Compassion and Cooperation: the Two Challenging Ethical Perspectives in the Fourth Industrial Revolution (4IR)

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[Abstract]

It has been internationally accepted that the trend of this global village has become the Fourth Industrial Revolution or 4IR that has been built by integrating technologies on electronics and information of the third revolution. While technologies have been affecting humankind, the borderlines between physical, mental and digital are hardly defined among humans. Though technologies have been focused by all sectors, the world will always need human brilliance, human ingenuity and human skills. Power of data needs to be utilized by power of people. Machines will supply humans with the insight and the perspective they need to reach those solutions but they cannot supply the judgment or the ingenuity that the people will do (Keywell, 2017). It has been argued that emerging new technologies have been socially and economically widening the gap between the north and the south, the rich and the poor and the ignorant and the educated. In addition, the inexorable integration of technology could diminish some of humans' quintessential capacities, specially compassion and cooperation. Constant

connection through smart-phones may deprive human life's most important assets: the time to pause, reflect, and engage in meaningful conversation (Schwab, 2016). In this scenario, to care and share or having compassion and cooperation among humankind is, thus, a crucial element that people can use their potentialities to utilize these technologies not only for their own wealth but for the well-being of all members in society. The objectives of this article, therefore, include: 1) To analyze social, political and economic impact of the 4IR; 2) To identify the two indispensable ethical perspectives for the 4IR i.e. compassion and cooperation; and 3) To apply religious doctrines in the two ethical perspectives.

Keywords: Compassion and Cooperation; Ethical Perspectives; Fourth Industrial Revolution

Introduction

As mentioned by the World Economic Forum (WEF) that the First Industrial Revolution used water and steam power to mechanize production; The Second used electric power to create mass production; The Third used electronics and information technology to automate production. Then the Fourth Industrial Revolution is building on the Third, the digital revolution characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres (Schwab, 2016).

Extensive technologies emerged in the Fourth Industrial Revolution (4IR) have been changing the ways of humans' living, working and relating with each other. According to Schwab (2016), the possibilities of billions of people connected by mobile devices, with unprecedented processing power, storage capacity, and access to knowledge, is unlimited. As Plutschinski (2017) mentioned, based on a completely digitalized world, the 4th Industrial Revolution causes the multiplication of emerging technology breakthroughs in fields such as artificial intelligence, robotics,

the internet of things, autonomous vehicles, 3-D printing, nanotechnology, biotechnology, material science, energy storage and quantum computing.

No matter by individual or in group, human's political, economic and social life has been inevitably affected by the Fourth Industrial Revolution (4IR). This technological revolution has led to the digital era that has a vast impact not only in physical, digital and biological spheres but also in moral or ethical perspectives.

Impact of the Fourth Industrial Revolution (4IR)

The Fourth Industrial Revolution has been extensively affecting humans in various facets. The impact of the 4IR can be broadly categorized in three areas including social, political and economic aspects.

Social Impact

Though digital era tremendously relies on data, humans are also indispensable for this technological revolution. As Keywell (2017) indicated, automation, machine learning, mobile computing and artificial intelligence are no longer futuristic concepts, they are humans' reality. However, people must have a shift in mindset. Computers prefer to retreat, but they can store massive amounts of data and are unbiased in their decision-making while humans can be more stubborn, but also can read their opponent's weaknesses, evaluate complex patterns, and make creative and strategic decisions to win. The world will always need human brilliance, human ingenuity and human skills. Power of data needs to be utilized by power of people. Machines will supply humans with the insight and the perspective they need to reach those solutions but they cannot supply the judgment or the ingenuity that the people will do.

As society has been widely opened for advanced technology, people have to rely on information that may manipulate and may even make themselves brainwashed. People are, thus, not only the internet customers but also its product. In this point of view, ethical aspect of humans is necessary to be considered. To support this ethical aspect, Plutschinski (2017) stated that the 4th Industrial Revolution raises some

profound ethical questions about the kind of world we want to live in and it is catapulting global mankind and all kind of companies and organizations in spheres never discovered or experienced before. We stand on the brink of a technological shift that will fundamentally alter the way we live, work and relate to one another. The 4th Industrial Revolution finally will change not only what we do but also who we are. It will affect our identity and all the issues associated with it: our sense of privacy, our notions of ownership, our consumption patterns, the time we devote to work and leisure, and how we develop our careers, cultivate our skills, meet people and nurture relationships. In addition, Schwab (2016) also argued that some forms of discontent can also be fueled by the pervasiveness of digital technologies and the dynamics of information sharing typified by social media. More than 30 percent of the global population now uses social media platforms to connect, learn, and share information. In an ideal world, these interactions would provide an opportunity for cross-cultural understanding and cohesion. However, they can also create and propagate unrealistic expectations as to what constitutes success for an individual or a group, as well as offer opportunities for extreme ideas and ideologies to spread. Schwab (2016) further explained that The Fourth Industrial Revolution will change not only what humans do but also who humans are. One of the greatest individual challenges posed by new information technologies is privacy. Tracking and sharing of information is a crucial part of the new connectivity. This will compel us to redefine our moral and ethical boundaries. In its most pessimistic, dehumanized form, the Fourth Industrial Revolution may indeed have the potential to "robotize" humanity and thus to deprive human's heart and soul.

Social ethics is, therefore, necessary to be enhanced and shared among people in this digital era. As Plutschinski (2017) suggested, we must now develop an ethical and globally shared view of how technology is affecting our lives and reshaping our economic, social, cultural and also spiritual lives. In the end, it all comes down to people and values. We need to shape a future that works for all of us by putting people first and empowering them. We need room for a truthful and healthy development of somebody's REAL identity, not a FAKE one. And first and foremost it is

needed to build and foster relationships in this present highly individualized and less-related world.

Though humans tremendously and individually rely on data in The Fourth Industrial Revolution or digital era, the world will always need human's ingenuity and skills because the maximum benefit of data needs to be utilized by the intellect of the people. It is, thus, necessary to focus on the people as the first priority by enhancing not only people's capacities in utilization of data but also ethically managing the data.

Political Impact

According to new technologies and efficient circulation of information, governments have been increasingly challenged by pressures to change their current administration to allow public to participate more in policymaking, administration, control and evaluation. Through availability of new information technology, people can get access to the decision making process i.e. decentralization of decision making and a fair redistribution of resources. As Schwab (2016) indicated, the physical, digital, and biological worlds continue to converge. New technologies and platforms will increasingly enable citizens to engage with governments, voice their opinions, coordinate their efforts, and even circumvent the supervision of public authorities. Ultimately, the ability of government systems and public authorities to adapt will determine their survival. If they prove capable of embracing a world of disruptive change, subjecting their structures to the levels of transparency and efficiency that will enable them to maintain their competitive edge, they will endure. If they cannot evolve, they will face increasing trouble. Systems of public policy and decision-making evolved alongside the Second Industrial Revolution, when decision-makers had time to study a specific issue and develop the necessary response or appropriate regulatory framework. The whole process was designed to be linear and mechanistic, following a strict "top down" approach. This means regulators must continuously adapt to a new and fast-changing environment so they can truly understand what it is they are regulating. To do so, governments and regulatory agencies will need to collaborate closely with business and civil society.

In the new digital era, governments have to change the approach on dealing with the public from top-down to bottom-up. This has made governments be more open for people's access to information and participation. Understanding and sympathizing of the politicians and public officials towards the public is the main basis for a meaningful cooperation and participation of the people. Then policy decisions are made, projects are implemented, and the benefits are shared according to the best interest of the public.

Economic Impact

There are some evidences to prove that The Fourth Industrial Revolution has caused a larger gap of economic inequality between groups of people: low skills and high skills; workers and innovators; labors and investors etc. Schwab (2016) argued that the revolution could yield great inequality, particularly in its potential to disrupt labor markets. As automation substitutes for labor across the entire economy, the net displacement of workers by machines might exacerbate the gap between returns to capital and returns to labor. In the future, talent, more than capital, will represent the critical factor of production. This will give rise to a job market increasingly segregated into "low-skill/low-pay" and "highskill/high-pay" segments, which in turn will lead to an increase in social tensions. Inequality represents the greatest societal concern associated with the Fourth Industrial Revolution. The largest beneficiaries of innovation tend to be the providers of intellectual and physical capital—the innovators, shareholders, and investors—which explain the rising gap in wealth between those dependent on capital versus labor. Technology is therefore one of the main reasons why incomes have stagnated, or even decreased, for a majority of the population in high-income countries: the demand for highly skilled workers has increased while the demand for workers with less education and lower skills has decreased.

The impact of this new technology has been widening the gap of income among various groups of people. In addition, it has made laborers feel unsecured for their future in both their income and the living of their

families. This needs compassion and cooperation among various sectors of government, employers, innovators, investors, shareholders and workers to compassionately and cooperatively find the solutions for the best interest of all sectors.

Ethical Perspectives on Compassion and Cooperation

Professor Klaus Schwab, Executive Chairman of the World Economic Forum, has called for "agile governance," to be achieved through public-private collaborations among business, government, science, academia and nongovernmental civic organizations. First, equity should be committed by doing all that is possible to ensure that all people, regardless of their economic means, will have access to technology's benefits. Otherwise, there will be the risk of exacerbating what Hastings Center scholar Erik Parens has called "the already obscene gap between the haves and have-nots." Even harder to talk about are values that have to do with ways of being in the world, with how humans relate to one another and to the natural environment. In short, the Fourth Industrial Revolution has brought enormous powers to people. Now they must be wisely used. Governance, which will take many forms, must involve the public as well as experts (Solomon, 2016).

Good governance is, thus, one of the crucial means for equity of humans in this global village to get access to the benefit of technology in order to bridge rather than widen the gap between the rich and the poor or the haves and the have-nots. In other words, ethical values of all beliefs accompanying the long history of humankind need to be raised and equipped with the ways of human practice in order to achieve the sphere of good governance.

Ethical Perspectives on Compassion

As mentioned above, the 4IR needs the time to pause, reflect, and engage in meaningful conversation with compassion for lifting up human's heart and soul to take care of others.

Ethical Perspectives on Compassion in Society

Whateverone's faith is; Christianity, Islam or Buddhism, compassion towards human fellows with mutual sympathy and friendship helps humankind live in peace as mentioned in the Bible of Christianity, the Koran of Islam and the Tipitaka of Buddhism as the followings:

The Good News Bible teaches "He (the Lord) lifts the poor from the dust and raises the needy from their misery. He makes them companions of princes and puts them in places of honor" (1 Samuel 2:8) (Canadian Bible Society, 1976, p296). "As for you my brothers, you were called to be free. But do not let this freedom become an excuse for letting your physical desires control you. Instead, let love make you serve one another. For the whole Law is summed up in one commandment: "Love your neighbor as you love yourself. But if you act like wild animals, hurting and harming each other, then watch out, or you will completely destroy one another" (Galatians 4,5:13,14,15) (Canadian Bible Society, 1976, p255). As taught in the Koran, "Believers, fulfill your duties to God and bear true witness. Do not allow your hatred for other men to turn you away from justice. Deal justly; that will bring you closer to true piety" (The Table, 5:6) (Dawood 2000, p107). In The Teaching of Buddha, "Hatreds never cease by hatreds in this world. By love alone they cease." The spirit of Buddha is that of great loving kindness and compassion; the spirit that prompts it to be ill with the illness of people, to suffer with their suffering as Buddha said "Your suffering is my suffering and your happiness is my happiness" (Society for the Promotion of Buddhism, 2001, pp5, 28). In addition, humans have capacities to develop Four Unlimited States of Mind including compassion, tenderness, gladness and equanimity. These states of mind are called Brahmavihara: holy abiding; sublime states of mind in 4 aspects including 1) Metta: loving-kindness; friendliness; goodwill; 2) Karuna: compassion; 3) Mudita: sympathetic joy; altruistic joy; 4) Upekkha: equanimity; neutrality; poise (Phra Brahmagunabhorn (P.A. Payutto), 2016, p124). In practice, one can cherish compassion through a sympathetic heart with a seven kinds of True Offering. The first is the physical offering. This is to offer service by one's labor. The second is the spiritual

offering. This is to offer a compassionate heart to others. The third is the offering of eyes. This is to offer a warm glance to others which will give them tranquility. The fourth is the offering of countenance. This is to offer a soft countenance with smile to others. The fifth is the oral offering. This is to offer kind and warm words to others including helping others to have Yonisomanasikara or analytical reflection i.e. wise attention or to think carefully before making decision. The sixth is the seat offering. This is to offer one's seat to others. The seventh is the offering of shelter. This is to let others spend the night at one's home. (Society for the Promotion of Buddhism, 2001, p 336)

All the three religions teach the people to have great loving kindness and compassion. The common aims of the teachings are to help and put all humans specially the poor and the needy in places of honor and not to let hatred but love serve one another in justice. Christianity teaches in helping and putting the poor and the needy in the places of honor and letting love makes people serve one another. Islam teaches in not allowing hatred to influence one to turn away from justice. Buddhism teaches humans to have great loving kindness and compassion and also help others to have analytical reflection before decision is made.

Ethical Perspectives on Compassion in Politics

Understanding of the government in self-governing of the people is a crucial part in the modern world of democracy that respects human rights and dignity in determining their political, social and economic means and destinations. Decentralization is one of the means that enables citizens to engage with governments by; voicing their opinions; supervising public authorities in redistributing resources with transparency and efficiency. Faiths accompanying governance of society have been scripted in the Bible, the Koran and the Tipitaka as the followings:

In terms of government transparency and integrity: The Koran mentions "My people, give just weight and measure in all fairness. Do not defraud your fellow men of their possessions, nor shall you corrupt the land with evil" (Hud: 11:85) (Dawood 2000, p230); The Good News

Bible indicates "Do not cheat when you use weights and measures. Use the true and honest weights and measures, so that you may live a long time in the land that the Lord your God is giving you. The Lord hates people who cheat" (Deuteronomy 25, 26: 11,12,13,14,15) (Canadian Bible Society, 1976, p218); The Koran also mentions "Corruption has become rife on land and sea in consequence of mankind's misdeeds. (He has ordained it thus) so that they may taste the fruit of their own works and mend their ways" (The Greeks, 30:41) (Dawood 2000, p407).

In terms of government righteousness and justice: The Good News Bible indicates "Do not deny justice to a poor man when he appears in court. Do not make false accusations, and do not put an innocent person to death, for I will condemn anyone who does such an evil thing. Do not accept a bribe, for a bribe makes people blind to what is right and ruins the cause of those who are innocent" (Exodus 23: 6,7,8) (Canadian Bible Society, 1976, p91). "Listen to the disputes that come up among your people. Judge every dispute fairly, whether it concerns only your own people or involves foreigners who live among you. Show no partiality in your decisions; judge everyone on the same basis, no matter who he is" (Deuteronomy 1: 16, 17) (Canadian Bible Society, 1976, p190); The Koran mentions "God is not unjust to them; they are unjust to their own souls" (The Imrans, 3:106) (Dawood 2000, p64); The Buddha taught "The best way for a ruler to reign over his country is first of all to rule himself. A ruler should come before his people with a heart of compassion, and should teach and lead them to remove all impurities from their minds. The happiness that comes from good teachings far exceeds any enjoyment that the material things of the world can offer. Therefore, he could give his people good teaching and keep their minds and bodies tranquil" (Society for the Promotion of Buddhism, 2001, p 458). In Buddhist governance, there is a ten Rajadhamma or virtues or duties of the governor or leader. The ten Rajadhamma principles include: 1) Dana or charity, generosity or liberating people for wisdom; 2) Sila or self-discipline or high moral character; 3) Pariccaga or self-sacrifice; 4) Ajjava or honesty, integrity or transparency; 5) Maddava or kindness and gentleness; 6) Tapa or self-austerity, self-control or non-indulgence of cravings; 7) Akkodha or non-anger or non-fury;

8) Avihimsa or non-violence or non-oppression; 9) Khanti or patience, forbearance or tolerance; and 10) Avirodhana or non-opposition, non-deviation from righteousness, conformity to the law (Phra Brahmagunabhorn (P.A. Payutto, 2016, pp 240-241).

The common teachings of Christianity, Islam and Buddhism concerning governance aim to bring justice and not deviate from righteousness; not to defraud, corrupt nor accept bribe but to be transparent and honest; and to fairly deal or judge all disputes without partiality. These teachings support the decentralization of power of the government by opening opportunities for its citizens to engage in voicing their opinions and supervising public authorities to fairly and transparently control and redistribute resources with neither partiality nor corruption but with understanding and sympathizing towards the public.

Ethical Perspectives on Cooperation

Inequality among humanity can be overcome only through cooperation and sharing. Good News Bible teaches, "When you harvest your fields, do not cut the grain at the edges of the fields, and do not go back to cut the heads of grain that were left; leave them for poor people and foreigners. The Lord is your God." ("Leave them for poor people") (Leviticus 23,22) (Canadian Bible Society,1976, p137). Jesus said the litmus test for a believer is love. He said people will know we are his followers by the way we love one another (John 13:35). Love is an action verb. One of the ways we show our love is when we cooperate (Richards, 2014).

The Koran also teaches cooperation, compassionate and sharing with others "Do your slaves share with you on equal terms the riches which We have given you? (The Greeks, 30:25) Therefore stand firm in your devotion to the true Faith, the upright Faith which God created for mankind to embrace" (The Greeks, 30:29) (Dawood, 2000, p406). "Cooperate with one another in good deeds and abstain from evil" (Surah al-Maida, 5:2). Every human being needs the cooperation of others to lead a pleasant and comfortable life. Man can never acquire happiness by remaining aloof from others. As a matter of fact, cooperation with one

another in good deeds guarantees the progress of human society. All of us should, therefore, endeavor to get acquainted with the needs and difficulties of one another, and remove them as far as possible. (Ahlul Bayt Digital Islamic Library Project, 1995-2018)

In Buddhism, Aparihaniyadhamma can be applied for the involvement of people in community affairs leading to prosperity with conditions of welfare. The main principles include: To hold regular and frequent meetings: the people should assemble often to discuss political affairs from national to local levels; and To meet together in harmony, disperse in harmony, and do their business and duties in harmony: the people of all social classes should meet together in unity to discuss their national and local affairs (Phra Brahmagunabhorn (P.A. Payutto, 2016, pp 211-212). In terms of social collectivism, Buddhadasa Bikkhu, a Buddhist monk figure, also mentioned the principle of unity and sharing "There is not one part of our body that can exist autonomously. All organs must work together, performing their functions properly according to the truth of bodily components, in order to survive. Thus, the spirit of socialism exists within everyone; it is the necessity of living together in a proper relationship. We should take no more than what we really need and share our surplus with those who have less (Tavivat Puntarigvivat, 2017).

The common teaching of Christianity, Islam and Buddhism is to understand the needs and difficulties of one another and help removing these difficulties as far as possible. In order to achieve this, people should live in unity by cooperation, love and understanding and sharing the surplus of what one gains. In other words, compassion and cooperation are the key elements for the living of all humankind.

Vibration of Ethical Compassion and Cooperation

Natural law of vibration exists in all religions. It is the law of justice that one should get the result of what one has done. Compassion and cooperation will, therefore, extend itself back to the people who vibrate it. Vibration is the law of deeds. Most people naturally think before they commit deeds. As Jones, Beverly Fells (2012) mentioned, The Immortal Buddha was one of the first to introduce man to the law

of attraction. The Buddha said "What you have become is what you have thought" (Jones, 2012, p1). Jones (2012) also further explained the universal laws that guide human's lives from beginning to end. The Laws of the Universe include: 1) The law of attraction states that thoughts lead to feelings and emotions that lead to actions that lead to results. As in the Bible (Job 4:8) "As I have observed, those who plow evil and those who sow trouble reap it." (Jones, 2012, p4); 2) The Law or Relativity states that nothing is what it is until you relate it to something good or bad; 3) The Law of Cause and Effect states that for every action, there is an equal and opposite reaction; 4) The Law of Polarity states that everything has an opposite; 5) The Law of Rhythm states that everything has a natural cycle and nothing stays the same; 6) The law of Gestation states that everything takes time to manifest. All things have a beginning and grow into form as more energy is added to them; 7) The Law of Transmutation states that energy moves in and out of physical form. Your thoughts are creative energy. The more you focus your thinking on what you want, the more you harness your creative power to move that energy into results in your life (Jones, 2012, pp2-3).

Justice must exist in all deeds. In Islamic Law, God is the highest made justice and equity, which here also means justice – the essence of what is right because it is the foundation of all the comprehensive principles and general rules the law giver has defined in his divine law. It truly represents God's order and law, preparing a straight path for humankind in this world and the hereafter. The essentials of the faith and politics are under the principle of justice. Justice is "the framework of everything". Justice is the essence of what is good and right. Justice can be realized by various means, provided they aim at the common good and do not conflict with the immutable elements of divine law. Any means that results in justice and equity is part of religion and does not contradict it (Amanat and Griffel, 2007).

In Buddhism, The Law of Vibration states that in order for you to get what you want you have to vibrate to it. Positive frame of mind vibrates toward achievement while a negative one can inhibit you from accomplishing your task. According to the Buddhist Teachings, the law of

karma says that for everything you do there is a result. There is an effect in every cause whether it is good or bad (Dollar, 2013).

Humans will receive what they have done as referred in the universal law of attraction, vibration and justice. Human thoughts lead to action and results. In return, the results of the thought and action will vibrate back to the one who thinks and acts. This is called the law of vibration. According to this universal law, compassion and cooperation is possible to be achieved only through the extensive vibration of compassion and cooperation itself.

Conclusion

It has been widely recognized that humankind is facing the threats of dehumanization resulted from The Fourth Industrial Revolution (4IR). New technologies of the revolution has been diminishing humans' quint-essential capacities specially compassion and cooperation. However, in ethical perspectives, all religions have their strengths to open opportunities for humans to review, enhance and empower themselves by following the religious teachings. Compassion and cooperation in society can be attained through the humans' application of these religious principles to be used in their life. Along with the new technologies, the vibration of these religious principles will extensively lead loving kindness to care and share among humanity. This will eventually help bridging the gap among the people no matter who they are: the educated or the ignorant; the skilled or the unskilled; the haves or the have-nots; the rich or the poor; and by groups of countries i.e. the north or the south.

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