Good, Bad, Neither: Some Reflections on Technology and Culture

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"From the Buddhist point of view, there are two types of mechanisation which must be clearly distinguished — one that enhances a man's skill and power, and one that turns the work of man over to a mechanical slave, leaving man in a position of having to serve the slave," wrote E. F. Schumacher in his celebrated book small is beautiful, about half a century ago, as globalisation and digital technology were about to emerge. Which of the two types of relationships with machines, then, is Bhutan, a Buddhist country, experiencing today?

In half a century, Bhutan has been catapulted into modernity and a globalised meld, which took many centuries for most other countries. Bhutan saw its first motor roads only decades after the Computer Laboratory was built in Cambridge in 1937. Working at New Museum's Site in Cambridge University, — where Maurice Wilkes and his team built the EDSAC computer in 1949, and where the famous Cavendish Lab was previously located — I was conscious of the technological revolution the world had seen since the middle of the 20th century. I could also discern how, despite its late adoption of modernity and technology, Bhutan had rapidly and fully embraced digital technology.

Since the official launch of television and the Internet in 1999, digital technology has spread across the country and profusely impacted people's welfare. This article explores some of the impact technology has had and continues to have on the cultures of Bhutan, particularly in the areas of the projects I have run since the beginning of the 21st century.

The Neutral Tool

In the abhidharma Buddhist texts, one finds a detailed exposition of Buddhist moral theories, of which a basic one is the classification of actions and events into three categories. They are positive or wholesome (*kuśala, dge*

¹ Schumacher (2011), Small is Beautiful: A Study of Economics as if People Mattered, London: Vintage Books, p. 40.

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ba) ones, negative or unwholesome ones (akuśala, mi dge ba), and neutral or indeterminate ones (avyākrta, lung ma bstan). The first two are ethically charged, thus leading to positive and negative results. Wholesome actions lead to happiness and peace, while unwholesome actions lead to suffering and pain. The neutral or indeterminate actions do not have intrinsic ethical value, and thus do not on their own lead to any results, like a seed which is burnt.

The Buddha is said to have proclaimed a voluntaristic moral theory in which the ethical value of the action is determined by the inner state of the mind or, more precisely, one's intention. Thus, if an action is carried out with a positive intention, such as compassion and wisdom, it is characterised as wholesome, but if the action is carried out with a negative intention, such as greed or hatred, it is considered unwholesome.

In the context of such analysis, the moral value of a specific act of creating or using technology is dependent on the intention of the individual involved. Even the creation of a destructive tool such as the atomic bomb can be positive if impelled by a desire to curb the power of the evil.

Technology, in general, is viewed as an indeterminate neutral tool and does not have an intrinsic moral value. Though the advancement of technology is seen as a sign of human progress, technology per se is considered neither good nor bad in its nature. The perception of technology as a neutral phenomenon was common in Bhutan when technology was introduced in the country.

The Fourth King, His Majesty Jigme Singye Wangchuck, clearly points this out in his address to the people of Bhutan while launching television and the Internet on 2 June 1999:

"I would like to remind our youths that television and the Internet provide a whole range of possibilities which can be both beneficial as well as negative for the individual and society. I trust that you will exercise your good sense and judgement in using the Internet and television (Kuensel, 5/6/1999, p. 4)."

Most Bhutanese today would clearly understand that technological products such as cars, computers, televisions, phones, Facebook and



We chat are neutral tools which can be used for both positive and negative outcomes, and the smart and beneficial use of technology lies in its positive application.

Positive Tool

In spite of what has been stated in the previous paragraphs, there is a pervasive view that technology is a beneficial development in human history, given its efficacy for socio-economic development. The use of technological tools has certainly helped reduce poverty, illness, and many other problems in life, by enhancing the production of food, developing medicine for previously incurable diseases, and so forth. Through technological facilities, people can access education easily, and also engage in trade, business, and travel with unprecedented ease. The introduction of audio-visual technology, such as television and radio and other digital facilities, vastly enhanced our access to knowledge and information.

It is with this scope of putting technology to positive use for socio-economic development that Bhutan embraced technology, much like the rest of the world, and, as was expected, the introduction of technology brought about extensive and rapid improvements in communication and development in the country. Village communities physically isolated for centuries have been connected swiftly to other communities.

Many social and economic benefits became easily available, facilitated by technology. For instance, the use of agricultural technologies, such as power tillers and paddy machines, changed the way farmers carried out agricultural work. Serious patients in need of urgent medical treatment can be airlifted to a good hospital to avail themselves of hi-tech medical services. Benefits from digital technology have become even more evident recently as Bhutan explores e-learning and online communication, with physical distancing necessitated by the spread of COVID-19.

Yet the benefit of technology, as has been made clear earlier, is essentially dependent upon the specific use of technological tools. How, then, has the use of technology benefitted the cultures of Bhutan? How has technology been deployed to strengthen cultural identity, traditions, and heritage?

It is beyond the scope of this article to enumerate the myriad ways in which technology saved or strengthened Bhutanese cultures. We can clearly see

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the use of technology in the media, film, and entertainment industries, which help preserve and promote Bhutanese music, dance, and other oral cultures. We also see the use of machine and technology in villages, to enhance arts, crafts, architecture, and many other folk knowledge and skills.

Technological tools have also been profusely used for religious education and ceremonies. The live broadcast of His Holiness the Je Khenpo's sermons at the height of the COVID-19 outbreak on 20 March 2020, is the most outstanding and recent case of deployment of digital tools for religious service.

His Holiness pointed out that media presentation is just a method and, if the message is effectively conveyed, remote transmission of sacred teachings through technological tools is no different from person-to-person transmission. Many urban Bhutanese today receive religious teachings online and use meditation apps. Religious builders even apply technological devices to make prayer wheels run faster and more smoothly. The profusion of social media tools has also helped reinvigorate community solidarity and connection. Many Wechat groups, for instance, preserve languages, reinforce community spirit, or share cultural knowledge and information.

In the past 15 years, I have also been making intensive use of digital technology to preserve and promote Bhutan's cultures. Learning from the development of e-libraries and digital humanities at Western institutions such as Oxford, Cambridge, and the British Library, my first attempt at digital documentation of Bhutanese cultures took place in 2003, when a research colleague asked me to obtain a copy of a text in the *rNying ma rgyud'bum* corpus in Gangteng monastery.

Having overcome the initial challenges of cultural sensitivity, religious conservatism, and a slight sense of technophobia in some authorities, I recall making my first journey to Gangteng on a bus crammed with farmers and rice bags. I was armed with a laptop, Konica Minolta Dimage F200, dozens of CDs, batteries, and gifts for the monks and caretakers.²

²More details on digitisation of archives in Bhutan, read Phuntsho (2010), 'Unravelling Bhutanese Treasures' in Diemberger and Phuntsho, Ancient Treasures, New Discoveries: Proceedings of the XIth Seminar of International Association for Tibetan Studies, Andiast: IITBS, pp. 195-222, and Phuntsho (2019), 'From Poti to Pixels: Digitising Manuscripts in Bhutan', in Arnold, Ducher and Harter, Reasons and Lives in Buddhist Traditions: Studies in Honour of Matthew Kapstein, Boston: Wisdom Publications, pp. 97-109.

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This journey launched the largest operation of cultural digitisation Bhutan has seen to this day. My initial efforts were hindered by the lack of electricity in Gangteng as I ran out of batteries. The following spring I returned with enough batteries and a power generator to recharge the laptop and batteries, to single-handedly digitise the 46 volumes of the *rNying ma'gyud'bum* corpus. I sat shooting in the cold temple, producing 1,000 jpeg images a day, which my colleagues in the UK declared were the best images of this corpus at that time.

As new funding became available through the Endangered Archives Programme, I launched a major project to digitise the entire manuscript library of Gangteng, employing local monks as assistants. We were equipped with two laptops, two Canon DSLR cameras, many external hard drives, camera cards, and other accessories.

At the end of project, we produced 1,475 GB of data comprising over 284,300 images of some 500 volumes of texts. This was followed by the digitisation of collections in 44 archival centres across Bhutan in the past 15 years, producing more than four million pages which were saved in multiple copies. Producing anywhere between 1,000-3,000 high quality images each day, it was by far the highest creation of big data through a single programme, until our own project of documenting oral traditions of Bhutan started in 2013.

In the course of the digitisation of archives, we came to realise how the oral and intangible cultures of Bhutan were seriously endangered by the sweeping homogenisation triggered by easy communication and urbanisation. Many traditional rural cultures were vanishing, as Bhutan saw rapid socio-cultural changes and a decline in the population of elderly citizens.

Thus, a second project of creating audio-visual recordings of oral and intangible cultures was launched with funding from Arcadia. Running an extensive programme of recording oral and intangible traditions in all 20 districts of Bhutan, we produced 3,260 hours of HD quality video recordings, and some 150,000 photos of cultural places, objects, and artefacts. We also collected copies of recordings and photos which were created before our project was launched.

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These data sets today constitute the largest collection of digital documentation of cultural heritage, and are perhaps the largest data collection in the country. Parts of the data are now accessible online through the websites of our partner organisations and through www.bhutanlibrary. org. Efforts are currently being made to create a comprehensive database and web portal to give full access to the data and associated metadata.

Statistical and analytical tools are also being used to study and analyse the cultural landscape of Bhutan, and a short encyclopaedia containing an inventory of Bhutan's cultures and some 200 essays on selected topics is being prepared.

As digital technology has become an integral part of 21st century life, it is only inevitable that technological tools are used for the cultural aspects of our life. Technological tools are used in all seven types of cultural practices — oral traditions, religious practices, arts and crafts, cultural events, folk knowledge and customs, games and sports, and languages and dialects. From the use of mechanical tools in carpentry and carving of traditional furniture, to applications for meditation and astrology, technology has permeated the cultural world and is shaping not only the expression and application of culture, but the nature of culture itself.

The Negative Use

Having briefly explored the use of digital technology for preservation and promotion of cultures, I shall briefly touch on the negative influences technology, particularly digital technology, has on Bhutan's cultural conditions and society as a whole, when not used responsibly and wisely.

The digital revolution we are experiencing today has happened in the span of a few decades, and much faster than the agricultural and industrial revolution which preceded it. Thus, the change has been too swift, even for proper social adaptation in almost all parts of the world, let alone for genetic evolution of life. Enamoured by the attractiveness and efficiency of technological systems and devices, humanity has fully embraced digital technology with little caution and misgivings. As a result, most of humanity still does not fully comprehend how the Internet and social media are going to shape the human psyche and behaviour, and therefore human well-being and existence as a whole.

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While anecdotes and cases of the negative impact of technology in Bhutan are numerous, the trends and issues I raise here are mostly based on well-known assumptions and speculations. No systematic study has been carried out, to my knowledge, on the impact of technology on Bhutan's cultural and social systems, and it is beyond the limit of this short article to do so.

A good and common example of such an assumption is the popular association of divorce with the introduction of mobile telephones about 15 years ago. No study has been done to unravel the cause of the rising number of divorces in Bhutan, but many people blamed mobile telephones for facilitating illicit relationships and distractions, which allegedly caused most of the divorces.

Similarly, social media platforms have been blamed for channelling vitriol and divisiveness, particularly during elections, as people opened anonymous accounts and poured out baseless allegations and slander with no culpability. While most Bhutanese are aware of this development, no study has been carried out to assess its extent and impact on society and electoral results.

Without a proper study on how social trends and issues are connected to ICT and social media, we cannot state with any confidence what role technology may have played in unhealthy social developments. Yet we can confirm some negative impact technology has, from observations during our cultural projects for other purposes.

For instance, a family in a community where there is no television almost always gathers around the hearth to eat their meals, during which family businesses are discussed and the elders transmit much of their cultural knowledge to younger members. However, this arrangement often changes after the family owns a television, which then becomes the central point of attention. The arrival of television and smart phones has definitely led to a decline in family conversations and many forms of cultural knowledge, such as folk stories, genealogical and place narratives, and local languages.

The construction of motor roads has also had a serious impact on existent cultural practices. Given Bhutan's steep topography, the construction of new motor roads almost always changes the physical face of the landscape. The new roads often side-line, or sometimes even destroy, a cultural landmark

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or place of cultural significance. As the motor roads cannot always follow traditional trade and farm routes, the roads also change existent political and social connections and alignments. One can find many villages deserted because the population moved closer to new highways when they were built in the late 20th century.

New motor roads bring enhanced traffic of visitors and business opportunities and this leads to a slow decline of the traditional culture of hospitality. It is quite customary in traditional village communities to invite a traveller home for a drink or a meal. Travellers would often find free lodgings to rest for the night. Soon after roads were built, in most places the number villagers offering free hospitality to strangers is observed to have declined. In place of traditional hospitality, one can see the rise of commercial lodges and restaurants.

Similarly, the introduction of electricity and electrical gadgets which follow, change the lifestyle and work behaviour drastically. For example, it is rare to find a villager cooking rice on an open fire, after electrification of the house. Imported electrical rice cookers have become a common sight in the corner of people's kitchens.

It is now quite rare to see Bhutanese villagers churning tea using a local churner or beater. Both the production and use of the traditional churner and beater are disappearing, as people prefer to use electrical blenders and mixers. Thus, many traditional tools, knowledge, and practices of producing and processing food in Bhutan are vanishing today as people enjoy the convenience of electrical tools.

Above all, the profusion of digital technology, in the form of computers, smart phones, and social media tools, is beginning to seriously alter people's mode of work, communication, socialisation, recreation, and lifestyle.

While there are undoubtedly many great benefits, the onslaught of digital technology has brought numerous challenges, most of it in very insidious forms, of which the majority of the population is not even aware. It is subtly disrupting the traditional cultures and value systems, and unwittingly leading Bhutanese into global homogeneity, despite their claim to remain unique and different.

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Most digital tools and social media platforms are outcomes of a capitalist corporate ethos geared to lure people into more greed and consumerism. The gadgets are designed to provoke more desires and make people spend and buy more. It is intrinsically driven by a materialistic agenda, to fan people's craving for consumption of material goods.

Despite being the most avowed followers of Buddhism or Hinduism — both of which look down on desire for material wealth and cherish inner values such as contentment — the Bhutanese have generally fallen for the temptation, as most people in the world have done. Thus, an iPhone, for instance, is a coveted belonging, and is even seen as a sign of social status. Many Bhutanese squander their savings, or even take loans, to acquire the latest iPhone, which could cost more than the average monthly salary.

Besides the physical look and packaging of the gadgets, which are highly attractive, most content on digital media is also designed to subliminally arouse people's greed and appetite for consumption. A lot of digital marketing tools, such as pop-ups, advertisements, advertorials, etc., are deployed to openly or subconsciously trick people into buying more and staying hooked onto the platform.

Facebook, for instance, uses canny ways to make users get addicted to the social media platform, whilst also firing targeted ads. It only takes one search for a pair of shoes or an air ticket for a user to become a target of countless ads for these items. With such canny and diligent marketing methods, most consumers who lack mindfulness and critical thinking often fall victim to the ploy. In addition, there are numerous deliberate phishing messages and scams to which careless people easily fall victim.

These technological tools and platforms have led to serious disturbances in the psychological wellbeing of the Bhutanese. As the human psyche is constantly connected to these tools and platforms, it goes through a fundamental change in how it behaves.

Technological developments have changed people's perception of the world and level of expectation, and in the process, heightened mental stress and restlessness. They deprive people of sleep and proper relaxation, and have altered the traditional routine which is aligned to natural cycles. As a result,

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we see more and more Bhutanese manifest a new character that is distracted and disturbed, fragmented and unreliable, anxious and discontented.

Unless the negativity embedded in the digital facilities are neutralised through promotion of responsible and mindful use of technological tools, these trends can precipitate into severe psychological and mental heath problems, and eventually lead to much bigger cultural, social and economic consequences.

In the final analysis, it may be appropriate to reiterate the same questions Schumacher asked half a century ago. "So we had better face the question of technology — what does it do and what should it do? Can we develop a technology which helps us to solve our problems, a technology with a human face? … The question of what technology actually does for us is therefore worthy of investigation." It is crucial and timely for the Bhutanese to ask some serious questions about how technology is shaping our culture, the bedrock on which we tend to rest our identity and sovereignty.