

FOURTH INDUSTRIAL REVOLUTION: BOTH AS AN IRONIC COVER-UP OF DUKKHA (SUFFERING) AND EFFECTIVE MEANS OF PRACTICING THE DHAMMA

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ABSTRACT

The fourth industrial revolution has already changed our lives in an unprecedented rate in contrast to what it was in the three previous industrial revolutions that came with the steam and hydro-power, electric energy and electronics and information technology respectively. In its fourth revolution, an extreme advancement of the technology gradually developed over the course of history is apparent with smarter technologies and it has already affected almost all aspects of our lives to the extent that life seems impossible without the touch to the modern technology. Just as it was with all the previous revolutions, the fourth Industrial revolution also has its pros and cons. The present paper expects to discuss the ways and means of applying the fourth industrial revolution to be blissful to the humankind by not being blinded by its concealment of the essential dukkha (suffering) of the beings, with reference to the Dhammacakkppavattana, saccavibhanga and avijja suttas. The basis of Buddhist teaching is understanding the dukkha which primarily comes in the forms of birth, aging, sickness and death. The Buddha has preached if the world is devoid of these, there is no need to strive to set free from the samsāra. The Buddha also preaches one should strive to set free from the samsāra quicker than someone whose head is burning is trying to put out the fire. Despite the differences in religions, everybody

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understands that whoever born will necessarily undergo the above stages of suffering. Yet, ironically, the modern technological developments are concealing these stark realities from people and the people are being blinded by the sugar-coated temporary comforts of the world making them forget the need to set free from suffering. On the contrary, the Buddha points out craving to be the root cause for dukkha and freedom from craving is akin to freedom of samsāra and that has to be done by following the noble Eight Fold Path. Even if the fourth Industrial Revolution “seems” to provide solutions for the birth, aging, sickness and death with better life conditions the human history has ever experienced, ironically it enriches the craving of the man with all such luxury invented day by day in the name of industrial revolution. It neither facilitates the moderate kind of living of people and nor supports the path suggested in Buddhism to be free from suffering. Moreover, the modern technological equipment such as smart phones, computers that come to the market in various names have not supported the yoniso manasikara instead they glue the minds of their users with ayoniso manasikara that leads to avijja or the ignorance which is the basis for the cyclical journey. Thus, the industrial revolution has to be made “human-friendly” by using its inventions effectively for deeper understanding of humanity and our origins. It should be amended to help men rethink about developing the mindfulness and spreading loving kindness. The unrealistic world that seems to be devoid of dukka which is created by the advancements of the industrial revolutions, hinders people from understanding the suffering and thus they are made to be heedless to be free from it, but, the same could be converted to be blissful by using it effectively as a vehicle to practice the path for eternal freedom suggested in Buddhism.

1. INTRODUCTION

The classical story that Prometheus stole fire of knowledge from the gods on Mount Olympus and gave it to the man has probably been composed to show the vitality of knowledge that makes the magical innovations possible. Human history has undergone so many milestones with regard to knowledge and innovations by making things that had been nightmares few decades back, real. Ending the agricultural society dominant in the period prior to the 18th century, the first industrial revolution took place in the end of that century and lasted until the 19th century. The first industrial

revolution changed the agricultural society to one of the industries and the invention of the steam engine enabled the use of energy that geared many industrial work. Moreover, the transformation of the cities and many modern mechanism have their origins from the first industrial revolution.

The second industrial revolution which could be introduced as a technical upheaval took place between 1870 and 1914, starting from the US and ultimately spreading to the rest of the world. Enhancing the link between knowledge and technology, the era showed the inventions of the airplane, telephone, typewriter, light bulb, electricity, petroleum, and the construction of the rail road that replaced human labour with machines.

While the first two revolutions mostly focused on developing the physical standards of the world, the third (1969) was a digital era. Competing new software, high tech robots, web based services of variety of range, new computer and telecommunication devices and most importantly the invention of nuclear energy, made the human work much easier making most of the services at the fingertips.

The fourth industrial revolution is underway with promises of “better” prospects for the modern world. The inventions of the fourth industrial revolution is expected to change the human society unlike anything the humans have experienced so far. Nonetheless, looking back at the innovations of the previous industrial revolutions, there is a question mark as to whether we have actually progressed with such magical changes. There is no argument that the world has developed to an unmatched level in physical facilities but whether we have progressed in our spirituality is the question we need to address. A quick observation is enough to understand the pathetic side of the modern man that they are so distanced from the religions which lay the moral foundation of humans. Buddhism stands out to be unique among the other religions that provides solutions for the problems not only of this life but also for the whole samsara. It directs us to achieve a permanent solution for all our problems that occur due to the samsaric existence.

Thus, the present paper is an attempt to look at the fourth

industrial revolution in terms of Buddhism, as the new discoveries seem to “challenge” the fundamental teachings of the Buddha. A careful analysis will show that despite the advancements of the modernity, these realities that the Buddha preached cannot be overpowered by the humans even if the modernity has been able to sugar coat these stark and dark realities in the slogans of positive thoughts towards life and happiness. In a Buddhist perspective, the modern technology has, of course, made the people heedless towards achieving the breakaway from the samsara as the dukkha or the suffering of the world has been concealed by the so-called advancements of the modern technology. While exposing the realities thus concealed, the present research also aims at analyzing how the advancing technology of the modern world could be made human-friendly in the true sense of these words according to Buddhism to direct people to achieve the ultimate liberation from samsara. The true happiness is not limited only to this life. Even if someone’s death is postponed or made a person forget about the impending death, they are not solutions for the sufferings of people. Buddhism suggests a realistic understanding of the real suffering of the world and provides a path to get away from the samsara so that suffering is eradicated forever and only such a person can truly be happy. Thus, the present paper examines, how the fourth industrial revolution could be made “human –friendly” with an intelligent approach to it.

2. LITERATURE REVIEW

According to McLuhan (1964), different communications media transform the same experience we have of space and time in different ways, and can eclipse the actual content of the message being transmitted. Furthering this idea, Veidlinger (Grieve & Veidlinger, 2014) points out the psychological effects of television, radio, the internet or any other medium as they shape thought in specific ways irrespective of the content they are transmitting. He shows just as the physical architecture can change the way the people behave by restricting certain movements in some directions, the media can also affect the behavior of people, “based on the various ways they impinge the senses that can override the discursive meaning of the content that they carry” (p.4). With the second industrial

revolution, the printing developed allowing different viewpoints to be spread all around the world within a very short period. While expanding the worldview of the people, this contributed to the social changes in societies. With the development of mass media, people who are in control of handling the media channels now have the control to decide which information should reach people and which way. Today, the digital media which have enabled the two-way communication have complicated the society while they have eased the spread of information much easily. Owing to digital media, anyone in one corner of the world can easily share his/her views on a matter discussed with another in the other end of the world within few seconds. By today, there has been an information overload that the society is at a real loss as to deciding which information is needed and which is not.

The very first method the Buddha used in spreading his word is oral communication. After the establishment of the Sangha Community, the Buddha advised his first 60 disciples to wander in all the villages and towns separately: “Caratha bhikkhave carikam bahujanahitaya bahujanasukhaya lokanukampaya atthaya hitaya sukhaya devamanussanam” (Vin.1.20). Buddhism first evolved in a society in which writing was not available and thus to ease the oral communication many techniques had been used in the Suttas such as repetition, phrases for easy memorization, etc. It was during the time of the Emperor Asoka that writing came to India and he made sure that all his work was well inscribed on stone slabs for his messages to be passed on to the generations to come. In Sri Lanka, Buddhism was passed on first from oral tradition but identifying the future challenges and the difficulties underwent in memorizing, the Three Baskets of Buddhist literature was first written down on Ola leaves in the Aluvihara, Matale in the 1st century BC. Moreover, there is evidence of many Buddhist monks travelling the Silk Road through Central Asia into China and they also spread the messages of the Buddha around the world (Boulnois & Mayhew, 2012). Likewise, Buddhism was in contact with the technologies developed in each era to popularize the Dhamma. When the radio was introduced, Buddhist monks used the media to preach the Dhamma and then the recorded tapes were distributed with the

preaching of the well-known preachers so that even the people of the remote areas also could listen to the Dhamma preaching. The next step was to make the preaching available in CDs and DVDs. Accordingly, Buddhism has always gone hand in hand with the modern communication modes developed through each industrial revolution, and it will continue to adapt to any invention to come as well. There are many projects to put the teachings of the Buddha into digital form which are accessible in many languages. With this, the entire Tripitaka is accessible with one finger click to anybody in the world. Starting from websites that spread the message of the Buddha, there are virtual temples and the virtual monks who conduct various meditations programmes online. Moreover, hundreds of Buddhist forums are available on social networks such as Face Book and the apps to share the Buddhist wisdom are also numerous.

While Buddhism has been so advantageous due to modern technology in popularizing it, the issue is whether the real purpose of Buddhist teaching is met with the advancements of the world. There also seems to be a scarcity in the research conducted to examine the link between the fourth industrial revolution and Buddhism and the present research expects to fill that research gap.

3. METHODOLOGY

The current research is a qualitative research with the data collected mainly through the library studies. The books, web articles, journals and Suttas were extensively read in order to gather data for this research.

Objectives

The main objectives of the research were to understand,

- what the fourth industrial revolution means
- the effects of it upon the modern man
- how the fourth industrial revolution has concealed the life difficulties of the man
- the Suttas in Buddhism that discuss the suffering of the beings

- how heedless man has become to practice the path of Nirvana owing to the modernity
- measures to utilize the modern discoveries and facilities to the betterment of the spiritual development.

4. DISCUSSION

We are on the brink of welcoming the fourth industrial revolution and the advancements made so far by the previous revolutions have already proven that this revolution will also make our lives much easier as it has never been before. Highlighting the inability of any one of us to ignore its effects on each individual, Schwab (2016), writes that the fourth industrial revolution will fundamentally alter the way we live, work, and relate to one another. He points out the possibilities of billions of people around the world connected via mobile devices, with “unprecedented processing power, storage capacity, and limitless access to knowledge”. “And these possibilities will be multiplied by emerging technology breakthroughs in fields such as artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3-D printing, nanotechnology, biotechnology, materials science, energy storage, and quantum computing”. This era we are living in is also an age where the smartphone apps provide the necessary meditation lines to contemplate and the monks preach and teach the Dhamma online. When the Internet, mobile phones, video games, and other revolutions of digital technology have affected the lives of all the people in the world, we cannot ignore the fact that Buddhism as a subject of learning has also been undergone change in the digital era. Buddhist teachings have increasingly been spreading around every nook and corner of the world today. It is present in digital media through diverse ways including interviews with the practitioners, cyber-communities that engage in Dhamma discussions, various research and analyses on Buddhism, etc. Buddhism is also present in virtual worlds, social media, and mobile devices and various computer applications are available for those who are interested in following or learning Buddhism.

In “Buddhism, the Internet, and Digital Media: The Pixel in the Lotus” (Grieve & Veidlinger, 2014), the necessary influence the digital age has caused for Buddhism has been pointed out and it raises

the question of the philosophy in Buddhism with the contrasting values promoted by the modern era of digitalization.

Besides this history that has primed Buddhism for a rich life in the new digital frontier, Buddhist philosophy has dealt more extensively than any other religion with the question of whether or not the world of experience is real, and such is a potent source for thinking about the nature of virtual reality...The centrality in Buddhism of desire and its dangers also provides a unique vantage point into the manifold desires generated by current ways of living in our mediated, hurried, and uncertain culture, where the decoupling of production from the physical world and the empowering of imagination to call forth virtual realities has replaced an earlier needs-based society with one powered by desire and consumption”.

This points out the problem we all experience in the face of modernity brought out by the industrial revolutions. Buddhism promotes achieving the ultimate bliss of *nibbana* by following the Eightfold Path. The Eightfold Path consists of Right View, Right Resolve, Right Speech, Right Conduct, Right Livelihood, Right Effort, Right Mindfulness, and Right Meditative Absorption or *Samadhi*. Another fundamental teaching of Buddhism is the three Essential Characteristics of Existence: *Anicca* (impermanence), *Dukkha* (Suffering) and *Anatta* (non-selflessness). One who understands these characteristics in all the conditioned elements may strive to break away from the *samsara*. Thus, the Buddha preached the Four Noble Truths which includes the essence of His teachings. Four Noble Truths have been given in a number of key *Suttas* including the *Dhammacakkapavattana Sutta* and *Saccavibhanga Sutta*. There, the Buddha has preached some essential causes for suffering such as birth, sickness, ageing and death (*Dhammacakkappavattana Sutta: Setting the Wheel of Dhamma in Motion – SN 56.11 PTS: S v 420*).

“Idaṃ kho pana, bhikkhave, dukkhaṃ ariya-saccaṃ: jāti-pi dukkhā, jarā-pi dukkhā (byādhi-pidukkho) maraṇam-pi dukkhaṃ, a-p-piyehi sampayogo dukkho, piyehi vippayogo dukkho, yampicchaṃ na labhati tam-pi dukkhaṃ; saṃkhitte na pañc-upādāna-k-khandhā dukkhā”.

“Now this, monks, is the noble truth of stress: Birth is stressful, aging is

stressful, death is stressful; sorrow, lamentation, pain, distress, & despair are stressful; association with the unbeloved is stressful, separation from the loved is stressful, not getting what is wanted is stressful. In short, the five clinging-aggregates are stressful”.

In the Aniccasaññā Sutta (S 22.102), the Kiñci Sankhāra Sutta (A 6.93) and the Aniccā Sutta (A 6.98) the Buddha points out the contemplation of impermanence is essential for spiritual liberation. In order to contemplate the impermanence or the true nature of the conditioned things, one has to continuously engage in yoniso manasikāra or the wise attention. On the contrary, the Ayoniso manasikāra means “not directing the attention to the roots of things” or “directing the attention away from the roots of things,” that is, not observing phenomena as they truly are, not noticing that they are impermanent, unsatisfactory and not-self (S 5.1.6.7). As a result of Ayoniso manasikāra, the wrong view arises distancing one from understanding the suffering and annihilating the journey of samsara.

Unfortunately, all these teachings seem to be completely in contrast to the modern day of living with so much of luxury that promotes a sheer pretention of a world sans suffering. The fourth industrial revolution is intended to be more hopeful in terms of health care industry because in the course of history due to the invention of drugs, the living expectancy has been on the increase. According to WHO, life expectancy grew globally by 6 years between 1990 and 2013 (Thuemmler & Bai, 2017). According to Lindsey Washington (2018), new technologies offer the following benefits:

- The new technology will bring new medicines to patients much faster
- It will allow physicians to manage chronic illnesses more effectively.
- Universal connectivity and greater access to information will empower patients to take a greater role in their healthcare.
- Data will be the underlying theme behind changes to health-care over the next five years.
- New data will allow for large leaps forward in medical re-

search.

- New technology will improve monitoring of patients, applying personalized treatment plans, and predictive medicine.
- Faster and more widespread connectivity will have a profound impact on hospital infrastructure.
- Better data on our bodies and brains will allow pharmaceutical researchers to develop new, better medicines.
- Emerging technologies will decrease healthcare inequality.
- New technology will decrease the cost of healthcare worldwide.
- High-speed connectivity will facilitate the creation of equal quality healthcare in both urban and rural areas.
- These healthcare measures with faster care for patients have increased the level of life expectancy and as a result of that, the aged population has also increased.

In the modern world, birth is no longer seem to be painful both for the mother and the infant, as the suffering undergone by both is concealed with various external facts. Not of course for the baby, but for the mother there are so many medical facilities available and many modern mothers say they did not even feel that the baby was taken. On the other hand, there is a trend to publish the photos of the newly born baby and the mother on social media that for some people posting photos is the most awaited thing in relation to the child birth. They are so thrilled by posting photos as well as to get a lot of congratulatory messages and comments on them that they forget the suffering enwrapped with the entire process of child birth. In the *Devaduta Sutta* (The Deva Messengers - MN 130 PTS: M iii 178), the Buddha preaches that in the hell, king Yama interrogates the man whether he did not see the “tender baby boy lying prone in its own urine & excrement?” and when the man replies that he did not, the king asks whether he did not get a mature thought as “I, too, am subject to birth, have not gone beyond birth. I’d better do good with body, speech, & mind?” The man replies in negative, and the king says,

"My good man, through heedlessness you did not do what is good with body, speech, & mind. And of course, my good man, they will deal with you in accordance with your heedlessness. For that evil kamma of yours was neither done by your mother, nor done by your father, nor done by your brother, nor done by your sister, nor done by your friends & companions, nor done by your kinsmen & relatives, nor done by the devas. That evil kamma was done by you yourself, and you yourself will experience its result."

The world which is blinded by the suffering that comes hand in hand with the birth would end up in the hell if they continue to be so heedless caught up to the fantasy world created by the modern technology. Moreover, the technology has been so advanced as to create artificial wombs filled with artificial amniotic fluid, and it is connected to reduce infant morbidity and mortality associated with prematurity (Partridge et al, 2017).

The second suffering the Buddha preached was the sickness and according to the Devaduta Sutta the sight of sickness is a messenger from the gods. King Yama says, had a person been heedful by seeing a sick man by contemplating that he is prone to the same condition, he could have been mindful and followed the path suggested by the Buddha. Considering the modern situation, the sickness just as or more than birth has been sugar coated in various ways. The hospitals are more luxurious than the five star hotels and it is considered well-to-do to afford to go to such a hospital. Technology has now found that eliminating diseases once thought incurable like HIV AIDS through the genomic editing and this is of course good news (Academiaedu, 2019), but we have to understand such discoveries would not end the dukkha caused by vyadhi in the journey of our samsara.

In death also, according to the SENS Research Foundation (Strategies for Engineered Negligible Senescence) research to provide indefinite life extension through rejuvenation techniques is underway (Academiaedu, 2019). The modern innovations have made the people so heedless by the covering up of the real suffering of life. Thus, the people are blind folded by the magical innovations and they are glued to this world created by modern science without paying attention to understand life. Since the beginning of the human history, the man has never been able to conquer neither

death nor failing health irrespective of the advancement of science and technology. Various drugs to cure the chronic diseases have been found, but even the millionaires had to die of certain illnesses despite the fact that the medication for such is readily available.

Ironically, the health sector is now complaining of certain disorders possible for the modern younger generation with their addiction to the technological device to a degree hither to unknown. The younger generation is pathetically engaged in their iphones and computers providing all kinds of pleasure to their senses and they are enriching *ayoniso manasikara*. Boers (2012) records how pathetically the modern generation has deviated from the “focus” or the “attention” which is important for spiritual life. She quotes, William McNamara in defining Christian spiritual contemplation as “long, leisurely, loving looks at the real” emphasizing the importance of “attention” in praying and he says, “It is the orientation of all the attention of which the soul is capable toward God” (p. 84). Boers furthers her discussion pointing out how the “systematic distraction culture” in the modern days with a lot of technical devices that distracts the focused attention of our younger generation is deviated. She says, “We live in an age of technologically induced and reinforced attention deficit disorder”. She further quotes, Maggie Jackson, “We are on the verge of losing our capacity as a society for deep, sustained focus”. Mihaly Csikszentmihalyi and Eugene are quoted when they say that most of the psychological pathologies are characterized by ‘disorders of attention’ that show how our attention may be misdirected and malformed by technology (p. 84). Moreover, the modern TV shows, video games, YouTube videos include such content that the attention of the watcher rapidly shifts making their focus changing from one object to the other constantly. This habit, as pointed out earlier is a barrier to contemplation.

Boers (2012) shares her experience of visiting churches for a year only to find in many the Power Point, overhead screens, and loud, amplified music bands were disturbing the serenity.

“The most sophisticated churches projected nonstop videos, often of nature scenes. Many showed announcements while taking offerings; these resembles commercial ads. I had plenty of questions

about what I saw: Were these media consistent with the proclaimed Word? How do such formats shape believers? Was the use of technology in keeping with worship tradition? ... I found it discouraging and dispiriting when I discovered this in church after church... May be this is now the only way to reach out, connect, attract attention. Perhaps many people are now incapable of contemplative, slow-moving worship. I am unsure. And I am also deeply uneasy” (p. 84-5).

Even if the Buddhist temples have not yet gone to the extent described above, there is a trend that new set of monks who call themselves arahants are using Power Point presentations in Apple computers which, of course has caught the attention of the young generation. It has become a fashion or a style to follow them as they are named, “monks of the modernity”. Through random observations I have felt this a challenge to Buddhism. Moreover, thorough social media any message could be spread so fast, and the viewers are at a loss to decide which is correct and incorrect.

The mass of data bombarded through the internet leave us stressed, tired, and anxious (Boars 2012, p. 85).

“We have a hard time knowing what is true or trivial, vacuous or vital, essential or ephemeral. And we are often deliberated by what we learn, unable to take it all in, let alone act on it or respond meaningfully”.

Discussing the same topic, Vanderbilt notes that the more information one is faced with, the less respect and attention one gives. When we are inundated with information it becomes hard for a person to choose what is important, what is a priority, what is crucial and the minds are so confused without focus and distracted attention.

This is indeed a threat to a person who is practicing the path described by the Buddha. Too much unwanted information distracts a person from *yoniso manasikara* (appropriate attention) and so many unwanted thoughts that would cause a lot of *papanna* (mental proliferation) leads one to *ayoniso manasikara* (inappropriate attention) distracting a person from *nibbana*. In the *Madhupindika Sutta* : the Discourse on the Honey-ball (MN 18 PTS: M i 108) and in the *Sakka-pañha Sutta*: Sakka’s Questions (DN 21 PTS: D ii), the Buddha clearly points out how *papancha* would let a mind

of an unenlightened being go astray leading to many confusions and conflicts. In the present world, with information bombarded to our minds, we are entangled in papancha to a degree that if we are unaware of the aftermaths of thus being led away by the mental proliferation, we become so far from the Ultimate Bliss of Freedom.

Another threat of modern communication media not only to Buddhism, but also to any other region is the democratic nature of the Internet that has promoted the growth of “fringe religions” including neo-paganism and New Age Beliefs. Thus, the Internet has eased various people to interpret religion according to their interpretations and popularize them through the internet. According to Helland (2000) there are two types of Internet Faith: Religion online and online religion. Religion online has more static information and the user can only search for a piece of scripture or some information on a website, but they cannot add or delete anything there. Online religion, on the contrary allows the participation of the readers to add, delete, suggest optional beliefs, etc., which ultimately tarnish the doctrine of the original message.

The false “I” created in the social media and the sense of self-importance felt with a lot of “Like” to almost everything someone posts on social media have badly affected the young people in developing a true personality. The quality of being sincere to someone’s weaknesses is essential in correcting oneself in Buddhism, and the created fancy world in the social media gives rise to building up a fake personality with a lot of meaningless “Great” and a click of “Like”s for something very meaningless such as what someone had for lunch on a day. Millions of friends who put “Like”s and “Wow”s on a post someone shares are completely in contrast to the “kalyana mittas” that Buddhism emphasize to be important in achieving the spiritual development.

CONCLUSION

The present paper discussed the disguised danger of the inventions of the fourth industrial revolutions in achieving the spiritual freedom. The comforts gifted by the innovations of the modern world have made the people lost in a fairy-tale world pretentious to be devoid of suffering. According to Buddhism,

a genuine revulsion on the pleasures of the world is needed by understanding the inherent qualities of all the conditioned things. It is not just a temporary revulsion that the Buddha is explaining, but a revulsion as a result of deep understanding of the true transient nature. Without that realistic understanding, the people are entangled in the samsara with ignorance. The present world, with the comforts that the human history has ever experienced is pursuing a suba sanna in everything causing them to be blind to the true nature of transience. Even if the digital media has promoted the spread of the Dhamma through the inventions of various apps, DVDs, etc., they have been unqualified to promote the practical side of Buddhism.

Technology is not harmful if it is controlled usefully to create benefit and also as a means of improving the understanding of the human beings. As mentioned above, making the younger generation aware of the danger of samsara and the disguised danger of digital era is a must in order to direct them to more spiritual understanding. Even if the Buddhist teachings are spread easily around the world with the numerous apps as discussed above, the younger generation should be made aware of the importance of the monks in spreading the Dhamma as they are trained to preach and direct the devotees in the path. Rather than depending on the online research published on the internet, it is important to have live and direct interactions with the monks in getting the Dhamma facts clarified. That will not only facilitate the improvement of our qualities in behaving and treating the Sangha, it will also be important for us to acquire merit that is essential in walking in the path.

Therefore, the innovations of the fourth industrial revolution can well be used to spread the message of the Dhamma easily to every corner of the world, while making the people aware of the essential nature of the world despite the fact that the modern technology has covered it up with temporary and sugar-coated fakeness.

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