



Buddhism and the Ecology in the Digital Age

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Abstract

The modern day ecological crisis characterized by increasing human estrangement from the natural environment has the potential to be exacerbated in the digital age, in which human beings become more preoccupied with cyberspace at the detriment of the physical and natural environment. Age old religious traditions, in particular Buddhism, are asked to address the ecological issues in this new social milieu in order to contribute to solving the crisis. Buddhism as a religion that historically has been able to adapt to technological changes and employ technology in the spreading of its teachings is in a good position to speak to this issue. However, in order to make an effective contribution, Buddhism should not only examine fundamental Buddhist teachings that promote healthy human-nature relationship, but also undergo the threefold process of retrieval, reevaluation and reconstruction in order to make itself relevant to the new social context.

Keywords: Buddhism, environmental crisis, digital age, digital era, technological nature

Introduction

As humanity enters the digital age, one of the most pressing issues facing the world is the ecological crisis that threatens not only to debilitate the natural environment but also possibly result in humanity's own destruction. It is imperative to reflect on environmental issues in the digital age because in so many ways, the entities that are associated with the digital context—the Internet and cyberspace—are increasingly drawing people mentally and emotionally, if not physically, away from the space of the analog world. As digital technology becomes more conspicuous in human life, the digital environment has gained greater grounds on the natural environment and people are becoming more preoccupied with the former while neglecting the role and significance of the latter in their lives. In the face of this new social milieu and the accompanying environmental predicament, religious traditions, which naturally are interested in the fate of the human lot, are often expected to help make sense out of the present reality as well as devising ways that contribute to solving problems that it presents. Buddhism, despite being an age old tradition is still asked to make available its wisdom in order to shed light upon issues that affect the well-being of human beings and the natural world around them. This paper examines how Buddhism can address the ecological crisis in the digital age in order to make itself relevant in a new social milieu where human beings are becoming increasingly detached from the natural environment around them.

Implications for human-nature relationship in the digital era

The ushering in of the digital age some three decades ago with the introduction and eventual prolific use of the Internet and its numerous applications has led to the creation of a new entity called cyberspace. This notional environment or metaphorical space is increasingly becoming an important place where people exchange information and experience a sense of social interaction and interconnectivity. People's lives, especially the younger generation, have become greatly attached to this non-physical environment as the place to go for engaging in online activities, building relationships, and finding news, information and entertainment. People in the Philippines, for example, are reported to spend over a quarter of their day online (6.3 hours). The people of Thailand on average spend 5.5 hours per day on the Internet either for work or leisure activities.¹ In Thailand, the largest percentage of users

¹Go-Globe, <http://www.go-globe.com/blog/digital-landscape-asia/>, accessed 10 October 2017.

(64 percent) comprises of individuals born between 1977 and 1994. It has been estimated that this group spends time equaling 2.26 days every week online.²

While technological development is inevitable, it is important to reflect on the ramifications of a technology based society. A pertinent question in this process of reflection concerns the future of the environment in an age where people seem increasingly removed from nature while opting for more technologically based methods of managing their lives as well as keeping themselves entertained. The relationship between human and nature in many cultures, especially in the past, is characterized by intimacy, connectedness, and symbiosis, so much so that one can even claim that nature and human beings constitute a single entity or organism (Miller 1991). This kind of horizontal human-nature relationship of interdependency is often seen in nomadic societies where environmental sustainability is essential to such a way of life. The role of the natural environment has always been important in the cultural sensibility of the people of Asia. In Vietnam, for example, the word for country (*đất nước*) is a combination of the two words, “earth” and “water.” Another word combination that Vietnamese people often use to refer to their sovereign nation is “*sông núi*” which means “river” and “mountains.” This linguistic expression is indicative of Vietnam’s geography, which comprises of thousands of rivers and long mountain ranges, and make up three quarters of the country’s land area. Vietnam’s two river deltas, the Red River Delta in the north and Mekong River Delta in the south are seen as the rice baskets that feed the people. Water geographical features have always been important to the Southeast Asian way of life. In Thailand, the traditional saying that expressed one’s optimism for the abundance that nature brought to their life is: “There is rice in the field and fish in the waters.”

Modernization or urbanization which is a technology driven process is seen to create dynamics that go against the natural affinity that human beings have towards the natural environment. George Monbiot (1995) calls this phenomenon the human “estrangement from the ecosystem” in which there is a “gradual loss of meaningful involvement” with nature with the benefits as well as dangers that it presents. While this process of estrangement may have started as early as the beginning of the agricultural revolution and escalated during the industrial revolution, it is manifesting itself dramatically in this digital age. In this era, relationships (whether human-human or human-nature) are less and less the result of direct

²AIS, “Thailand ICT Business Landscape and Digital Trend 2016,” <http://messepl.com/wp-content/uploads/2015/11/5.-Connect.W-2015-Global-Telco-Conference-AIS.pdf>, accessed 11 October 2017.

interaction and increasingly mediated by digital technology. In the past when infants cried, they were picked up by grandmas and aunts who would comfort them so that they would stop crying. Nowadays, when children cry, they are more likely to be given a smart phone to watch Youtube video clips so that the adults can go on doing their business. Many children of Burmese and Cambodian migrant workers in Thailand are only able see their parents a few times a year, even only once every few years, because the parents have to migrate to neighboring countries to make a living. Parent-child bond, instead, is mediated by digital social network applications such as Line and Facebook.

Human-nature relationship, likewise, is affected in the digital age. In the past, children in Vietnam and Thailand used to make horse figures out of banana stalks and raced with one another in the field. Nowadays, children are more likely to get their adrenaline rush by racing cars on a tablet or a smart phone. Traditionally people ordered their daily activities of work and rest basically in accordance with the natural cycle of day. However, with digital technology presenting distractions such as on-demand entertainment programs, online games, and social networks that allow continuous interaction with people all over the world, many forget the natural body rhythms that have evolved over millions of years. One must admit that in certain cases technology has helped in promoting environmental sustainability and conservation. The development of the light bulb, for example, consumes 50 times less energy than the kerosene lamp used in many developing countries. The ability to send correspondences by email reduces the need for paper products. Nowadays, the International Anti-Poaching Foundation (IAPF) trains Green Army rangers to use surveillance technology such as thermal imaging cameras and drones to monitor animals and their habitats in order to prevent poachers from hunting endangered species. The Japan Agency for Marine-Earth Science and Technology (JAMSTEC) uses sophisticated sensors to monitor the pH levels of the Pacific Ocean in order to help take preventative measures to preserve marine ecosystems.³ Digital technology has also helped us to see and experience nature in wonderful ways, allowing us to discover details that were unavailable to the average person before. Access to information, photographs and videos of natural places all over the earth are available with a few clicks of the mouse or touches on the smart phone or tablet.

Despite all the positive things that technology, especially digital technology has brought to human life and the effort to promote environmental sustainability, the question

³<http://www.makeuseof.com/tag/5-ways-tech-will-save-environment/>, accessed 10 November 2016.

remains whether these technological developments have reduced the feeling of estrangement and drawn us back into a more intimate relationship with the natural environment. In many ways, one can argue that technology has further hindered opportunities for encounter between human beings and the natural environment. Nowadays, people can easily take a tour of any part of the world—both natural and man-made—by searching for videos on Youtube and other Internet applications. One can even take virtual tours of the majestic redwood forests in California or the awe inspiring Son Doong Cave in Vietnam. Technology has enabled us to “experience” the most extraordinary events and places in the world with just a click of the mouse. Such digitally mediated encounters, for many, often serve as the prevalent mode of interaction between human and nature. After all, why spend money and time getting on a ship heading into the ocean for days on end without knowing if you’ll actually encounter a blue whale if you can see it up close and personal via Youtube? In fact, the virtual tours and the recording of natural places and events with sophisticated equipments are oftentimes much more picturesque and exciting than the experience of going to the actual place. Many have been let down after having seen photos or taken a virtual tour of a particular place only to be sorely disappointed upon making the actual visit there. For those who do get to the place, many seem more concerned with taking “selfies” and uploading the photos onto social networks than really taking the time to engage in anything meaningful with that particular place. The natural setting becomes nothing more than an interesting background to highlight one’s own image to be broadcasted to friends and followers. Therefore, the irony of the digital age for human relationship with nature is that while it seems to help bring us closer to nature intellectually and even physically, this closeness often does not translate into emotional connection and intimacy.

Buddhist intervention in the digital age

Religion and technology has always gone hand in hand, usually with religion making use of available technology in order to promote its teachings and spread its presence to new territories. The invention of the printing press, for example, did wonders for making the Christian Bible available to the faithful over the centuries. The digital age that the world now finds itself in is having profound impact on how religion presents itself and reaches out to humanity. By employing digital technology and mass media, religions are able to support their adherents in understanding and practicing their faith, but also introduce themselves to potential faith seekers in every corner of the world who can get online. In a globalized world, religions can also impact the society with teachings that address spiritual, social, and political dimensions of human life.

In this manner, Buddhism has never lagged behind when it comes to putting available technology to good use. According to Daniel Veidlinger (2016), “Buddhism has long had an affinity for the latest technologies and has used every means at its disposal to transmit the Dharma far and wide.” Just as Buddhist monks and laypeople took to the Silk Road to spread their teachings, they are now doing the same on the information highway to communicate its teachings to people of all sorts of cultural and ethnic backgrounds. In the same manner that the printing press made the Bible accessible to all kinds of people, digital technology has now put the Pali Canon in multiple languages at the fingertip of anyone with Internet access. In the scholarly community, the *Journal of Buddhist Ethics* established in 1994 was the first online peer reviewed journal in Religious Studies. As a religion that has always kept up with technological developments, Buddhism is in as good of a position as any not only to understand, employ, but also critique digital technology and its ramifications for human-nature relationship in this new social environment.

Despite Buddhism’s demonstrated affinity for technology, the tradition has always emphasized the essential role and place of the natural environment in human life, especially in the human endeavor of self-cultivation and self-transformation. In the Buddhist tradition, nature is intimately connected to the life and livelihood of humanity. In the canonical texts, processes and events taking place in nature were often employed to shed light on the reality of human life. For example, in the *Samyutta Nikāya*, the process of how a seed sown in the field is able to grow serves to reinforce the teaching that human life is also affected by various causes.

*As when a seed is sown in a field
It grows depending on a pair of factors:
It requires both the soil’s nutrients
And a steady supply of moisture:
Just so the aggregates and elements,
And these six bases of sensory contact,
Have come to be dependent on a cause;
With the cause’s breakup they will cease. (S.I.9)*

Another example from the same *Nikāya* asserts that the processes that lead to spiritual progress have parallels with what is observable in nature.

*Again and again, they sow the seed;
 Again and again, the sky-god sends down rain;
 Again and again, ploughmen plough the field;
 Again and again, grain comes to the realm.
 Again and again, the mendicants beg;
 Again and again, the donors give;
 When donors have given again and again,
 Again and again they go to heaven. (S.I.12)*

These nature analogies affirm the understanding that human life processes are subjected to the mechanisms of cause and effects that are operative in human life as much as in other entities in the universe. David J. Kulupahana points out that contemplating the events that take place in nature is beneficial to individual spiritual cultivation because the natural settings draw attention away from distractions pertaining to sense pleasures as well as providing a natural experiential ground conducive to understanding the true nature of the world as impermanent and dependently arising (2009, 5). It is not surprising that the Buddha insisted that his monks search out for natural locations such as the forest, mountain, or a hillside cave in order to carry out their effort towards spiritual progress (M.I.181; I.346; I.441; III.4; III.116). In these rustic and wild locations fraught with danger and inconveniences, by contemplating on these aspects of nature, one is able to more deeply understand the reality of life as characterized by impermanence and suffering. When monks reside in the forest and must deal with nuisance from pests and insects that damage their abode and beddings, they are encouraged to contemplate on this reality as reflecting impermanence of all things and to persevere in their difficulties. At the same time, leading a forest life also leads to the danger that comes from wild animals. Monks are told to be aware of this situation, and by contemplating on the fear aroused from this danger, they can be led closer to the dhamma (Harris 1991, 106). The important role of nature in one's spiritual quest and daily activities, many have pointed out, can be demonstrated in how the Buddha led his own life. The fact that the Buddha was said to be born, achieved enlightenment, and died under various types of trees, lived and taught in natural environments, and often taught his disciples using examples from nature is evidence that there is an intimate relationship between spiritual well-being and the natural environment. The Theravadin forest tradition in which monks build temples in the wilderness or other natural locations in order to live and teach testifies to the legacy of the important role of nature since the earliest days of the religion.

For Buddhism, evidence of one's progress in the effort of personal self-cultivation is in the virtues that he demonstrates in his relationship with others. To this extent, the state of the natural environment can function as a measure of the degree of human virtuousness. In his sermons, the Buddha drew connections between these two realities. For example, in the *Cakkavattasihanada Sutta* (D.III.58-77), the Buddha said that when people behaved degenerately, filling their actions with ignorance, anger, and hatred, what resulted were war, famine, epidemics and other calamities. However, when people changed their hearts and their way of living, nature was restored to balance, and humanity experienced prosperity and peace. The claim of the state of nature as manifestations reflecting human virtuousness can also be seen in other suttas of the *Anguttara*. In one sermon, the Buddha asserted that the regularity of the course of the sun, moon and stars, the stability of the seasonal rains, the bountifulness of the crop, and the health of human beings were the direct result of the behavior of kings and leaders (A.II.74). Similarly, in another sermon of the same *Nikāya*, the Buddha warned, "When people are excited by illicit lust, overcome by unrighteous greed, afflicted by wrong Dhamma...sufficient rain does not fall leading to famine and lack of grains; wild spirits are let loose harming human lives" (A.I.159-160).

As environmental well-being is directly correlated to human virtuousness, exercising virtues towards nature is no less important than doing so towards fellow human beings. As a person trains himself in the Noble Eightfold Path and understands that the life of sentient beings is characterized by suffering, he is encouraged to practice loving kindness (*mettā*) and compassion (*karunā*) in his life. A person filled with loving kindness and compassion sincerely desires that all sentient beings be freed from any suffering in their lives. Loving kindness is to be directed towards other creatures regardless of their strength, size, or proximity. It is to be wished upon others whether they are seen or unseen (S.I.8). Monks were enjoined by the Buddha to exercise loving kindness even in the face of challenges and difficulties (M.I.123). He exhorted them to vigorously train themselves so that they could display these virtues not only to those immediately around them but also to the entire world. Indeed, a person who is truly imbued with loving kindness and compassion would extend these virtues to human beings as well as non-human entities. Otherwise, it would not be accurate to characterize that person as truly compassionate (James 2007, 457).

Closely related to loving kindness and compassion is the virtue of gentleness. Gentleness can be seen as the positive derivative of non-violence (*ahimsā*), the first precept in Buddhism. In the *Dhammapada* one is reminded that all sentient beings, human or otherwise, avoid things that cause them pain (Dp.129-130). Therefore, any actions that

inflict pain upon others, whether through everyday interactions with those around us or through means of livelihood, ought to be avoided (A.V.177). Earning a living as pig and sheep butchers, hunters, thieves and murderers result in grave consequences to the individual that no water ablution can eliminate (The.242-3). Just as loving kindness and compassion has a universal ethical thrust, so does gentleness. One would expect that those who display gentleness towards people and animals would also extend this demeanor towards plants and even non-living things like a sand dune or a mountain cave.

Another virtue that greatly affects the well-being of nature is generosity (*cāga*) in giving (*dāna*). Bhikkhu Bodhi points out that the spiritual quality of generosity is important because it directly counters the poisons of greed and hatred while “facilitating that pliancy of mind that allows for the eradication of delusion” (1995). True generosity is the underlying impetus for the practice of *dāna parami*, the perfection of giving that brings about wholesome *kamma* essential to the path of enlightenment (Jootla 1995). Indeed, giving is an admirable act and Buddhism focuses a great deal on giving. However, the kind of giving that Buddhism is interested in is not just any act of giving, but those acts of giving that are motivated by the genuine internal disposition of generosity. There is no question that without nature, human beings cannot survive. Without the oxygen produced by plants, human beings would not be able to breathe. The processes taking place in nature is also extremely conducive to the spiritual progress of human beings when they meditate and reflect on them. The service that nature offers to human beings is constant and unceasing. Human generosity through acts such as planting trees and preserving forests demonstrate a sense of gratitude towards and an awareness of reciprocity in dealing with the natural environment. As the *Khuddaka Nikāya* states: “A person who sits or sleeps in the shade of a tree should not cut off a tree branch. One who injures such a friend is evil.”

Buddhist teachings demonstrate that in many ways the well-being and the flourishing of the natural environment is part and partial of the very success of the human effort towards spiritual advancement. In the digital age where human interaction with the natural environment is increasingly being facilitated through the digital environment or replaced by preoccupation with cyberspace, Buddhism needs to actively refer to its fundamental teachings and traditions in order to promote healthy and wholesome human-nature relationship. Those who are technologically inclined might argue that the digital environment with its ever changing content and shifting identities can represent just as good a means for reflection on impermanence as the forest environment. One might also argue that “technological nature” such as a virtual tour of a nature site or a plasma “window” with a view of nature is an adequate

replacement of the actual experience. The truthfulness of these assertions, however, has not been corroborated by any known studies. Rather studies have indicated that interaction with authentic nature can lead to improvement in one's mental and physical health. Even minimal exposure to nature such as looking at it through a glass window has been shown to help hospitalized patients to heal faster, decrease the rate of illness of prisoners, and promote health in the workplace (Kahn et al. 2009, 37). While benefits of interaction with nature has been proven persuasively, studies that compare the benefit of technological nature with authentic nature have shown that the former brings fewer enjoyments and benefits, even if the presence of technological nature is better than having no nature at all.

Facing the reality of global urbanization and modernization, it seems many people are willing to reconcile with the fact that experiencing actual nature is becoming increasingly rare, and are more willing to accept having technological nature rather than no nature at all. This attitude reflects a situation described by Daniel Pauly as the "shifting baseline syndrome" (1995). Pauly came up with this syndrome after examining how fisheries scientists determined their baseline upon which to evaluate changes. As it turned out, as successive generation of fisheries scientists embarked upon studying the composition of stock size and species in a particular place, they would often take what they observed at the beginning of their career as the baseline. Because the composition changes with each successive generation, the baseline continually shifts and accommodates for the loss of stock and species. The shifting baseline in relations to the composition of fish is also observable in other areas such as air quality, moral and ethical standards, or spiritual well-being. Accepting technological nature as a legitimate substitute for actual nature, or even reconciling with the fact that there might not be any nature at all in one's living environment represents this shift in determining what are the standards for human physical, mental and spiritual flourishing. Likewise, one can propose that cyberspace is as good an environment as the natural forest to meditate on the nature of reality; but chances are we will suffer from the shifting baseline syndrome mentioned above.

In this digital age, Buddhism is called to apply its age old teachings to the new social context in order to maintain standards for human spiritual well-being as well as ecological flourishing. Just as Buddhist ethics have been advanced on serious matters affecting human society such as genocide and suicide, Buddhist ethics can also be formulated to address biocide and ecocide. Buddhism can engage in this developmental endeavor through the threefold process proposed by Mary Evelyn Tucker and Jim Grim (2017), which comprises of retrieval, reevaluation and reconstruction. In retrieval, Buddhist experts peruse scriptural and com-

mentarial sources in order to uncover and highlight aspects of the tradition that are relevant to human-Earth relations as well as identify applicable ethical codes for practice. This step involves close examination of both historical and textual sources in order to discover relevant content that may have not been previously evident. Reevaluation involves the examination of traditional teachings, customs, and religious tendencies and models of ethics in order to discover their impact on the environment. Reevaluation requires raising important questions about whether traditional religious tendencies and preoccupations with other-worldly matters hinder the addressing of more urgent ecological issues. Finally, reconstruction involves the creative effort by Buddhist scholars and leaders to adapt the teachings to address the contemporary circumstances. According to Tucker and Grim, “This is the most challenging aspect of the emerging field of religion and ecology and requires sensitivity to who is speaking about a tradition in the process of reevaluation and reconstruction.” For Buddhism itself, this deliberative process is no small challenge because in addressing ecological issues, the Buddhist scholars and leaders must maneuver between “bilingual languages, namely, their languages of transcendence, enlightenment, and salvation” and the “languages of immanence, sacredness of Earth, and respect for nature.” While this developmental process can be painstakingly slow and requires tremendous sensitivity, it must be done if Buddhism is to make itself relevant in the digital age. As Bikkhu Bodhi asserted:

If any great religion is to acquire a new relevance it must negotiate some very delicate, very difficult balances. It must strike a happy balance between remaining faithful to the seminal insights of its Founder and ancient masters and acquiring the skill and flexibility to formulate these insights in ways that directly link up with the pressing existential demands of old-age. It is only too easy to veer towards one of these extremes at the expense of the other: either to adhere tenaciously to ancient formulas at the expense of present relevance, or to bend fundamental principles so freely that one drains them of their deep spiritual vitality. Above all, I think any religion today must bear in mind an important lesson impressed on us so painfully by past history: the task of religion is to liberate, not to enslave. Its purpose should be to enable its adherents to move towards the realization of the Ultimate Good and to bring the power of this realization to bear upon life in the world. (Bikkhu Bodhi 1994)

As a religious tradition that knows how to make sense out of and employ technological developments, Buddhism is also asked to challenge those tendencies in technological

developments that lead human beings away from spiritual progress and ultimate emancipation. Buddhist teachings on nature must be emphasized and highlighted in the new social milieu in order to counter against further alienation of the natural environment from the daily experience of people. While cyberspace and virtual reality are legitimate entities of modern human society that must be accepted, it does not serve us well when our daily life is overly consumed by these notional spaces as to lead to further separation of human beings from the natural environment.

Conclusion

In conclusion, as technological development continues to be advanced, the digital landscape will take shape in more dramatic ways. The digital environment and the associated entity called cyberspace will in some ways distract or even draw people away from the natural environment, causing further human alienation from nature. Facing this prospect of alienation and estrangement, Buddhism can play a vital role in reminding its adherents of the importance of nature in one's spiritual development. Buddhism, as a religion that understands and knows how to use technology in propagating its teachings, can advance ideas that promote healthy and wholesome human-nature relationship to counter against negative inclinations brought about by increasing preoccupation with the digital environment at the peril of the natural environment. By actively bringing environmental issues to the forefront and emphasizing the fundamental need for a healthy human-nature relationship, Buddhism can serve as a force to prevent apathy towards environmental degradation and a catalyst for promoting environmental well-being. Buddhism can do this by implementing the threefold process of retrieval, reevaluation and reconstruction. By seriously and methodically engaging the tradition from the environmental perspective, great wisdom can be drawn out and applied for the greater good of humanity as well as the ecology.

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