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The Imperative of Earth-Eco-Socialism for Sustainable Tourism in a Technological Era

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ABSTRACT

Purpose: This paper argues for the adoption of the principle of earth-eco-socialism as an ethical framework for re-evaluating how sustainable tourism should be conceived in an age defined by the intersection of ecological vulnerability and technological advancement. It attends to tourism practices that are not sustainable, most especially those influenced by technological optimism and market-driven approaches, and in turn proffers an ethically informed framework for real sustainability.

Methods: This paper is philosophical research and, accordingly, adopts the method of critical and conceptual analysis, with particular attention to the influence of artificial intelligence tools on tourism's operational landscape.

Findings: The findings of this paper show that while modern technology has significantly influenced tourism, its deployment has in many cases been as a result of profitability. By so doing, the environment is endangered, as such a yardstick encourages commodifying patterns that commercialize nature and marginalize local communities. Thus, the moral foundations upon which sustainability claims are made are weakened. It further reveals that most existing sustainability approaches are mere claims tied to technological optimism and market-based environmentalism.

Implications: This study shows that a more ethically rigorous interpretation of sustainable tourism should move toward ecological reciprocity, communal participation, and intergenerational responsibility. It contends that both scholars and practitioners should reconsider the ethical foundations of sustainability, while policymakers can apply this knowledge in designing tourism policies that prioritize ecological justice and community inclusion.

Originality: The thrust of this paper is that it presents earth-eco-socialism as a distinct ethical framework capable of re-situating the purpose and practice of tourism. It contributes to existing discourse by moving beyond conventional sustainability models to responsible tourism through presenting a philosophical alternative that integrates ecological justice, collective responsibility, and planetary balance by means of reorientation.

1. Introduction

Current tourism discourse faces the intersection of ecological vulnerability and technological advancement. As this intersection intensifies, followed by several negative consequences, there is a surge in demand for a critical reevaluation of sustainable tourism (Gössling, 2002; Hall, Gössling, & Scott, 2015; Buitrago &, 2021). It is considered not only urgent but ethically imperative. Tourism, broadly conceived, is the human activity that involves the movement across spaces, interaction with ecological and cultural landscapes, and the consumption of both natural and social resources. No doubt, tourism is traditionally understood as a source of recreation, economic growth, and cultural exchange, but tourism in the contemporary era operates within a technologically mediated environment. It, hence, inculcates tools such as artificial intelligence, digital mapping, environmental sensing, and algorithmic analytics, all of which influence decision-making, visitor management, and the very experience of nature itself (Sharpley, 2020). However, contrary to these benefits, critics have consistently argued that these innovations risk fueling inequities, intensifying resource extraction, and normalizing environmental disruption under the guise of efficiency and innovation (Ivanov & Webster, 2019; Tussyadiah, 2020; Neuhofer *et al.*, 2014; Zuboff, 2019; Sharpley, 2020).

Though these technologies are capable of enhancing efficiency and expanding access, they have often facilitated extractive and commodifying patterns that reduce ecosystems to objects of consumption, marginalize host communities, and weaken the moral and ethical foundations upon which claims of sustainability are premised (Ivanov & Webster, 2019; Neuhofer *et al.*, 2014; Murphy *et al.*, 2017; Tussyadiah, 2020; Zuboff, 2019; Sharpley, 2020). Such developments reveal that tourism, despite its promises of sustainability, frequently perpetuates the very forms of environmental degradation it claims to address, reflecting the inadequacy of market-oriented environmentalism and techno-optimistic interventions when divorced from a deeply ethical framework (Sharpley, 2020).

It is against this backdrop that this paper argues for the adoption of Earth-Eco-Socialism, an ethical framework committed to ecological justice, collective responsibility, and the restoration of planetary balance. It is that which situates humans within ecological systems as co-inhabitants rather than as dominators. The moral framework with which Earth-Eco-Socialism operates is that of ecological protection. When situated in the context of this research, it helps reconsider tourism through the lens of practical sustainability. It does this by responding to ecological mistreatment and abuse of the environment in the name of tourism through its demand for cooperative governance, participatory management, and enforceable ethical and legal frameworks. All of these necessities, as housed by earth-eco-socialism, seek to guide human-environment interactions (Ojomo, 2011, Mogaji, 2024; Ojomo, 2019). This could therefore help in resisting the anthropocentric and exploitative tendencies inherent in contemporary tourism, offering instead a vision grounded in ecological reciprocity, moral accountability, and planetary stewardship. This theory has been applied to several environment discourses (Ojomo, 2019; Mogaji, 2024; Horsthemke, 2025). However, there is no application of this theory to tourism, hence contributing to the uniqueness of this paper.

Following the above, this paper examines the moral imperatives that should underpin tourism in the contemporary techno-ecological era by evaluating both the potentials and limitations of technological interventions and market-driven sustainability strategies. By so doing, this paper advances the argument that sustainable tourism, when informed by Earth-Eco-Socialist principles, need not be a passive or extractive endeavor but can instead function as a transformative practice that nurtures ecosystems, empowers local communities, and re-establishes the ethical balance between human activity and planetary well-being. It is on the above premises that this paper argues that the adoption of earth-eco-socialism as a guiding ethical framework, the idea of tourism, could be reconceptualized from its traditional view, the view that sees tourism as that which is concerned with profit, efficiency, and commodification, to one committed to justice, ecological integrity, and collective flourishing.

2. Literature Review

2.1. Tourism in the Technological Era

The idea of tourism, in its earliest and most traditional conception, was fundamentally understood as a human activity that involves movement, cultural encounter, and the experiential engagement with natural and social landscapes. Historically, tourism existed long before it acquired its modern economic and institutional character. It began as pilgrimage, exploration, and curiosity-driven travel, where individuals moved across spaces not for consumption but for meaning, connection, and reflective engagement with distant environments and peoples (Hall & Page, 2014). In its traditional form, tourism was largely dependent on physical mobility supported by rudimentary communication systems, local guides, interpersonal narratives, and the slow rhythms of human interaction, all of which express the human-centered and community-embedded nature of early travel practices (Towner, 1995). However, as societies evolved, the idea of tourism was met with a paradigm shift. After all, Bowen and Whalen (2017), Gajdošík and Marciš (2019), and Kazak *et al.* (2020) are of the view that technology, particularly AI, is the next stage of tourism. In essence, the originally intimate, place-based encounters, as traditionally conceived, transitioned to a structured global industry. This, however, is driven by the rise of industrialization and the mass-transport revolution of the nineteenth and twentieth centuries. This driving factor can be understood in practical terms through its representation in modern contexts such as the emergence of travel agencies, organized tours, and mass leisure mobility. These practices, in reality, lead to the progressive commodification of landscapes as destinations, all of which reflect the socio-economic transformations occurring across the modern world (Urry, 2002).

According to Filieri *et al.* (2021), technological advancement as experienced in contemporary times, particularly with the emergence of artificial intelligence in the early twenty-first century, has stimulated development across several sectors of the economy and wider society. AI, as they emphasized, stands as one of the most promising contemporary technologies and, through its steady advancement over time, has facilitated its widespread adoption across multiple domains. Today, it functions effectively in the manufacturing sector, supply chain management, healthcare systems, retail operations, and, of course, the tourism industry (Leone *et al.*, 2021; Filieri

et al., 2021; Murphy *et al*., 2017). Even in academia, Kırtıl and Aşkun (2021), in their research, highlight the sudden interest of academics in research that is artificial, showing its impact and acceptance. On education, Mehra and Kapoor (2025) argues, "Technology, if used in the most appropriate manner, can support inclusive education as it can ensure access to education, access to different content, and support assistive learning." In other words, technology is a productive tool, as it transforms how education is approached for efficiency in several areas. According to Murphy, *et al*. (2017), in the organizational domain, artificial intelligence, particularly through robotics, which is of course a product of technology, contributes significantly to new forms of digital transformation by initiating reforms in organizational structures, managerial practices, and the modalities through which companies collaborate and create value. Such developments, they argue, represent a major technological shift that is expected not only to influence consumer behavior but also to foster economic success by positively reshaping industry structures in the foreseeable future. This explains why a 2019 study by Tractica (2019) reveals that the AI software market is an undeniably lucrative one, considering its average global growth rate year-on-year, which stands at 38% from US$22 billion in 2020 (Tractica, 2019; Filieri *et al*., 2021).

In a study by Tussyadiah (2020), it was observed that the incorporation of artificial intelligence into tourism operations is shown to enhance service efficiency. This efficiency is observed through its capability of automation, optimization of routine tasks, and improved accuracy in service delivery. All of this, Tussyadiah (2020) shows, strengthens firms' capacity to reduce labor pressure and streamline operational costs. This position is further supported by the empirical study of Lu, Cai, and Gursoy (2019). Their findings reveal that AI-enabled recommendation systems significantly influence travelers' decision-making by providing personalized suggestions that enhance satisfaction and increase the likelihood of booking conversions (Lu *et al*., 2019). Also, going by the findings of Bowen and Morosan (2018), AI-driven customer service technologies, particularly service robots and intelligent virtual agents, were shown to improve service reliability and enhance perceived value among tourists. This enhancement of service delivery, accordingly, contributes to the greater trust in hospitality brands. Furthermore, AI-supported analytics could help strengthen tourism firms' competitive advantage, considering their successes in other fields. According to the studies of Henriques and Pereira (2024) and Rekiek *et al*. (2024), AI-supported analytics has succeeded in enabling demand forecasting, dynamic pricing, and data-driven marketing decisions in hotels, all of which contribute to improved profitability and more responsive destination management. This could help in strengthening tourism firms' competitive advantage. This analysis is, however, complemented by the work of Gretzel *et al*. (2015), who maintain that AI and smart technologies enhance destination competitiveness through intelligent mobility, seamless navigation, and personalized travel experiences. Their study shows that through this technological transformation, customer satisfaction is undeniably enriched. This view is supported by Ivanov & Webster (2019), as they further established that AI contributes to managerial decision-making by automating forecasting, revenue management, and resource allocation. Going by the above, organizational resilience and long-term financial performance are enhanced and promoted.

Looking beyond the aforementioned organizational advantages, empirical evidence from tourism destinations exposes some practical relevance and benefits of artificial intelligence in tourism management. For instance, smart tourism initiatives in Barcelona have utilized data analytics, real-time monitoring systems, and digital visitor management tools to ensure the proper monitoring of tourist flows and reduce congestion in heavily visited areas. By so doing, which is of course through the help of these technologies, destination managers are able to redistribute visitors across different attractions. Thus, this enables them to minimize overcrowding and also improve resource allocation. In essence, going by the above benefits of technological advancement in tourism, it then follows that when technological transformations are guided by responsible objectives, they (technology) can contribute positively to destination management and ecological conservation by supporting more informed and responsive decision-making processes (Gretzel *et al*., 2015; Buhalis, 2020). Similarly, environmental sensing technologies have been affirmed to be capable of protecting tourism destinations through proper ecological monitoring and sustainable resource management. For example, Chen and Wu (2026), in the empirical study carried out on Qianjiangyuan National Park, integrated remote sensing data, tourist trajectory information, and geotagged photographs to assess the relationship between ecological quality and tourism activities, came out with positive findings. Their findings show that such technologies can assist policymakers and conservation managers in properly monitoring environmental conditions, evaluating visitor impacts, and developing more sustainable tourism management strategies. This advancement in technological innovation exposes that they need not necessarily conflict with ecological sustainability but may, under appropriate ethical and regulatory conditions, contribute significantly to environmental protection and conservation efforts. A condition Cole and Browne (2015) highlight is lacking in the case of Bali, where tourist managers exploit the poor

governance of tourism activities, which not only affects and marginalizes the locals from their resources but also leads to overtourism, as the inflow of tourists exceeds the available water resources.

From the above literature, it is arguable that the adoption of artificial intelligence within the tourism sector has generated substantial improvements in operational efficiency, including the improvement of customer experience and strategic management. That is, a technologically adaptive tourism environment that accommodates the flourishing of firms and the satisfaction of tourists has been established. In essence, this has resulted in a shift in the operationalisation of tourism, as it no longer operates as a purely physical and experiential activity. Rather, it has been mediated by technologies ranging from digital maps, algorithmic recommendation systems, artificial intelligence, and smart-destination infrastructures, among many others, all of which are capable of influencing how tourists perceive, choose, engage with, and move through spaces (Gretzel *et al.*, 2015; Neuhofer *et al.*, 2014).

However, while the foregoing analysis shows the considerable benefits associated with technological advancement in tourism, it would be misleading to assume that technological innovation is inherently sustainable or environmentally benign. By this, this paper means the ethical significance of technology rests solely on the social, economic, and ecological frameworks within which it is deployed (Buitrago & Yñiguez, 2021). This explains why, in spite of the rapid institutionalisation and digitisation of tourism through technological breakthroughs (Chen & Wu, 2026; Tussyadiah, 2020; Bowen & Morosan, 2018; Erdős *et al.*, 2025), technology-driven tourism has been criticised for some of its unsustainable practices (Buitrago & Yñiguez, 2021). It has been criticised for being too focused on maximising and improving the tourist experience at the expense of the environment (Sharpley, 2020), which in most cases leads to overtourism even with the claim of sustainable tourism (Buitrago & Yñiguez, 2021). This technological turn fundamentally alters the moral and experiential foundations of tourism, which, of course, ought to be responsible, as it introduces a layer of digital logic (Najafi & Costa, 2026). This digital transformation has implications for the overall human–environment relationship and human-place relationship.

On one hand, scholars acknowledge that these innovations enhance human experience, efficiency, accessibility, profit, and balancing tourism utilisation and ecological conservation in tourism planning and management as earlier established (Buhalis, 2020; Gretzel *et al.*, 2015; Henriques & Pereira, 2024; Rekiek *et al.*, 2024; Chen & Wu, 2026). On the other hand, critics have insisted that these technologies, when left unregulated or uncritically embraced, fuel several unjust and non-eco-sensitive activities, a tendency which contributed to the need for the research by Chen and Wu (2026) on balancing tourism and ecological conservation and that of Jaya-Montalvo *et al*. (2024), which echoed the risk of not properly regulating tourist activities in the Galápagos Islands due to economic gains. In such situations, technological systems may not just facilitate satisfactory experiences but may also inform tourist behaviour, influence destination visibility, and contribute to patterns of resource consumption that may undermine long-term sustainability objectives (Buitrago & Yñiguez, 2021). These include practices that commercialise ecosystems, displace host cultures or engage in sensitive manners with sensitive places or objects, and normalise the reduction of complex ecological systems into objects of consumption (Viken *et al.*, 2021; Milano *et al.*, 2018; Sharma, 2019; Buitrago & Yñiguez, 2021; Semwal, 2024; Najafi & Costa, 2026).

For instance, Najafi and Costa (2026), in their analysis of 420 AI-generated travel recommendations across major artificial intelligence platforms, found that these systems consistently directed users toward a relatively small number of already popular destinations. That is, rather than encouraging geographical diversity, the algorithms end up projecting the visibility of established tourist locations, which, as a result, contributes to what the authors describe as "digital overtourism". Going by their study, such patterns are a confirmation of how artificial intelligence may unintentionally intensify visitor concentration and ecological pressure in environmentally sensitive destinations. Furthering the above, Huang's (2023) research shows that visitor activity patterns in protected natural areas confirm that geotagged photographs and digital traces tend to concentrate around specific sites with high aesthetic and ecological value. This, inferably, supports the claim of uneven spatial distribution of tourist flows, a pattern that indicates that digital platforms and data-driven systems may indirectly influence mobility patterns and thus amplify the visibility of already popular locations. The implication of this is that it contributes to destination pressure, increased environmental stress, and uneven spatial development within tourism landscapes. In another case, the proliferation of tech-enabled vacation rentals, which is now being promoted through platforms like Airbnb (Stors & Baltes, 2018), has severely strained local water resources and driven groundwater depletion in destinations like Bali, Indonesia. This critical dynamic is exposed by Cole and Browne (2015), whose analysis (social-ecological systems {SES} analysis) details how the massive freshwater demand from commercial tourism accommodations overrides local governance and exhausts local aquifers. He writes:

> *"In this vacuum of governance, tourism stakeholders take advantage of the lack of monitoring and sanctions. They are not being held accountable for the degradation of watersheds, nor are they paying for their share of groundwater extraction. Furthermore, the refusal to pay for direct, or indirect, water consumption deprives local governments of the funding that could be used to manage and maintain water bodies and watersheds i.e. the maintenance of water related ecosystem services." (Cole & Browne, 2015)*

In such scenarios, Cole and Browne (2015) noted that the tourists, who are often more financially stable than most of the locals, end up getting sufficient water supply during their stay, water that is originally not a sufficient for the locals. On this, he noted:

> *"Bali's tourism industry renders some unique characteristics to the Users and how they interact with other components of the SES. With 5 million international and domestic tourists and 85% of the tourism industry belonging to non-Balinese, this is representative of a SES subject to the drastic transformations associated with tourism, including a much more transient, numerous and diverse population. From a tourist perspective, experience of water shortages is highly unlikely and their experience will be far removed from the reality of local Balinese. Among the numerous and diverse users, socio-economic status is highly differentiated allowing for similarly highly differentiated consumption patterns, compounded by lack of knowledge, monitoring, regulations and ultimately free-riding." (Cole & Browne, 2015).*

Beyond resource extraction, digital tourism platforms may also facilitate new forms of spatial commodification. Following the examination of Airbnb listings in Berlin, Stors and Baltes (2018) show how digital platforms transform ordinary neighbourhoods into tourism commodities by rebranding local spaces as marketable attractions. As a result, local environments end up being valued for their tourism potential, which is often at the expense of the social and ecological realities experienced by resident communities (Cole and Browne, 2015).

In a similar manner, while reporting on the Rhodes International Festival in the year 2016, which attracts lots of tourists, Gkoumas (2019) identifies how tourists acknowledge the environmental harm of tourism, which, of course, is aided by technology, by shifting blame. He writes:

> *"For instance, hoteliers and restaurant owners believed that sea and air transportation companies should be blamed for the impact of tourism on environmental pollution. Yet they admitted that levels of pollution within the transportation industry differ. In Rhodes, the vast majority of the international flights come from the UK and Germany, producing fewer emissions in comparison to long-haul flights from overseas destinations. Similarly, yacht managers accused cruise ship companies of increasing marine pollution, particularly in popular tourist ports. They further argued that most of the cruise ships that operate in the port of Rhodes are not equipped with sewage treatment systems and had taken no action to save energy." (Gkoumas, 2019)*

Further, in places such as the Galápagos Islands, the rise of land-based tourism presents immediate threats to sensitive geographical features. This reality informed the study of Jaya-Montalvo *et al*. (2024), as they acknowledged the risk of not properly regulating tourist activities due to economic gains. In their research, they noted that:

> *"Galapagos was declared a Natural World Heritage Site (1976), UNESCO Biosphere Reserve (1984), and Ramsar Site (2001) because of its unique flora, fauna and landscapes, which inspired Charles Darwin. Due to the variety of tourist sites around the four large inhabited islands, there is an increase in national and foreign tourists (267,688 people in 2022), which may cause deterioration of the tourist facilities if not adequately monitored or regulated." (Jaya-Montalvo et al., 2024).*

The calculations of their research support the claim of this study on the necessity of not favouring economic gain over environmental sustainability. Accordingly, they contend that to prevent severe geological and ecosystem degradation on Santa Cruz Island, specific sensitive geosites must be tightly restricted to a maximum carrying capacity of 500 to 2,000 visitors per day, noting the environmental consequences if that limit is bridged.

There is no denying the fact that, in recent years, the discourse on sustainable tourism has emerged in response to unsustainable practices of tourism. It has gained renewed

global attention in reaction to technology-driven tourist practices. This reaction is largely driven by multilateral frameworks, climate-conscious policies, and industry-wide commitments to reduce ecological footprints (Buitrago & Yñiguez, 2021). The emergence of this approach towards sustainability is to ensure a positive reengineering of community participation, respect for cultural practices, and observing ecological boundaries (Schönherr *et al*., 2023; Joseph, 2025; Scott, 2021). However, some scholars still express a contrary argument against the idea of sustainable tourism, as it has also furthered an anthropocentric perspective through fuelling inequities, intensifying resource extraction, and normalising environmental disruption under the guise of efficiency and innovation, also known as 'greenwashing' (Font & McCabe, 2017; El Balbal & Omari, 2024; Wailmi *et al*., 2024). To Buitrago & Yñiguez (2021), sustainable tourism does not live up to its objective due to implementation strategy and, as such, recommends responsible tourism as the remedy to contemporary overtourism, a position that reveals the behavioural dimension of tackling unsustainable practices of contemporary tourism. In other words, sustainability has thus become an institutionalised mantra within tourism studies and destination management, which has failed to uphold its very objectives. Sharpley (2000, 2020), for example, shows how sustainable tourism continues to operate within an economic-growth paradigm that undermines its ecological aspirations. As a result of this, critics argue that much of what is celebrated as "sustainable tourism" remains insincere and structurally constrained. The idea behind it is informed by the same market-driven logics it seeks to reform (Moscardo & Murphy, 2014; Higgins-Desbiolles, 2020). It privileges profit and efficiency over ecological responsibility and community well-being (Sharpley, 2020; Zuboff, 2019). According to these critics, sustainability rhetoric is often mobilised to legitimise continued growth, rather than to interrogate the ecological limits, systemic injustices, and extractive tendencies embedded within contemporary tourism models (Murphy *et al*., 2017; Tussyadiah, 2020; Zuboff, 2019; Sharpley, 2020).

Thus, even with its institutional recognition, sustainable tourism frequently reproduces the very contradictions it claims to resolve (Sharpley, 2000, 2020; Buitrago & Yñiguez, 2021). In other words, the contemporary technological form of tourism reveals a double-edged reality. On one hand, it introduces the digitisation of tourism and, by implication, improves the tourist experience and transforms the sector. On the other hand, it intensifies the commodification of nature and, as such, undermines cultural heritage, conceives nature as a commodity to be consumed, and leaves ecological responsibility sidelined and silenced (Milano *et al*., 2018; Sharma, 2019; Buitrago & Yñiguez, 2021; Sharpley, 2000, 2020). Hence, this conflict, or, simply put, tension, between technological advancement and ecological vulnerability shows that there is the need for a robust and eco-sensitive ethical scrutiny beyond technocratic and neoliberal conformity.

3. Methodology

This paper, being philosophical in nature, adopts the methods of critical analysis and conceptual analysis. To realise its objective, the study is divided into two sections. It presents the theoretical framework of the study "Earth Eco-Socialism", propounded by Philomena A. Ojomo, which emerged as a response to the ecological crisis through the lens of Marxian socialism, arguing that the ecological crisis is inseparable from capitalist exploitation. Afterwards, it applies this theory to address the current problems associated with tourism, as it relates to the vulnerability introduced by artificial intelligence technology. Then the paper moves to conclude.

4. Results and Discussions

4.1. The Theory of Earth-Eco-Socialism

The idea of Earth-Eco-Socialism, propounded by Philomena A. Ojomo, emerged as a contemporary political response to the entrenched ecological crisis, taking a different position from eco-socialism. The theory of eco-socialism emerged as a response to ecological crisis through a socialist lens, particularly the Marxian perspective, arguing that ecological crisis is inseparable from capitalist exploitation. It contends that resolving environmental degradation requires restructuring socio-economic relations towards collective ownership and ecological justice (Foster, 2000; Kovel, 2007; Kovel & Löwy, 2001). In other words, eco-socialism is primarily a structural critique of capitalism that is built on political economy and historical materialism, with its ethical implications derived from concerns of social and ecological justice, rather than from an independent moral ontology of nature. However, earth-eco-socialism, while retaining this critical diagnosis of capitalism, seeks to ground ecological struggle not only in social justice but also in the moral responsibility owed directly to the Earth (Mogaji, 2024).

This, in Fayemi and Balogun (2017), as highlighted, is anchored on a Marxian and Leopoldian framework. Earth-eco-socialism is a normative, ethical and political framework that insists on grounding the struggle for ecological sustainability by deepening moral responsibility to the Earth itself, a gap the eco-socialist theory fails to fill. By so doing, she considers earth-eco-socialism as a theoretical support and a complement of "a socialist ideological and ecological action in understanding the intrinsic value of the earth as an indispensable platform

in the quest for environmental sustainability" (Ojomo, 2011; Fayemi & Balogun, 2017). Hence, through the priority placed on "communal values, caring relationships, and moral duties to both people and nature", earth-eco-socialism represents a paradigm shift from eco-socialism.

Further, Earth-eco-socialism embraces ecological ethics in addressing environmental crises rather than relying solely on justice-based or ecological-economic approaches (Mogaji, 2024). No doubt, Ojomo (2019) acknowledged environmental crises, as far as contemporary time is concerned, have their root in capitalism, a view supported by Bentley (2013) and Bernstein (2025). However, she argues differently from the eco-socialists by emphasising moral duties, care and communal values as the remedial framework for tackling environmental challenges and social injustices (Mogaji, 2024), rather than pure ecological economics. In other words, Earth-eco-socialism argues for moral inclusion (Ojomo, 2019; Mogaji, 2024; Ojomo, 2024; Ojomo et al., 2025). As Bookchin (2005) rightly argues, any attempt to separate ecological problems from social problems would lead to misconstruing the sources of the growing environmental crisis, a principle that Earth Eco-Socialism upholds strongly, in contrast to how traditional Eco-Socialism has handled ecological issues. In essence, Earth Eco-Socialism leans more towards the identification of moral decline in humans in relation to the environment rather than the political in protecting the rights of humans and the land. It interprets socialism as a value system that advances the quality of common social solidarity, collective interest, and mutual responsibility (Ojomo, 2019; Ojomo *et al.*, 2025; Ojomo, 2024).

According to Mogaji (2024), the driving force of Ojomo's Earth Eco-Socialism is actually centred on accelerating development and advancing social progress based on two principles. He argues thus:

> *"Firstly, it considers confronting social and economic problems, and secondly, it is geared towards arresting or rather, mitigating environmental crises through laws enacted by the state. However, even with its political orientation, it is more of a moral framework that advances the virtue of the collective good and mutual benefits of humans about the environment and nature as a whole. In other words, Eartheco-socialism … tries to expand the moral framework that houses human interests beyond that confinement and embraces the recognition and respect for the Earth and ecological preservation." (Mogaji, 2024)*

Following the above, Earth Eco-Socialism thereby reframes environmental protection not as a peripheral policy choice but as a duty owed to the land itself and to future generations. It does this by looking beyond anthropocentric boundaries and, hence, situates human well-being within the wider moral community of the Earth. In other words, the moral weight of earthly eco-socialism rests on the conviction that sustainable development is impossible without recognising the Earth as a subject of ethical consideration. That is, the integrity of the Earth constitutes the precondition for any meaningful human flourishing.

4.2. Earth-Eco-Socialism as an Imperative for a Reimagining of Tourism in the Era of AI Technology

Building on the foregoing conceptualisation of Earth-Eco-Socialism, this section then proceeds to show how this ethical framework provides the most adequate philosophical position in rethinking and reconstructing sustainable tourism in a rapidly evolving techno-ecological era. As earlier emphasised, tourism today stands at the crossroads of two intensifying realities: on one hand, the unprecedented power of technological systems to shape human–environment interactions. As Akande (2022) argues, technology is "a means or act of getting things done with little effort". It is a practical process of producing things for human needs and consumption. Technology has been a tool of changing human conditions, lives and societies." On the other hand, the improper adoption of technology may deepen the vulnerability of ecological systems under the weight of extractive, commercialised, and market-driven tourism practices (Sharpley, 2020; Gkoumas, 2019; Cole & Brwone, 2015), a practice rampant today. This dual reality exposes the moral tensions and vulnerability embedded within contemporary tourism practices. These tensions, however, are nowhere near being resolved by the current sustainability rhetoric, considering its approach. This is the case because, rather than properly addressing these problems, current sustainability interventions continue to privilege growth, efficiency, and profit over ecological integrity and communal well-being (Moscardo & Murphy, 2014; Higgins-Desbiolles, 2020). It is precisely within this ethical vacuum that eco-socialism becomes indispensable and is better positioned as a viable framework.

The framework of Earth-eco-socialism stands in contrast to current sustainability rhetoric that cannot look beyond wealth and human satisfaction maximisation. It is positioned to reorient the purpose of tourism. It does this by shifting the focus from a profit-centred enterprise, not in a form of disguise as seen in today's sustainable tourism (Moscardo & Murphy, 2014; Higgins-Desbiolles, 2020). Rather, to a value-laden human practice, premised on the idea of care, reciprocity, and planetary stewardship (Ojomo 2011, 2019;

Mogaji, 2024; Ojomo, 2024; Ojomo *et al*., 2025). Arguing through the lens of earth-eco-socialism, the earth is therefore presented not as a passive backdrop for tourist consumption. Rather, it is considered a moral subject whose integrity constitutes the foundation of meaningful human activity (Ojomo, 2011). In this sense, tourism, under an earth-eco-socialist lens, cannot merely be "managed" or "regulated" but rather ethically reimagined. Its core principles make it an encounter that respects ecological rhythms, acknowledges intergenerational responsibility, and resists the temptation to collapse nature into commodified attractions curated by algorithms or dictated by market appetites, as presented in the case studies of Cole and Browne (2015), Gkoumas (2019), and Jaya-Montalvo *et al*. (2024). It then follows that, while traditional sustainability frameworks remain preoccupied with mitigating impacts, reducing carbon footprints, or improving efficiency, Earth-Eco-Socialism demands something deeper. It looks deeper into transforming the moral consciousness that guides tourism, a shift necessary for our contemporary tourism discourse. Thus, by foregrounding communal values, shared responsibility, and moral duties to both humans and nature (Mogaji, 2024; Mogaji, 2024), Earth-Eco-Socialism redirects tourism away from the anthropocentric logic that has long governed its practice toward a relational ethic. It resituates it (tourism) with a framework where ecosystems and cultural communities are approached as co-participants in the tourism encounter and not as resources to be optimised for economic gain.

Furthermore, in an era where technological infrastructures continue to mediate the tourist experience through their influence on human desires, determining mobility, and normalising algorithmic authority, eco-socialism provides a moral compass capable of interrogating these systems. It questions the irregularities contained in contemporary practices of tourism. These include questioning the ecological cost of digital convenience and also challenging the invisibility of extractive data-driven tourism. It also stands in opposition to unethical power imbalances by exposing the subtle ways through which technology amplifies existing power imbalances between corporations, local communities, and the environment (Milano *et al*., 2018; Sharma**,** 2019). In the case of Bali, Indonesia, for example, where there is water scarcity, and on top of that, the tourist base keeps expanding, further straining the already insufficient water for the locals (Cole & Browne, 2015). In such a scenario, tourist organisers are to be shouldered with the moral responsibility of ensuring proper provision for their tourists, who end up with the little water available for the locals. Even if at all the locals were not affected, they ought to replace what was used, which is the core of sustainability, supported by the preventive research carried out by Jaya-Montalvo *et al*. (2024). This negligence confirms their moral irresponsibility towards nature. Also, in the case of Rhodes Island, where environmental abuse was unconsciously admitted to by the hoteliers and others through the pointing of fingers (Gkoumas, 2019), it can actually be addressed through proper environmental education, whereby their moral responsibility towards nature would be duly highlighted through the framework of eco-socialism.

By so doing, Earth-eco-socialism provides a framework for resisting the digital commodification of nature and cultural heritage. In essence, Earth-Eco-Socialism does not go to the extreme of rejecting technology; rather, it subjects it to an ethical interrogation to prevent ecological exploitation and abuse in order to ensure dwelling with nature (Heidegger, 1971, 1977). It insists that technological innovation must remain subordinate to the moral imperative of environmental preservation and communal well-being. Therefore, tourism guided by this theory becomes a transformative practice. It hence becomes that which strengthens local autonomy, protects cultural identities, restores ecological balance, and re-establishes the moral equilibrium between human aspiration and planetary limits.

However, in 2017, Fayemi and Balogun critiqued Ojomo's earlier eco-philosophical approach, which was first mentioned in her paper titled "Aldo Leopold's Land Ethics: Implications for Africa," delivered at the International Conference on African Environmental Ethics, Philosophy, and Education Versus Environmental Activism and Advocacy: The Great Debate, an international conference at the University of Lagos. Fayemi and Balogun (2017) argue that, no doubt, Ojomo's earth-eco-socialist orientation sought to move beyond Western conservation models, but it falls short in sufficiently clarifying the mechanism through which environmental consciousness could be cultivated among African communities, students, or local institutions. Their contention was that the theory lacked explicit operational pathways, whether through public pedagogy, community mobilization, curriculum reform, or structured environmental activism. Hence, they argue it therefore risks appearing conceptually persuasive; however, practically indeterminate (Fayemi & Balogun, 2017).

Be that as it may, this earlier limitation becomes significantly moderated in her more recent works Ojomo *et al*. (2025). In this later work, she expands the scope of the model by properly building it more firmly in cooperative environmental governance, enforceable legislative frameworks, democratic participation, and earth-centered moral responsibility. Through these operational mechanisms, she shifts the theory from a purely ethical appeal to a more institutional and geopolitical model of ecological transformation. Furthermore, in her co-authored applied research on environmental crises, the theory of earth-eco-socialism was further operationalized. Ojomo *et al*. (2025) proposed concrete mechanisms to see to the practical relevance of this theory by building on her earlier

works (Ojomo, 2019, 2024; Ojomo *et al*., 2025). These operational mechanisms include participatory environmental management, regulatory accountability, and structural reforms to waste governance systems, as the context of theoretical research warrants. Though the operational mechanisms of her works might seem different, in reality, they are arguing for the same course. Their operational mechanisms call for legislative reform that will recognize these problems and attend to them contextually. Considering these recent contributions to the operationalization of this theory, the gap highlighted by Fayemi and Balogun (2017) is therefore addressed. It even goes further by also providing the normative and structural tools necessary for contemporary ecological challenges.

Following the above, the theoretical framework of earth-eco-socialism, therefore, is better positioned as an ethically robust framework for confronting the challenges of tourism in the techno-ecological age. By arguing through the lens of this theory, the failure of market-driven sustainability is exposed. It also counters the reductionism of technological optimism, and as a result, re-situates tourism within a moral horizon where human flourishing is inseparable from the integrity of the Earth. To this effect, through the adoption of this theoretical foundation, tourism could thus be repositioned not as an extractive, exploited, or commodified encounter but as a morally informed practice capable of nurturing ecological renewal. By observing the moral underpinnings suggested by this theory, communal solidarity could be reinforced, and also, treating the planet as habitable for future generations could be ensured.

5. Conclusion

The question of sustainable tourism becomes an important one, considering all the arguments presented above. The priority on profit over the well-being of the entire ecosystem is frowned at in this paper. This paper situates its argument within the framework of Earth-eco-socialism for global adoption in order to ensure sustainable tourism. It contends that responsible tourism remains indispensable and non-negotiable if humanity intends to preserve sustainability amid ongoing global environmental crises, most especially in the age of technological innovations in tourism. Accordingly, this paper noted that with the rapid rise of artificial intelligence and technologically mediated tourist practices, expectations have risen sharply, and without a genuine commitment to sustainable tourism, these developments may accelerate ecological degradation. In fact, it has started leading to degradation, but the sustainable tourism in practice is premised on the maximization of profit. In other words, the solution currently in practice is profit driven. However, the form of sustainability proposed in this framework is not the one deployed as a disguise for profit maximization, destination marketing, or heightened tourist experience. Rather, it is a sustainability that prioritizes the well-being, balance, and flourishing of the entire ecosystem. Hence, this paper maintains that tourism in the age of advanced technology, if it genuinely seeks to be sustainable, should embrace an eco-centric orientation in both its policies and practices, even when technological tools are deployed. It argues in favor of Earth-eco-socialism precisely because this perspective moves beyond profit, rejects anthropocentrism, goes beyond eco-socialism, and transcends the narrow focus on human well-being.

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Conflict of Interest

The authors affirm that there is no conflict of interest in relation to this research or its publication.

Declaration

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Data Availability Statement

The materials and sources analysed in this study are publicly available through published books, journal articles, reports, and other publicly accessible documents cited in the reference list. No proprietary or restricted datasets were generated or analysed during this study.

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References

Akande, M. A. (2022). The Logic and Science of Incantation in Yoruba Traditional Technology. *Appon Philosophical Quarterly*, *1*, 137-48.

Bentley, J. H. (2013). Environmental crises in world history. *Procedia - Social and Behavioral Sciences, 77*, 108–115. https://doi.org/10.1016/j.sbspro.2013.03.067

Bernstein, J. M. (2025). Adorno in the Anthropocene. *Journal of Adorno Studies, 1*. https://doi.org/10.7413/joas011

Bookchin, M. (2005). *The ecology of freedom: The emergence and dissolution of hierarchy*. AK Press.

Bowen, J., & Morosan, C. (2018). Beware hospitality industry: The robots are coming. *Worldwide Hospitality and Tourism Themes, 10*(6). https://doi.org/10.1108/WHATT-07-2018-0045

Bowen, J., & Whalen, E. (2017). Trends that are changing travel and tourism. *Worldwide Hospitality and Tourism Themes, 9*(6), 592–602. https://doi.org/10.1108/WHATT-09-2017-0045

Buhalis, D. (2020). Technology in tourism-from information communication technologies to eTourism and smart tourism towards ambient intelligence tourism: a perspective article. *Tourism review, 75*(1), 267-272. https://doi.org/10.1108/TR-06-2019-0258

Buhalis, D., & Sinarta, Y. (2019). Real-time co-creation and nowness service: lessons from tourism and hospitality. *Journal of Travel & Tourism Marketing, 36*(5), 563–582. https://doi.org/10.1080/10548408.2019.1592059

Buitrago, E. M., & Yñiguez, R. (2021). Measuring overtourism: A necessary tool for landscape planning. *Land, 10*(9), 889. https://doi.org/10.3390/land10090889

Chen, X., & Wu, C. (2026). Assessment of the spatiotemporal coupling relationship between ecological environment quality and tourist spatial activities in Qianjiangyuan National Park. *Scientific Reports, 16*(1), 10152. https://doi.org/10.1038/s41598-026-38914-9

Cole, S., & Browne, M. (2015). Tourism and water inequity in Bali: A social-ecological systems analysis. *Human Ecology, 43*(3), 439–450. https://doi.org/10.1007/s10745-015-9739-z

El Balbal Karima, & Omari Soumia. (2024). Green marketing in the context of sustainable tourism: Current situation and Perspectives. In *Revue Internationale de la Recherche Scientifique* (Revue-IRS) - ISSN : 2958-8413. Zenodo. https://doi.org/10.5281/zenodo.10615165

Erdős, F., Thinakaran, R., Firuza, B., & Koloszár, L. (2025). The rise of AI in tourism: A systematic literature review. *GeoJournal of Tourism and Geosites, 60,* (2spl), 1254–1265. https://doi.org/10.30892/gtg.602spl22-1498

Fayemi, A. K., & Balogun, O. A. (2017). Women's identities in African environmental ethics: A conversational approach. In *African Philosophy and Environmental Conservation* (pp. 103–119). Routledge. https://doi.org/10.4324/9781315099491-9

Filieri, R., D'Amico, E., Destefanis, A., Paolucci, E., & Raguseo, E. (2021). Artificial intelligence (AI) for tourism: A European-based study on successful AI tourism start-ups. *International Journal of Contemporary Hospitality Management, 33*(11), 4099–4125. https://doi.org/10.1108/IJCHM-02-2021-0220

Font, X., & McCabe, S. (2017). Sustainability and marketing in tourism: Its contexts, paradoxes, approaches, challenges and potential. *Journal of Sustainable Tourism, 2525*(7), 869-883. https://doi.org/10.1080/09669582.2017.1301721

Foster, J. B. (2000). *Marx's ecology: Materialism and nature*. Monthly Review Press.

Gajdošík, T., & Marciš, M. (2019). Artificial intelligence tools for smart tourism development. In *Computer Science On-line Conference* (pp. 392–402). Springer. https://doi.org/10.1007/978-3-030-19810-7_39

Gkoumas, A. (2019). Evaluating a standard for sustainable tourism through the lenses of local industry. *Heliyon, 5*(11). https://doi.org/10.1016/j.heliyon.2019.e02707

Gössling, S. (2002). Global environmental consequences of tourism. *Global Environmental Change, 12*(4), 283–302.

Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: Foundations and developments. *Electronic Markets, 25*(3). https://doi.org/10.1007/s12525-015-0196-8

Hall, C. M., & Page, S. (2014). *The geography of tourism and recreation: Environment, place and space*. Routledge. https://doi.org/10.4324/9780203796092

Hall, C. M., Gössling, S., & Scott, D. (2015). The evolution of sustainable development and sustainable tourism. In *The Routledge handbook of tourism and sustainability* (pp. 15–35). Routledge.

Heidegger, M. (1971). Building dwelling thinking. In A. Hofstadter (Trans.), *Poetry, language, thought*, *154*, 1-26. Harper & Row.

Heidegger, M. (1977). *The question concerning technology and other essays* (W. Lovitt, Trans.). Harper & Row.

Henriques, H., & Pereira, L. N. (2024). Hotel demand forecasting models using artificial intelligence: A systematic literature review. *Tourism & Management Studies, 20*(3), 39–51. https://doi.org/10.18089/tms.20240304

Higgins-Desbiolles, F. (2020). Socialising tourism for social and ecological justice after COVID-19. *Tourism Geographies, 22*(3), 610–623. https://doi.org/10.1080/14616688.2020.1757748

Horsthemke, K. (2025). African ecological ethics and the moral status of nonhuman nature. In *African philosophy and deep ecology* (pp. 81–95). Routledge. https://doi.org/10.4324/9781003480914-7

Huang, R. (2023). Analyzing national parks visitor activities using geotagged social media photos. *Journal of Environmental Management, 330*. https://doi.org/10.1016/j.jenvman.2022.117191

Ivanov, S., & Webster, C. (Eds.). (2019). *Robots, artificial intelligence, and service automation in travel, tourism and hospitality*. Emerald Publishing. https://doi.org/10.1108/978-1-78756-687-320191014

Jaya-Montalvo, M., Briones-Bitar, J., Soto-Navarrete, L., Espinel, R., & Carrión-Mero, P. (2024). Tourism carrying capacity of geosites on Santa Cruz Island, Galapagos, for its sustainability. *WIT Transactions on Ecology and the Environment, 263*, 127–138. https://doi.org/10.2495/ST240111

Joseph, E. K. (2025). Planning sustainable futures: Critical drivers of success in the global context. *Discover Sustainability, 6*(1), 399. https://doi.org/10.1007/s43621-025-01126-8

Kazak, A. N., Chetyrbok, P. V., & Oleinikov, N. N. (2020). Artificial intelligence in the tourism sphere. *IOP Conference Series: Earth and Environmental Science, 421*(4), 042020. https://doi.org/10.1088/1755-1315/421/4/042020

Kırtıl, İ. G., & Aşkun, V. (2021). Artificial intelligence in tourism: A review and bibliometric research. *Advances in Hospitality and Tourism Research, 9*(1), 205–233. https://doi.org/10.30519/ahtr.801690

Kovel, J. (2007). *The enemy of nature: The end of capitalism or the end of the world?* (2nd ed.). Palgrave Macmillan.

Kovel, J., & Löwy, M. (2001). An ecosocialist manifesto.

Leone, D., Schiavone, F., Appio, F. P., & Chiao, B. (2021). How artificial intelligence enables value co-creation in industrial markets. *Journal of Business Research, 129*, 849–859. https://doi.org/10.1016/j.jbusres.2020.11.008

Lu, L., Cai, R., & Gursoy, D. (2019). Developing and validating a service robot integration willingness scale. *International Journal of Hospitality Management, 80,* 36-51. https://doi.org/10.1016/j.ijhm.2019.01.005

Mehra, R. K., & Kapoor, N. (2025). The role of assistive technology in supporting special education needs. In *Blending human intelligence with technology in the classroom* (pp. 209–222). IGI Global. https://doi.org/10.4018/979-8-3373-0771-8.ch009

Milano, C., Cheer, J. M., & Novelli, M. (2018). Overtourism: A growing global problem. *The Conversation.* https://theconversation.com/overtourism-a-growing-global-problem-100029

Mogaji, R. I. (2024). Redefining domestic violence: An earth-eco-socialist consideration. *International Journal of Multidisciplinary Research Review Studies, 1*(1), 1–16.

Moscardo, G., & Murphy, L. (2014). There is no such thing as sustainable tourism: Re-conceptualizing tourism as a tool for sustainability. *Sustainability, 6*(5), 2538–2561. https://doi.org/10.3390/su6052538

Murphy, J., Hofacker, C., & Gretzel, U. (2017). Dawning of the age of robots in hospitality and tourism: Challenges for teaching and research. *European Journal of Tourism Research, 15*(2017), 104–111. https://www.cabidigitallibrary.org/doi/full/10.5555/20173129512

Najafi, M., & Costa, C. (2026). Digital overtourism in AI travel recommendations: Evidence from a comparative analysis. *Current Issues in Tourism, 1–7*. https://doi.org/10.1080/13683500.2026.2654066

Neuhofer, B., Buhalis, D., & Ladkin, A. (2014). Technology as a catalyst of change: Enablers and barriers of the tourist experience and their consequences. In *Information and communication technologies in tourism 2015* (pp. 789–802). Springer. https://doi.org/10.1007/978-3-319-14343-9_57

Ojomo, P. A. (2011). Environmental ethics: An African understanding. African Journal of Environmental *Science and Technology*, *5*(8), 572–578. https://doi.org/10.4314/ajest.v5i8.72050

Ojomo, P. A. (2019). Niger Delta environmental crises and the limitations of Africanizing Aldo Leopold's land ethic. In African environmental ethics 291–308. Springer. https://doi.org/10.1007/978-3-030-18807-8_19

Ojomo, P. A., Idoko, V. E., & Mogaji, R. I. (2025). An earth-eco socialist approach towards sustainable e-waste management in Lagos State. *African Journal of Environmental Science and Technology*, *19*(9), 254–263. https://doi.org/10.5897/AJEST2025.3372

Ojomo, P. A. (2024). Thinking sustainability through the Earth-eco-socialist paradigm. International Journal of Research and Innovation in Social Science, 8(4), 237–247. https://dx.doi.org/10.47772/IJRISS.2024.804019

Rekiek, S., Jebari, H., & Reklaoui, K. (2024). Prediction of booking trends and customer demand in the tourism and hospitality sector using AI-based models: A case study of major hotel chain. *International Journal of Advanced Computer Science & Applications, 15*(10). https://doi.org/10.14569/ijacsa.2024.0151043

Schönherr, S., Peters, M., & Kuščer, K. (2023). Sustainable tourism policies: From crisis-related awareness to agendas towards measures. *Journal of Destination Marketing & Management, 27*, 100762. https://doi.org/10.1016/j.jdmm.2023.100762

Scott, D. (2021). Sustainable tourism and the grand challenge of climate change. *Sustainability, 13*(4), 1966. https://doi.org/10.3390/su13041966

Semwal, R. (2024). Enhancing cultural sensitivity and safeguarding heritage sites. In D. Sharma, H. Abdullah, & P. Singh (Eds.), *Sustainable tourism, Part A: Balancing conservation and progress in a dynamic industry*. Emerald Publishing Limited. https://doi.org/10.1108/978-1-83797-979-020241013

Sharma, N. (2019). Overtourism: Excesses, discontents and measures in travel and tourism [Review of the book *Overtourism: Excesses, discontents and measures in travel and tourism*, edited by C. Milano, J. M. Cheer, & M. Novelli]. *Anatolia*. https://doi.org/10.1080/13032917.2019.1690794

Sharpley, R. (2000). Tourism and sustainable development: Exploring the theoretical divide. *Journal of Sustainable Tourism, 8*(1), 1–19. https://doi.org/10.1080/09669580008667346

Sharpley, R. (2020). Tourism, sustainable development and the theoretical divide: 20 years on. *Journal of Sustainable Tourism, 28*(11), 1932–1946. https://doi.org/10.1080/09669582.2020.1779732

Stors, N., & Baltes, S. (2018). Constructing urban tourism space digitally: A study of Airbnb listings in two Berlin neighborhoods. *Proceedings of the ACM on Human-Computer Interaction, 2*(CSCW), 1–29. https://doi.org/10.1145/3274435

Towner, J. (1995). What is tourism's history? *Tourism Management, 16*(5), 339–343.

Tractica. (2019). Forecast growth of the artificial intelligence (AI) software market worldwide from 2019 to 2025. www-statista-com/statistics/607960/worldwide-artificial-intelligencemarket-growth/(accessed7 February2021).

Tussyadiah, I. (2020). A review of research into automation in tourism: Launching the Annals of Tourism Research Curated Collection on Artificial Intelligence and Robotics in Tourism. *Annals of tourism research, 81*, 102883. https://doi.org/10.1016/j.annals.2020.102883

Urry, J. (2002). *The tourist gaze*. Sage.

Viken, A., Höckert, E., & Grimwood, B. S. (2021). Cultural sensitivity: Engaging difference in tourism. *Annals of Tourism Research, 89*. https://doi.org/10.1016/j.annals.2021.103223

Wailmi, K., Mahrinasari, M. S., & Ahadiyat, A. (2024). Greenwashing: Influence on the development and sustainability of tourism in Indonesia. *Jurnal Ilmiah Edunomika, 8*(2). https://doi.org/10.29040/jie.v8i2.12790

Zuboff, S. (2019). *The age of surveillance capitalism*. PublicAffairs. https://doi.org/10.4324/9781003320609-27