necessitating multidisciplinary research endeavors to comprehend the intricate interplay between neoliberalism, individualization, technology and embodiment.

Looking ahead, future research is desirable to continue exploring the nuanced dynamics of this intersection, with particular emphasis on assessing the potential risks and benefits associated with the integration of mindfulness practices and AI technologies. By adopting a critical and interdisciplinary approach, scholars can contribute to a deeper understanding of the evolving landscape of healthcare delivery and the implications of technological advancements for individual and societal well-being.

A study in this direction could focus on qualitative data collection through ethnographic methods, examining how individuals engaging in guided meditation facilitated by AI devices perceive alterations in their subjective experiences regarding the benefits of meditation in contemporary contexts. An anthropological inquiry could correlate these findings with recent scholarship on biopolitics and surveillance capitalism, integrating them with subjective perceptions linked to the transformation of contemplative devices within the emerging society of performance and self-surveillance. Moreover, it could further contextualize within the history of the medicalization of meditation the immediate aspects and implications for the future. Ultimately, such research endeavors are pivotal in informing ethical guidelines and policy decisions aimed at fostering the responsible utilization of AI in tandem with contemplative practices.

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