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# Humans and the Fourth Industrial Revolution: Reading the World and the Canonical Word

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### 1. Introduction

Human history has been driven by technological development and resulting societal changes.<sup>1)</sup> Two great transformations can be detected in this trajectory. The first pertains to the development of agriculture and change to stratified horticultural and agrarian societies from the relatively unstratified hunting and gathering societies that were the earliest form of human communities.<sup>2)</sup> The other great transformation pertains to industrialisation that transformed agrarian societies of Europe into something new that was unprecedented in the history of

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See esp. Patrick Nolan and Gerhard Lenski, Human Societies: An Introduction to Macrosociology, 12<sup>th</sup> edition (Oxford: OUP, 2015); Gerhard Lenski, Ecological-Evolutionary Theory: Principles and Applications (Boulder, CO: Paradigm Publishers, 2005).

<sup>2)</sup> See esp. James C. Scott, Against the Grain: A Deep History of the Earliest States (New Haven, CT: Yale University Press, 2017). Note how Scott points out how the transition to agrarian societies was not a straightforward one, involving a number of regressions. However, the change nevertheless was achieved in the ancient Near East by the time writing begins about 3,100 BC. One should keep in mind that hunting and gathering societies have existed alongside the more technologically advanced ones till today, even if the hunting and gathering mode has become increasingly unviable as the more technologically advanced ones have spread (see Nolan and Lenski, Human Societies, 116-119).

mankind.<sup>3)</sup> The first phase of this revolution relates to steam engines, iron, coal, textile machines and factories, circa 1760-1850.<sup>4)</sup> The second pertains to railroads, steamship, steel, rubber and farm machines, circa 1850-1900.<sup>5)</sup> This was followed by the third phase of automobiles, airplanes, telephones, electricity, petroleum, radios and movies, circa 1900-1950.<sup>6)</sup> The fourth phase has been marked by the development of television, computers, transistors, the internet and plastics.<sup>7)</sup> As the fourth phase advances,<sup>8)</sup> such areas as robotics, nanotechnology, virtual reality (and the creation of cyberspace more widely), 3D printing and artificial intelligence are at the forefront of research. The results of such research and developments are then disseminated into a variety of areas of life and societal contexts.

Globalisation has also accelerated in the fourth phase of the industrial revolution.<sup>9)</sup> However, its roots already go back to

<sup>3)</sup> See Nolan and Lenski, Human Societies, 217ff. Note also the analysis of the main four types of societies (hunting and gathering, horticultural, agrarian and industrial) in ibid., together with some other forms of societies (note also that horticultural and agrarian societies are ultimately fairly similar). The question of why this development took place in Europe has been a central question in modern social sciences and their development, see Jørgen Møller, State Formation, Regime Change, and Economic Development (Abingdon, Oxon: Routledge, 2017), 1, 148; the work more broadly includes analysis of possible reasons for the changes in Europe and a proposed related model; see also Lenski, Ecological-Evolutionary Theory, 169-185 from a somewhat different perspective.

<sup>4)</sup> I am following Nolan and Lenski, Human Societies, 225-228 here.

<sup>5)</sup> Nolan and Lenski, Human Societies, 228-230.

<sup>6)</sup> Nolan and Lenski, Human Societies, 230-232.

<sup>7)</sup> Nolan and Lenski, Human Societies, 232-235.

<sup>8)</sup> Some have used the label post-industrial societies in terms of where things are heading at (see Lenski, *Ecological-Evolutionary Theory*, 105-106), however, I agree with Lenski (ibid., 106) that it is better to see the related phenomena as part of the industrial era and its ongoing revolutionary development.

Globalisation is listed as a characteristic of the fourth phase in Nolan and Lenski, *Human Societies*, 232.

an earlier time of European exploration from the 15th century on that more or less started to cover the whole world in its scope.<sup>10)</sup> In reality, the Portuguese explorations were made possible by advances in ship technologies that enabled the covering of wider distances and, as an important milestone, the circumnavigation of the globe.<sup>11)</sup> Altogether, it seems completely fair to suggest that human technology is constantly evolving and the changes induce societal changes that may have both local and global effects.<sup>12)</sup> An important part of such effects is the development of states, and then also of empires which can be seen as specific social constructs where one society also controls a number of other societies.<sup>13)</sup> In this, the ability to

<sup>10)</sup> See e.g. Marc Ferro, Colonization: A Global History (London: Routledge, 1997; French original 1994), 24-51. See also e.g. the comments in Patrick Manning, Migration in World History, second edition (Abingdon, UK: Routledge, 2013), 136-162 for the period of 1700-1900 and Christiane Harzig and Dirk Hoerder, with Donna Gabaccia, What is Migration History? (Cambridge: Polity Press, 2009), 30-42 for the period between 1600-1800. And, of course, certain regions had a large degree of interaction within themselves already in earlier times, such as the ancient Near East in the late Bronze Age in the second half of the second millennium BC, see e.g. Eric Cline, 1177 B.C.: The Year Civilization Collapsed (Princeton, NJ: Princeton University Press, 2014).

<sup>11)</sup> See Ferro, Colonization, 24-25, on this technological advancement.

<sup>12)</sup> This seems to me clear especially from Lenski, *Ecological-Evolutionary Theory*. Not everyone wishes to subscribe to such an (evolutionary) approach, however, the key point made by Lenski is that the amount of information that humankind possesses has been increasing cumulatively and that has brought with it far-reaching changes to human life at both individual and collective levels, even when the trajectory of development has not always been linear or can be qualified as "deterministic" when looked at during certain shorter periods of time, such as with the development of the first states (for which see Scott, *Against the Grain*, esp. 1-17; cf. comments in Nolan and Lenski, *Human Societies*, 84-85 on determinism).

<sup>13)</sup> Cf. the (brief) comments in Nolan and Lenski, *Human Societies*, 50-51 on the existence of a world system of societies throughout history.

control others and coerce them into a territorially defined social system is fundamental, <sup>14)</sup> and the scope and intensity of such coercion, accompanied by hegemonic ideology, has increased in the historical trajectory. <sup>15)</sup> The first known transregional empire in world history developed in Mesopotamia about 2300 BC, established by Sargon of Agade. <sup>16)</sup> This empire was followed by such notable empires as the Assyrians, Babylonians, Persians, Greeks, Romans, the Islamic Empire, the Mongols and Ottomans, and Spanish, Russian, Chinese, British and US empires. <sup>17)</sup> Of these, the Assyrians, Babylonians, Persians, Greeks and Romans also feature as significant actors and motifs in the

<sup>14)</sup> See Scott, *Against the Grain*, esp. 150-182, including the concept of caging (or equivalent).

<sup>15)</sup> Cf. Siniša Malešević, *The Sociology of War and Violence* (Cambridge: CUP, 2010) with its concepts of centrifugal ideology and cumulative bureaucratisation of coercion, and the concept of hegemony tracing back to the intellectual work of Antonio Gramsci in the early 20<sup>th</sup> century, on the latter, Bruce Routledge, *Archaeology and State Theory: Subjects and Objects of Power* (London and New York: Bloomsbury Academic, 2014) is a useful exploration and expansion of the thinking of Gramsci. For recent increase in surveillance and related coercive technologies, see e.g. Alfred McCoy, *In the Shadows of the American Century: The Rise and Decline of US Global Power* (Chicago, IL: Haymarket Books, 2017); Jeff Halper, *War against the People: Israel, Palestinians and Global Pacification* (London: Pluto Press, 2015).

<sup>16)</sup> For a book length treatment of the empire of Agade, see Benjamin Foster, *The Age of Agade: Inventing Empire in Ancient Mesopotamia* (Abingdon: Routledge, 2016).

<sup>17)</sup> See Eric H. Cline and Mark Graham, Ancient Empires: From Mesopotamia to the rise of Islam (Cambridge: Cambridge University Press, 2011) for an overview of the earlier empires and Jane Burbank and Frederick Cooper, Empires in World History: Power and the Politics of difference (Princeton, NJ: Princeton University Press, 2010) for a narrative of major empires from Rome and early China till the Second World War. Cf. also Michael Mann, The Sources of Social Power, 4 vols (Cambridge: CUP, 1986-2013) for tracing the overall trajectory of power in human history from the perspective of ideological, economic, military and political power (IEMP).

biblical books of both the Old and New Testaments. The two major world wars of the 20th century were conflicts between Western empires.<sup>18)</sup> The destructiveness of these wars was greatly accentuated by the development of weapons technology and the ability of these societies to mobilise large armies that could cover the whole globe.<sup>19)</sup> The power of the US empire was greatly increased through the two world wars, and it is currently by far the world's most dominant empire, even if its power may now be waning.<sup>20)</sup> All in all, as humans live within wider societal contexts that themselves can and in the era of globalisation do span the globe, an understanding of these contexts will help in reflecting on the role of humanity in the midst of continuing technological developments, that is, one needs to take into account both the individual/local and the global that are more or less in constant interaction.

<sup>18)</sup> See Burbank and Cooper, *Empires in World History*, 369-411 for an account from this perspective.

<sup>19)</sup> Cf. Nolan and Lenski, *Human Societies*, 236-237; Malešević, *The Sociology of War and Violence*.

<sup>20)</sup> On the US empire, see McCoy, American Century, on the financial power of the US empire from the First World War till the early 1970s and beyond, see Michael Hudson, Super Imperialism: The Origin and Fundamentals of US World Dominance, new edition (London: Pluto Press, 2003, first edition 1972). On the rise of the USA, see also Walter L. Hixson, American Settler Colonialism: A History (New York, NY: Palgrave MacMillan, 2013); and cf. James Belich, Replenishing the Earth: The Settler Revolution and the Rise of the Anglo-World, 1783-1939 (Oxford: OUP, 2009). I would also like to mention here Mario Liverani's Assyria: The Imperial Mission, Mesopotamian Civilizations 21 (Winona Lake, IN: Eisenbrauns, 2017) that focuses on the Assyrian empires (Middle Assyria in the late second millennium BC and especially Neo-Assyria in the first half of the first millennium BC) but importantly includes extensive reflection on the ideology of empire in the Assyrian context and situates it within the context of more modern empires as well.

## 2. The Christian Religion

One should keep in mind that the Christian religion developed in the agrarian preindustrial era, both in terms of ancient Israel from the late second millennium BC on and the time of Jesus Christ and the early Christian church in the first century AD. In that sense, the concerns of the people of the time and the documents they produced could have nothing to do with modern technologies of the later industrial era, not to speak of the current fourth phase of the industrial revolution. The writers could not imagine the development of TV, radio and the internet, nor modern mass transportation via ships, cars and aeroplanes.<sup>21)</sup> Nor could they have any idea of computer technology, the internet and the development of computerised software and artificial intelligence, computer games and virtual reality. They could thus also not envisage how humans should relate themselves to such technologies. Related thorny issues today also involve such aspects of medical technology as abortion and potential human cloning. In such areas, the only way forward seems to be to try and find general principles from the biblical canonical scriptures and then apply them to contemporary situations.<sup>22)</sup> It is a task for individual and interpretative

<sup>21)</sup> Even if the Philistine migration in the 12<sup>th</sup> century BC did involve migration via ships, see Assaf Yasur-Landau, *The Philistines and the Aegean Migration at the End of the Late Bronze Age* (Cambridge: CUP, 2010), esp. 122-193.

<sup>22)</sup> On the extensive discussions on Christian ethics in general, see e.g. Neil Messer, Christian Ethics, SCM Study Guides (London: SCM Press, 2006); Robin Gill, ed., Cambridge Companion to Christian Ethics, second edition (Cambridge: CUP, 2012); in relation to the Old Testament, see e.g. John Barton, Ethics and the Old Testament, second revised edition (London: SCM Press, 2010); idem., Ethics in Ancient Israel (Oxford: OUP, 2014); Christopher C. J. Wright, Old Testament Ethics for the People of God (Leicester: IVP, 2010); in relation to the New Testament, e.g. Joel B. Green, The New Testament and Ethics: A Book-by-Book Survey (Grand

communities to try and find a way to formulate guidelines in such cases. Considering the distance that the biblical text has with modern situations in these respects, it would not seem obvious that clear-cut solutions are possible. Nevertheless, I will make some comments in the next section, at the same time, my intention is to not address these issues to any great extent here as they have already been extensively discussed in theological discourse, including in treatises on Christian ethics.<sup>23)</sup>

However, one should also at the same time keep in mind that the biblical writers did not live in a world that was devoid of technology, it is just that the technologies of their times were less advanced than those today.<sup>24)</sup> At the same time, it seems clear that, at least for all practical purposes, humans (as *homo sapiens*) are still biologically the same as they were a number of thousand years or so ago.<sup>25)</sup> Certainly, the cumulative increase of information and technology can have implications to the social and biological sides of things, however, the fundamental genetic heritage seems to be constant for all practical purposes, at least

Rapids, MI: Baker Academic, 2011).

<sup>23)</sup> See e.g. the works referred to in the preceding footnote.

<sup>24)</sup> Note how Gen 1-11 can be seen as including description of technological development, with Adam and Eve at the start being naked in the garden and taking care of it (Gen 2:8-9, 15). After eating from the fruit of knowledge, they make (even if rudimentary) clothes (Gen 3:7), and after expulsion from the garden, agriculture and herding start, together with tent making (Gen 3:23, 4:2, 20). Cain builds a town (Gen 4:17), and his descendant Jubal starts off musical instruments (Gen 4:21) and Tubal-Cain the making of bronze and iron tools (Gen 4:22). Noah on his part plants a vineyard, at least as a first person to do so after the flood (Gen 9:20). At Babel, a specific building technology is attested that would certainly not have been used in the garden of Eden (Gen 11:3), and certainly Gen 11:1-4 attests to an ability to mobilise a sizable group of people for labour. Note also the comment above about the Philistine migration and the use of ships in the sense of reflecting the available technologies of the time.

<sup>25)</sup> Cf. Lenski, Ecological-Evolutionary Theory, 30-31, 33-51.

in a time span of a number of thousand years or so, and this genetic heritage also implies certain common capabilities and characteristics that all humans share.<sup>26)</sup> Accordingly, humans are fundamentally the same now as they were in biblical times but have created new technologies and interacted with them, with implications to individuals and the wider social contexts of humans. Thus, such issues as changes to gender roles through for example the use of machines making the relative physical power between men and women less significant should be seen in the context of technological changes.<sup>27)</sup> Recent adjustments to gender roles especially in industrial societies are thus primarily social, and, for example, the issue of the participation of women in Christian ministry can broadly be seen as attesting reduced gender divisions in comparison to preindustrial times.<sup>28)</sup> Nevertheless, for example, pollution due to the use of modern technologies may cause birth defects that might affect gender issues due to changes to reproductive systems with at least some people. And, the availability of artificial insemination and human cloning may at least in some way cloud how one may relate to their parents, however, the underlying biological structure of humans seems to be the same unless future technologies might be able to engage in genetic modification beyond correcting

<sup>26)</sup> See Lenski, Ecological-Evolutionary Theory, 45-50.

<sup>27)</sup> Cf. Lenski, Ecological-Evolutionary Theory, 46. It should also be noted how the move from hunting and gathering into agrarian and horticultural societies meant a decline in living standards to the majority of humanity, with this situation being in the process of being reversed with the onset of industrial societies, see Lenski, Ecological-Evolutionary Theory, 7, 30 and passim; Nolan and Lenski, Human Societies, 317 and passim; Scott, Against the Grain, passim. Lenski also notes that technological development and its accompanying social changes do not necessarily imply moral improvements (see Lenski, Ecological-Evolutionary Theory, 7).

Cf. the discussion on hunting and gathering societies that also addresses gender relations in Nolan and Lenski, Human Societies, 99-115.

some physical defects. Even with some changes to these, industrial, and really any other societies would nevertheless be expected to maintain some kind of organisational structure for their operations. In this, industrial societies clearly involve an increased amount of coercion and control when seen in the context of the overall history of human societies as referred to in the foregoing.<sup>29)</sup> As part of that, the role of states and empires is significant, with the current human present consisting of a system of nation states that do not stand on an equal footing in the world scene.<sup>30)</sup>

<sup>29)</sup> See also Malešević, The Sociology of War and Violence.

<sup>30)</sup> Note here the following set of comments in Michael Hardt and Antonio Negri, Empire (Cambridge, Massachusetts: Harvard University Press, 2000), 309-311, that even if written some two decades ago, should still be taken into account in a number of ways (to my mind the recent failure of the USA to impose its will in Syria on its part signals at least certain limits to its power at the time of writing this in comparison to when Hardt and Negri wrote, not long after the collapse of the Soviet empire): "At the narrow pinnacle of the pyramid there is one superpower, the United States, that holds hegemony over the global use of force - a superpower that can act alone but prefers to act in collaboration with others under the umbrella of the United Nations."... "On a second level, still within the first tier, as the pyramid broadens slightly, a group of nation-states control the primary global monetary instruments and thus have the ability to regulate international exchanges."... The second tier "is structured primarily by the networks that transnational capitalist corporations have extended throughout the world market-networks of capital flows, technology flows, population flows, and the like"... "The third and broadest tier of the pyramid, finally, consists of groups that represent popular interests in the global power arrangement." ··· "Who represents the People in the global constitution? Or, more important, what forces and processes transform the multitude into a People that can be represented in the global constitution? In many instances nation-states are cast in this role, particularly the collective of subordinated or minor states. Within the United Nations General Assembly, for example, collections of subordinate nation-states, the majority numerically but the minority in terms of power, function as an at least symbolic constraint on and legitimation of the major powers."... "Nation-states, however, are certainly not the only organisations that construct

The early Israelite society can be seen as an attempt to break free from the coercive effects of ancient agrarian states and empires.<sup>31)</sup> The Israelite narrative commemorates liberation from oppressive slavery in Egypt, itself a strong empire in the western-southwestern part of the ancient Near East in the late second millennium BC.<sup>32)</sup> In the context of huge debates over the historicity of the biblical narrative about the origins of ancient Israel, with a variety of options presented, this author has proposed that the development of ancient Israel can be seen as settler colonialism where a group of people who escaped from Egypt and its slavery settled in the Canaanite highlands and founded a new society there.<sup>33)</sup> The settlers created the biblical books Genesis-Joshua as a programmatic document for the new society.<sup>34)</sup> This incorporated references to past history, including

and represent the People in the new global arrangement. Also on this third tier of the pyramid, the global people is represented more clearly and directly not by governmental bodies but by a variety of organisations that are at least relatively independent of nation-states and capital. These organizations are often understood as functioning as the structures of a global civil society, channeling the needs and desires of the multitude into forms that can be represented within the functioning of the global power structures. In this new global form we can still recognize instances of the traditional components of civil society, such as the media and religious institutions." NGOs also belong to this category (ibid., p. 312).

<sup>31)</sup> See Pekka Pitkänen, "The ecological-evolutionary theory, migration, settler colonialism, sociology of violence and the origins of ancient Israel," *Cogent Social Sciences* 2:1210717 (2016), 1-23 that utilises insights from Lenski, *Ecological-Evolutionary Theory*, 147-168.

<sup>32)</sup> See most recently e.g. Ellen Morris, *Ancient Egyptian Imperialism* (Hoboken, NJ: John Wiley and Sons, 2018).

<sup>33)</sup> See esp. Pitkänen, "Pentateuch-Joshua: A Settler-Colonial Document of a Supplanting Society," *Settler Colonial Studies* 4:3 (2014), 245-276; idem., "The origins of ancient Israel."

<sup>34)</sup> See esp. Pitkänen, "Reading Genesis-Joshua as a Unified Document from an early date: A Settler Colonial Perspective," *Biblical Theology Bulletin* 45:1 (2015),

the exodus and wilderness wanderings, the initial settlement under Joshua and the patriarchal narratives, with the patriarchal narratives also serving as legitimation for the new society's claim on the land. In the process of settlement, the existing indigenous societies would be destroyed, with the new Israelite society taking their place (cf. e.g. Dt 7). The book of Judges, but also aspects of the book of Joshua, shows how the establishment of the new society only partially corresponded to what was envisioned. Also importantly, while the early settling society eschewed from strong centralising structures, instead envisaging a decentralised tribal structure and system, by the 11th century BC it was gravitating towards such centralisation. This took place by the establishment of kingship (see 1-2 Sam, including 1 Sam 8), with David as the first king who established a dynasty with hereditary successors. The kingdom could however not stay united for long but divided into two under David's son Solomo n.35) Interestingly, the biblical narrative indicates that in David's time the Israelite society was so strong on the whole that it could also control a number of its surrounding entities, in other words, it was an empire (see e.g. 2 Sam 5; 8; 10). The empire was however transitory, also undoubtedly weakened by the division of the kingdom, and fairly soon the Israelite societies were pressurised by outside powers, especially the Arameans (2 Kings 10:32-33). In the end, northern Israel succumbed to the rising neo-Assyrian empire in the late 8th century BC (2 Ki 17) and the southern kingdom of Judah to the Babylonian empire in the early 6th century BC (2 Ki 24-25). The lands were

<sup>3-31;</sup> idem., A Commentary on Numbers: Narrative, Ritual and Colonialism, Routledge Studies in the Biblical World (Abingdon, UK: Routledge, 2017); cf. also idem., Joshua, Apollos Old Testament Commentary 6 (Leicester: IVP, 2010).

<sup>35)</sup> Again, the early history of ancient Israel as portrayed in Judges, Samuel and Kings is hotly contested, but I believe that the overall picture given in these books can at least broadly be considered as perfectly consistent and plausible.

conquered and people exiled by both the Assyrians and the Babylonians, with new people also brought in from elsewhere in the Assyrian empire in the case of the northern kingdom.<sup>36)</sup> Once the Babylonian empire fell to the Persians, the Persians took a differing policy towards the exiles from Judah and their descendants, allowing for a return to the land. There the returnees established a new community in the land and also build a new, second temple (Ezra, Nehemiah, Haggai). The next empire that rose was that of the Greeks through the conquests of Alexander the Great in the fourth century, with the book of Daniel on its part bearing on these changes of empires. The Greeks were in due time followed by the Romans, and the Judeans in Palestine were living under their rule at the end of the pre-Christian era.

Jesus was a Galilean reformer of the ancient Jewish religion.<sup>37)</sup> However, he was not well received by the Jewish establishment who incited the ruling imperial Roman authorities to condemn him to death. Jesus's followers, however, established a new religion based on his teaching, believing that he was the son of God who died for the sins of mankind. Importantly, Jesus was not, and is not portrayed as, a reformer who would restore the independence of ancient Israel as against Roman rule, but his kingdom was to be an otherworldly one (e.g. John 18:36). Christians were to establish a new community in Christ that is a spiritual rather than a political one in opposition to the existing political structures of the day. This outlook is confirmed by the apostle Paul who operates as a Roman citizen within

<sup>36)</sup> Again the history is contested, including as to the scale of the exiles, especially as regards the southern kingdom of Judah, but again I consider the overall picture as completely consistent in the context of world history.

<sup>37)</sup> For a helpful set of comments on this, see George E. Mendenhall, *Ancient Israel's Faith and History: An Introduction to the Bible in Context*, ed. G. A. Herion (Louisville, KY: Westminster John Knox Press, 2001), 203-231.

the context of the Roman empire where his missions take place (e.g. Acts). Certainly, Paul and the New Testament do make some comments about empire, at the minimum indirectly so,<sup>38)</sup> but their message focuses on creating new communities in Christ within the context of existing socio-political settings and structures.

The new religion, initially consisting of a handful of followers, spread in the Roman empire and, even if it was initially an illegitimate religion and at times there were attempts by the empire to root it out, it eventually became sufficiently popular and was appropriated by an emperor, Constantine, in the early fourth century. Constantine also changed the status of the religion from an illegitimate one into one recognised by the state.<sup>39)</sup> By the end of the century, an edict by the emperor Theodosius made Christianity the only legitimate religion in the empire.<sup>40)</sup> Henceforth Christianity went hand in hand with the state in Europe in a new era of Christendom.<sup>41)</sup> Except for the newly divided Catholic and Orthodox churches at the beginning of the second millennium, most new expressions of Christianity that came out from the reformation in the 16th century continued

<sup>38)</sup> See e.g. Rom 13:1-7; 1 Peter 2:13-16. The book of Revelation seems to be an exception to this as it has been usual to read it as attesting a criticism of the Roman empire. However, the language in the book is apocalyptic and symbolic so that its message is not always very clear in its details.

<sup>39)</sup> For a stimulating exposition of this process from the first to the third century AD, see Bart D. Ehrman, *The Triumph of Christianity: How a Forbidden Religion Swept the World* (London: Oneworld Publications, 2018).

<sup>40)</sup> See e.g. Ehrman, The Triumph of Christianity, 243-277 for an account of this.

<sup>41)</sup> For a summary of the period between 400-1500 in this respect, see e.g. the comments in Stuart Murray, *Post-Christendom: Church and Mission in a Strange New World* (Milton Keynes, UK: Authentic Media, 2004; second edition 2018), 24-59 and *passim*. More extensive treatments that include coverage of the history of the church for this period include Diarmaid MacCulloch, *A History of Christianity: The First Three Thousand Years* (London: Penguin, 2009).

operating within the Christendom paradigm, including the Lutheran, Anglican and Reformed churches. It is true that there were also dissidents to the approach of church and state going together, most notably in the Anabaptist tradition, however, these remained as minorities. 42) From a socio-political perspective, the beginning of overseas European empires from the 15th century on also meant the expansion of Christianity as part of the related conquests, even when the papal conquests in the Baltics in the 13th-14th centuries were already an example of the expansion of Christian states.<sup>43)</sup> Certainly, there were missions outside the context of empires from the earliest times, however, much if not most of the spread of Christianity went together with the expansion of the Western empires. Altogether, it should be highlighted that Christianity was complicit with the European expansion, even if this was not the case always.<sup>44)</sup> As a notable point in this respect, for example, even now there is only a limited amount of criticism by Christians on the conquest of northern America by European settlers, many of whom identified as Christians.<sup>45)</sup> Similarly, many Christians even

<sup>42)</sup> Montanism would be an early example of this type of "radical" Christian movements that were not linked with the "establishment."

<sup>43)</sup> See e.g. the comments on these in Murray, *Post-Christendom*. The medieval crusades to Palestine can of course also be mentioned here even if they only resulted in a temporary hold of the area.

<sup>44)</sup> The objections of Bartholomé las Casas to the Spanish conquests are famous.

<sup>45)</sup> Note, however, e.g. the recent popular level Steve Heinrichs, ed., with illustrations by Jonathan Dyck and afterword by Sylvia McAdam, *Unsettling the Word: Biblical Experiments in Decolonization* (Altonia, Manitoba, Canada: Friesens for CommonWord/Mennonite Church Canada, 2018) that addresses these very issues. It is also true that biblical studies as such has already incorporated postcolonial criticism quite extensively (including e.g. L. Daniel Hawk, *Joshua in 3-D: A Commentary on Biblical Conquest and Manifest Destiny* [Eugene, Or: Wipf and Stock, 2010] in this connection), but the wider impact of those considerations may have remained relatively limited to date.

today support the continuing expansion the state of Israel into Palestinian lands, even as a process that is deemed to be the will of God.

The foregoing comments highlight how the history of Christian religion has been tightly intertwined with the question of societal structure and political power, attested by the presence and history of empires and expansion into the lands of other peoples, and changes to the societal contexts of the writers from the earliest roots of ancient Israel in the Old Testament on. At times both the biblical and later Christian narratives have advocated conquest, with the writers perhaps also being in more or less commanding positions within empires or societies bent on conquest. At other times the existence and rule of empire has been taken as a given, and at certain times, such as with the biblical writers in the 6th century BC, the writers have been subjugated by external empires and lamented about the state of affairs. 46) In terms of the Christian movement itself, despite its high social position in regard to the state during Christendom, cultural memory has often propagated a narrative of Christians being a powerless and persecuted minority. It is important to be critical of such a narrative as in many cases not reflecting actual realities. On the whole, I do believe that the variety of actual settings for a variety of Christian individuals and communities fits with the flow of world history and the conceivable possibility of an individual or social group more or less being in any of the positions that may exist at a given time, at the top or bottom of a social pyramid, or somewhere in between, in terms of power and influence. As for today, while the secularisation that started in Europe with the onset of modernity has resulted in the Church losing much of its power and privileges in terms of the state, 47) again, the current most

<sup>46)</sup> See the book of Lamentations for a heart-rending poetic account around the conquest and destruction of Jerusalem.

powerful empire in the world may still use at least potentially co-optative Christendom rhetoric in its operations around the world, at least this clearly is the case for the so-called Christian right in that empire in particular. That is, the potential direct role of Christianity, and religion in general, in Christendom-type politics has not yet been completely undone.

At the same time, one might be able to consider the separation of religion from politics a quite an unprecedented development in world history, as religion has always had a major function in that respect till the time of Enlightenment in the West. This issue has already attracted a huge amount of attention as part of the analysis of the Enlightenment and secularisation. On the whole, it seems that the advent of scientific knowledge has been able to subject the world to a more mechanistic system of explanation based on natural causes and effects, and undoubtedly the development of the theory of biological evolution in the 19th century had a significant role to play in this respect. However, an interesting perspective arising from ritual studies that seems to have attracted limited attention can also be added to the usual considerations. According to Rappaport, religious controls, often expressed through ritual, were important for early societies as such societies only had limited means for controlling people otherwise. Thus religious sanctions could be powerful regulators of behaviour that could be utilised, whether consciously or unconsciously. However, technologies of control have been greatly enhanced as part of the technological advancement of modern societies, and hence there is less, if any, need for the role of religion in regulating behaviour. 48) Such a functionalist explanation does seem to at the minimum fit with the idea

<sup>47)</sup> Cf. Murray, Post-Christendom.

<sup>48)</sup> See Roy A. Rappaport, *Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People*, new, enlarged edition (New Haven, CT and London, UK: Yale University Press, 1984; first edition 1968), 236-237.

that it is difficult to impose moral values based on religion on modern people especially based on a potential threat of divine punishment. All this implies that it is unlikely that religious organisations will be able to impose their will on populations easily, especially in a situation where technological innovations keep taking place.

# 3. Interconnecting with the World

The foregoing survey has mapped the overall context of world Christianity. It has suggested that one may expect that technological development keeps taking place but that certain human universals, especially those pertaining to social organisation, have exhibited and are likely to exhibit less change in their fundamentals than one might at first sight assume, even if, at the same time, political and societal contexts may constantly be in flux in their specific details. The remainder of this essay will move towards looking at a set of specific issues in more detail, with the comments already made serving as a backdrop.

In doing so, one question to ask is what should be the goal of Christians and humanity in general. Some Christians might consider that all that one needs to do is to prepare for the kingdom of heaven, whether attained by Christ's second coming (parousia) or by the death of an individual so as to sooner or later join God's people in heaven. For them, trying to "change the world" is not necessary. However, in reality, it is doubtful if even many of those advocating that position have no interest in issues that relate to this life.<sup>49)</sup> In practice,

<sup>49)</sup> Of course, one may, for example, cite the monastic movement here as an example of trying to "escape" the world. But, whatever the case with the origins of the movement, monastic communities sprang more or less within the Christendom

people do care and show concern to what is happening to themselves and around them. This makes it clear that Christians will need to think of what happens in the realm of the present life. In other words, one needs to think of what could make things "better". But, how can one define the "good life," if that is a reasonable approximation for what one might wish to strive towards? Perhaps that is an issue that does not have an easy answer,50) but, I believe that some comments can nevertheless be made here. Intuitively, if one considers Jesus's summarising maxim of loving one's neighbour as oneself (Matt 22:37-39; Mk 12:28-33; Lk 10:27), surely good life can be seen as a communal matter. Here then one immediately can think of the question of what is the best way of organising a community so as to enable the love of one's neighbour. Jesus's parable of the Samaritan (Lk 10:30-37) shows that good behaviour towards one's neighbour is what is set as an ideal, not one's social and national status. Also considering the extension of Christianity to cover all (known) nations in the book of Acts, clearly there is a case to extend the question to the world's global community. This then can be asked in the form of how the global community should function so that all can be treated well.

A complex issue in this respect is the question of hierarchy. The foregoing survey pointed out that considerable hierarchy has been with humanity since the development of agriculture and the accompanying development of extensive social

world and they did interact with the surrounding communities, at least one way or another. One may also here keep in mind H. Richard Niebuhr's five basic modes of Christian engagement with culture for reference. I believe that what follows below has its closest parallels with the concept of "Christ the transformer of culture." One should also note that it clearly seems to be increasingly difficult to isolate oneself in a technologically connected and controlled world, and this tendency is likely to accentuate in the future.

<sup>50)</sup> The extensive discussions in e.g. Christian ethics are one area where this type of consideration has already taken place.

stratification. Such hierarchy brought in its wake riches and power to some but poverty and at least potential hardship to many. The Christian religion and its roots in the Old Testament were written in the context of such hierarchy, also in the transnational scene of empires. As indicated, Genesis-Joshua reflects a programmatic attempt to flatten such hierarchy as much as possible. Also, as a significant social group, the Old Testament prophets were heralds crying for social justice (e.g. Amos). On the other hand, much of the New Testament assumes social hierarchies and often does not seek to abolish them, at least not directly. How is one then to proceed from a Christian perspective, especially if one thinks that the New Testament fulfils and at least in some aspects supersedes the Old?

As already indicated, I do believe that, from a socio-political perspective, one should read the New Testament as a set of books by early Christians that were focused on the life and resurrection of Jesus and its significance for believers. Clearly, it is correct that the believers were to have a hope for the future and await for the return of Jesus Christ that in general was believed to be imminent (e.g. 1 Cor 7:29-31). Due to that, there was no need to try and change things (but cf. nevertheless e.g. Acts 6:1-6), and the time and resources available for a small cadre of believers in the populous Roman empire would not have been enough for that anyway. However, two thousand years of church history to date have shown that the end cannot be assumed to be imminent. Accordingly, there is no need for Christians to think that they merely need to "wait," without trying to improve things in this life.

If so, how should such improvement take place? One important related aspect is to live a good and considerate life at an individual level. However, as people are members of societies, one's thinking should be extended into wider social contexts as individual actions do have wider effects. In respect

to the wider social contexts, ultimately there is no need to limit one's thinking into the local levels, but one may consider the widest possible spheres, and that implies the global system in today's globalized world. As societies often work through their structures and embedded institutions, considering the role of such structures and institutions is vital. This is where one may look back at the foregoing discussion about states and empires that are, or at least tend to be, situated at the top level of world hierarchy. It should be clear that a good analysis of human life starts by actually being aware of what the accompanying realities are. Accordingly, Christians should be well versed about what is going on in the world.<sup>51)</sup> In that, they would share the interests of any other people in terms of knowing and things. Coming then back to the analysing post-Christendom in the industrial era, Christians cannot any more assume that they can try and be the ones who have a dominant role in determining for others what to do. Instead, perhaps working together with others and seeking to consult with and influence them in relevant matters will be a better way to operate. That Christians may have differing views about individual details than other social groups can also be seen in the context that even Christians themselves do not agree on everything. This being the case, it would seem best to try and present viewpoints and seek to persuade others that the way forward that has been conceptualised by its advocate or advocates is the best available option for a "good life".

On the whole, Christians at all levels of social hierarchy should keep in mind that Christendom was often marked with Christians allying with coercive powers that were also often unjust and even violent and destructive. Altogether, those at any levels of world hierarchy should be encouraged to seek to change the hierarchies in question for the better, whatever practical means

<sup>51)</sup> Cf. Karl Barth's comment about reading both the Bible and the newspaper.

they might have at their disposal. Those at the top levels of the hierarchy should not be happy with the status quo and the power and privileges they may have but seek to do the best they can so as to change things for the better, and in general use power available to them for the benefit of others. In addition to social structures within nation-states themselves, the current world system of the dominant empire and the accompanying power and privileges it holds and the world hierarchy that has formed around it cannot be considered as just. Christians should join and collaborate with those who seek to transform the system. Of course, Christians should carefully consider the methods to be used for reforming it. For example, it is unlikely that anyone would wish to advocate the eruption of another world war, including considering the current nuclear stockpiles held by the world's major powers that are enough to destroy the whole planet.<sup>52)</sup>

One can also learn from the early Israelite project in that its designs were only meant for the benefit of the Israelites but were destructive towards the indigenous peoples of the land. Altogether, methods that are destructive to others so as to achieve one's own objective should be sought to be avoided. Of course, history shows that human life and human societies do not stand

<sup>52)</sup> Here, of course, one should also consider that possession of nuclear weapons goes together with power, and ultimately those possessing them will hold decisive military power as against countries that may not. In this, especially as North Korea is not part of the US empire, it should not be surprising that the USA has been trying to object as strongly as possible to the recent development of such weapons by North Korea. The approach should be contrasted with that towards Israel, an integral part of the US empire (on the development of the program in Israel, see comments in Avi Shlaim, *The Iron Wall: Israel and the Arab World* [London/New York: Penguin Books, 2000; new and fully updated edition 2014]). The recent tendencies towards the weaponisation of space are commented on in McCoy, *American Century*, 159-190. Interestingly, the issue of technological advantage and its control for military purposes finds an ancient example in 1 Sam 13:19-22; cf. also Josh 17:16-18; Jdg 1:19.

still, and there are identifiable indications that the current world system is changing.<sup>53)</sup> However, it is not yet clear what will take the place of the current world system and how. If a new empire were to take over the existing one, can there be any guarantees that it will be a more benevolent one, also if one looks back at the history of empires and their tendency to concentrate power, resources and privileges to themselves at the expense of others?

So, all in all, this essay suggests that, in addition to issues at personal level, Christian should be critical of existing social structures all the way to the world system at large. Considering that there are now billions of people on this planet, most Christians, if any individual at all, will not have explicit power to change much anything at the global scale. And yet, for example, except for trying to do their part at their personal and local levels, if Christians can include analysis and spreading of information about issues, perhaps that can reach those in power so that something may change. In that sense, I believe that even the powerless can dream big dreams.<sup>54)</sup>

Considering the very possibility that China will be the next major world power,<sup>55)</sup> Asians in particular can reflect on issues of power and how the world can be changed for the better.<sup>56)</sup> And, Korea with its large Christian population can have a special role in the development of Christianity. Korea was never part of Christendom, even when there may have been a large concentration of Christians in a number of areas. Nor does Korea

<sup>53)</sup> See esp. McCoy, American Century.

<sup>54)</sup> Of course, the Christian movement itself started with only a small group of followers of Jesus Christ.

<sup>55)</sup> See e.g. McCoy, American Century, esp. 193-226.

<sup>56)</sup> Asia, including Korea and China, is of course already part of the drive of the fourth industrial revolution, and China at least is aiming to be a world leader in the area; cf. https://www.globalresearch.ca/why-west-fears-made-in-china-2025/5649633 [accessed 21/8/18]

need to seek the attainment of Christendom, and some of the problems that relate to power and privilege and its abuse by Christians in Korea relatively recently can alert and have already alerted people to the issues involved. Of course, Koreans can also look at the West and its Christendom-related history and the many associated failings that were involved. I believe that Korea can make its contribution to the world, standing independently but also learning from the West, separating the positive from the less beneficial.<sup>57)</sup> In the future, whatever the political relationship between the North and South may be, people with a heritage from each of these areas and their differing socio-political systems, also in relation to the wider context of world empires, can strive to make their contribution towards a better world. In the global context, it is important for Korean Christians to carefully consider the political issues involved, including for example in deciding what might be the best social structure for any unified Korea in the world, utilising any positive means at their disposal to influence the coming course of events. But, again, Korean Christians should dream beyond Korea as well, for both the local and the global.

## 4. Some Practical Oriented Suggestions

I will now attempt to provide some suggestions of more practical nature in the context of this essay the express focus of which is on humanity and the fourth industrial revolution from the perspective of Christianity, also making reference to the discussion thus far.

<sup>57)</sup> On the whole, Christianity should be made fully indigenous in local settings. Christianity is still often associated with the West, but such association should be rejected.

In terms of economics, one economist already some 15 years ago suggested ways towards a better and more just world. I shall quote some of these points here as I believe they still have a fair bit of value, also keeping in mind that financial instruments are instruments of power that were also developed into their current form in accompaniment with the industrialisation of the West.<sup>58)</sup> The measures include moving away from the dollar as a reserve currency, allow governments to issue credit to finance budget deficit so as to spur investment and employment at home, denominate international debts in domestic currencies, tax those who hold private financial capital and less so with ordinary working people, reform and replace international financial institutions such as IMF and the World Bank, allow countries to raise protective tariffs and subsidies where necessary, cut down capital flight especially to offshore tax avoidance centres and regulate intra-corporate fund and profit transfers, and restore the classical distinction of earned and non-earned income.<sup>59)</sup> These measures could help towards achieving a more just system of trade and through that a more equal footing for the variety of peoples of the world. And, one might of course also add considerations of how there could be debt relief in the world, a concept that already goes back to the ancient world.<sup>60)</sup> In

<sup>58)</sup> On this development in the context of the West, see Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*, 2nd Beacon paperback edition, with foreword by Joseph E. Stiglitz and with a new introduction by Fred Block (Beacon, MA: Beacon Press, 2001; originally published in 1944 by Farrar & Rinehart).

<sup>59)</sup> Michael Hudson, Global Fracture: The New International Economic Order, new edition (London, UK: Pluto Press, 2005; first edition 1977 by HarperCollins Publishers), xxiv-xxi.

<sup>60)</sup> Cf. the mišarum degrees of Old Babylonia. However, interestingly, the concept could already be subverted in the ancient world itself, as described in Eckart Otto, Deuteronomium 12:1-23:15, Herder's Theologischer Commentar zum alten Testament (Freiburg im Breisgau, Germany: Herder, 2016), 1341-1349. Christians

addition, the economist points out how the extensive network of American military bases acts as a strain to the world economy, and scaling them down considerably if not completely would thus also be vital.<sup>61)</sup> The pulling out of American military bases would of course also help towards restoring political equality among the nations of the world, in addition to helping alleviate a number of other issues that are associated with the bases.<sup>62)</sup> At the same time, it would nevertheless be important to avoid creating power vacuums that social groups with less than helpful motives could try and exploit. However, at the same time, a claim that a peace that an empire may be able to create and maintain should not be the primary consideration, as history shows that empires tend to create such peaceful realms through conquest and associated often extreme violence.

People should also take into account ecology and avoid increasing pollution. This is an important issue for industrial societies. One may ask if and to what extent the world can bear the expansion of industrialisation. Use of renewable energy should be advocated, together with considering the impact that human activity may have on climate change. These issues that relate to material sustainability are of course part of public debate already, but in this connection it is important to also keep in mind the potentially destructive nature of capitalism that is inherently not interested in the environment.<sup>63)</sup> And,

have of course already on their part engaged with this issue, see e.g. http://www.advocacyinternational.co.uk/featured-project/jubilee-2000 [accessed 24/8/18]; cf. also e.g. https://jubileedebt.org.uk/ [accessed 24/8/18].

<sup>61)</sup> Hudson, *Global Fracture*, pp. xxix-xxx, and see idem., *Super Imperialism* on the issue more generally.

<sup>62)</sup> On the bases and their wider effects, see David Vine, *Base Nation: How U.S. Military Bases Abroad Harm America and the World* (New York, NY: Henry Holt Co., 2015; reissue with a new foreword by Simon Winchester in 2017).

<sup>63)</sup> Note here the comment by Rappaport, *Pigs for the Ancestors*, 329; "When monetary logic is associated with production for gain, not only is ecological awareness

significantly, that those most suffering from climate change tend to be poor people living in the world's poorest countries should keep drawing attention to the structural inequalities of the overall world system that is strongly imprinted by capitalism.

One important aspect of the fourth industrial revolution is that machines can in many ways make people unnecessary for certain tasks. Automation has already started but such issues as the creation of self-driving cars and the potential use of artificial intelligence (AI) to replace human decision making should also be considered. As with anything that relates to human life, it is important to make AI subject to careful ethical frameworks. When humans may not be needed, there should be consideration of retraining to new tasks. However, the concept of universal income, already trialled in such countries as Finland, should be considered also. This would enable a more leisurely approach for individuals to life, and it would in fact signal a return towards how original hunting and gathering societies operated. People in those societies generally only needed to work a comparatively small number of hours per day to manage. Of course, life expectancy was relatively short for members of those early societies with a high rate of infant mortality and succumbing to diseases. In that sense, combining medical technology with only a limited amount of work would seem to be a winning combination. On the whole, issues relating to medical care and general care in old age should be carefully reflected on continually and appropriate policies made. Private medical care certainly would increase inequality, so it is clear that the universal availability of free medical care should be advocated.

Even though in principle a very positive development, there

obscured but the likelihood of ecosystemic degradation is increased. This likelihood is further increased in industrial societies, societies in which production is expanded to meet the voracious appetites of machinery for such substances as coal and petroleum."

are nevertheless issues that would need consideration in relation to increased leisure time. While for example virtual reality (VR) can enhance people's life (also in working situations in addition to leisure pursuits), there are questions to be asked about its use. VR and computer games can for example be addictive, and addiction can bring potential problems with it. Addiction includes the use of drugs that are increasingly available in societies today also due to the ease of making a number of them by employing modern technologies. When one considers that there has recently been a move to legalise the use of cannabis in a number of countries and US states, one may ask the question of if and to what extent this should be more widely done and how any or some of the other drugs that are currently illegal should be dealt with.

An important accompaniment of information technology is its potential to be used for electronic surveillance. While surveillance is not in itself a new development, latest technologies enable tracking the movements and doings of people on the street through CCTV and facial recognition, and on the internet by tracking websites visited. Here one needs to strike a careful balance. People should be granted freedom, however, at the same time, there needs to be a way to uncover those who seek to harm others and thwart their actions. But, the usefulness of technology for preventing criminal activity notwithstanding, in many ways it is lamentable that the Foucaultian panopticon is likely to increasingly be with humans in the future.<sup>64)</sup> Any suggestions for its mitigation would be gladly received.

Issues relating to indigenous peoples should be included in considerations of how the world can be made better. These peoples have typically been at a disadvantage in terms of their

<sup>64)</sup> See Michel Foucault, *Discipline and Punish: The Birth of the Prison* (London: Penguin, 1979; French original 1975 and the English translation first published by Allen Lane 1977).

technological development. Especially since the late 15th century the West has largely destroyed many of such groups (as with the USA, Canada and Australia) or forced them to live under the terms and conditions of the Western nation that conquered and colonised them, and more widely under the overall system of the West. Some relief in this respect has been achieved, as recently attested by the formulation of the United Nations Declaration of the Rights of the Indigenous Peoples, 65) however, things can go much further. As possession of land is about possessing resources, restoration of land to these peoples could help in alleviating past wrongdoings. The restoration of land should then also be accompanied by allowing these peoples to live in their own terms as they themselves see fit. This would include safeguards against them falling into crippling debt in the terms of the more powerful and generally more technologically advanced social groups. As one specific example of protecting indigenous peoples, Christians should not support the modern state of Israel that has been and is continually expanding its scope onto the Palestinian territories, together with strongly oppressive action and policies towards them.<sup>66)</sup> This is of special significance for Christians as the land in question was the main theatre of action for the events described in the biblical documents. In this context, when one considers the security industry that has arisen around the oppression of the Palestinians, the Israel-Palestine issue bears more widely on the use of technology for oppression.<sup>67)</sup> Yet more widely, but also linked with this specific context, the potential use of technology for war is an obvious ongoing concern. Some specific examples in the context of the fourth industrial revolution include the

<sup>65)</sup> See https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html [accessed 23/8/18].

<sup>66)</sup> Among other things, see Halper, War against the People.

<sup>67)</sup> For fuller details, see Halper, War against the People.

use of robots, big or small, including drones, for war, and the use of AI, at least in some form, in making decisions on whom to attack, kill or maim.

The issue of the role of individual in relation to collectives should also be carefully reflected on. I already drew attention above to how capitalism which generally focuses on individual gain, with a belief that this will benefit others, can be destructive for the environment.<sup>68)</sup> Also, I have drawn attention to the destructive effects of the technologically more advanced societies in the West on indigenous peoples around the world. The issue relates to ethics in terms of how humans should relate to each other, and we already referred to Jesus's expression of the "golden rule". Here an issue of good and participatory governance can also be reflected on. I do believe that societies should choose a suitable form of governance that will also ensure an equitable distribution of resources to all across the global community as a whole, and not just for the benefit of those on the top in stratified societies. It is likely to be impossible to get rid of all social stratification, but perhaps the Scandinavian societies of the late twentieth century could serve as one possible heuristic model and a starting point. Also, one may ask the question of to what extent "democracy" as defined by Western societies should serve as an ideal to strive towards, considering the many destructive effects that Western "democratic" societies have had on the world. All in all, any new ideas in this respect should be helpful, including in interaction with political scientists and economists. And, of course the conduct of individuals in relation to family, friends and for example colleagues at working places must be in scope as well, and it is well known that at the minimum many of the related questions have already been covered by ethical theorists, including from a Christian perspective.

<sup>68)</sup> Note that Adam Smith's concept of "invisible hand" is accordingly at the minimum in need of clear modification.

Altogether, one should not be afraid to adapt Christianity to new situations, including based on new considerations that may arise from reflecting on the role of Christianity in the world, even when some experiments, such as Christendom can be understood as having been problematic. The Bible itself already attests to adaptation of religion to new settings. In the context of the historical development of ancient Israel that was already outlined in the foregoing, the book of Chronicles describes how king David rearranged the Israelite worship with the building of a new temple in Jerusalem after the older order that had been based on the tent of meeting and the prominence of Shiloh was surpassed (see 1 Chr 22-27; cf. 1 Sam 2-4; 2 Sam 5-7; Ps 78:56-72).69) That change in itself that also transformed a more "democratic" tribal organisation into a more centralised model based on kingship was a partial abrogation and adaptation of the original setting that pertained to the early Israelite settlers as reflected in Genesis-Joshua. Similarly, the Jews needed to adapt their life in a new setting of the Babylonian exile in the 6th century BC, and the same, together with reapplying the Pentateuch in a new situation, was the case for the returnees to the land in the postexilic time that followed (see Ezra, Nehemiah). Except for further adaptation and change in the Hellenistic and Roman period, as already drawn attention to above, Jesus himself can be seen as a reformer who aimed to renew Judaism. The New Testament documents show how the new followers of the Christ movement related to Judaism and the sacred scriptures of the Old Testament and transformed Jewish practice. An interesting development to highlight is the Jerusalem council where the terms of accepting gentiles into

<sup>69)</sup> See Pitkänen, Central Sanctuary and Centralization of Worship in Ancient Israel: From the Settlement to the Building of Solomon's Temple, reissue with a new introduction by the author (Piscataway, N.J.: Gorgias Press, 2014; first edition 2003, second publisher's edition 2004) on this process as a whole.

the new Christian community were decided (Acts 15), with a set of very pared down requirements in relation of the law of Moses laid out for the new gentile believers (Acts 15:29-30).

# 5. Summary and Conclusions

In this essay, I have surveyed issues that relate to Christianity in the context of the ever-advancing process of technological development and its present that has been labelled as the fourth industrial revolution. I have suggested that the changes in technology should be seen in the wider global setting of humanity in its historical context. An analysis of social impacts of technology with their accompanying effects on societal structures and power within and between societies is vital. I have argued that, for Christians, it is crucial to analyse these settings and then respond to them critically and creatively. Especially in a post-Christendom context, Christians should seek to work in the context of societies as a whole, endeavouring to play their part in influencing the present and future direction of those societies. It is also important to be open to changes in the organization of church life and worship and belief structures, keeping in mind that the Christian religion and its predecessors could and did adapt to new situations. As part of such re-adaptation and renewal, it is important to recall past successes but also to be critical about past failures and learn about them, including reflecting on what practical measures can also be taken. The canonical scriptures attest to the ancient contexts of their authors and questions that they and their contemporaries faced. Understanding such concerns can be taken as an important starting point and also a point of comparison when looking at contemporary modern contexts and related issues, questions and problems. It is clear that a number of considerations cannot be seen as finding their

counterparts in the canonical writings easily, and, conversely, certain issues addressed by the Bible may be deemed to at least appear to be even irrelevant or not applicable due to differing social and cultural settings, or at least only partly corresponding. As things are not clear cut in terms of relating the ancient and modern contexts, Biblical interpretation can at times even be a contentious issue, with accompanying difficulties in arriving at consensuses. However, individual Christians should be encouraged to engage with the issues and take part in related debates in connection with wider communities. I hope that this essay on its part can help stimulate such engagement.

## <주제어>

제 4차 산업혁명, 인간, 사회과학적 분석, 윤리적 원칙, 상황화, 히브리어 성경, 신약성경

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### <초록>

# 인간과 제 4차 산업혁명

-세계와 성경적 세계 읽기-

Dr. Pekka Pitkänen (University of Gloucestershire)

이 논문은 주후 세 번째 천년기(third millennium)의 초반에 다양한 기술 발전들로 격변하는 사회적 환경에 속에서 종교로서 기독교를 상황화 하는 점을 다루고자 한다. 특히 소위 4차 산업혁명과 연관된 문제들과 글로벌 환경에 영향을 미치는 다양한 요인들을 분석하면서 구체적으로 아시아와 한국의 상황에 대해 제한된 논의를 하고자 한다.

우리의 토론은 수렵-채집 사회로부터 농경사회와 문명의 초기로 전환한 세계사의 콘텍스트 속에서 인간 사회들의 전반적인 발전 경로를 추적하는 것으로 시작할 것이다. 특히 제 4차 산업혁명은 바로 이 발전의 연속체안에 자리 잡고 있으므로 국가들과 제국들을 포함하는 발전적인 사회적 구조들의 역할을 중요하게 다룰 것이다. 그리고 나서 우리는 비록 성경 저자들이알고 경험한 사회들이 오늘날의 사회들보다 기술적으로 덜 발전되었다고할지라도, 성경이 그와 같은 사회 구조 상황 속에서 어떻게 쓰여졌는지 살펴보고자 한다. 특히 기독교 세계(Christendom) 시대에 기독교가 사회와 교류하면서 드러낸 특징들과 후기 기독교를 향한 움직임과 그 의의(意義)를 재고하게 될 것이다. 그리고 종교로서 기독교와 기독교적 정체성을 갖는 개인들이어떻게 자신의 사회적 콘텍스트 속에 올바로 자리잡으면서, 현대 세계와소통할 수 있는지에 대해 실제적인 제안들을 제시하고자 한다.

전체적으로, 이 논문은 성경과 주의 깊게 소통하는 것에 뿌리를 두고 기독교인들이 지역적인 쟁점들을 다루는 것과 함께 전세계적인 차원에서 세상 문제들을 다루어야 한다는 관점으로 4차 산업혁명의 주제를 다루고 있다. 우리의 이웃을 시랑하라는 예수님의 명령을 따라 정의와 평등을 최우선 적으로 추구하는 것이 과거의 성공과 실패를 비평적으로 분석하면서도 미래 의 혁신을 향한 개방성을 유지하는 윤리적 원칙과 행동의 규범적 모델을 제공할 것이다.

(trans. by Dr. Y. J. Lee)

#### <Abstract>

# Human and the Fourth Industrial Revolution: Reading the World and the Canonical Word

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This essay will offer considerations for contextualising Christianity as a religion in the changing societal setting influenced and even driven by new technological developments in the early third millennium AD, especially as they relate to the so-called fourth industrial revolution. The essay will include an analysis of a variety of factors that contribute to the accompanying global environment, with select comments on Asia and Korea as part of it. The discussion starts by outlining the overall developmental trajectory of human societies in the context of world history since the move from hunting and gathering to agrarian societies and the beginning of civilization. In this connection, the role of developing societal structures, including states and empires, is of paramount significance to consider, with the fourth industrial revolution standing in a continuum of this development. The essay then points out how the canonical scriptures were written in the context of such social structures, even if the societies known to and experienced by the biblical authors were less advanced technologically than ones today. An outline of Christianity's interaction with society especially in Christendom times and the move towards post-Christendom and its significance add to the considerations. The essay then moves towards formulating a set of practical oriented suggestions on how Christianity as a religion and individuals identifying with Christianity could best situate themselves within their

societal contexts and interact with them in the contemporary world. On the whole, the essay argues in line with the position that, rooted in a careful interaction with the canonical writings, it is vital for Christians to fully deliberate on and seek to engage with the world at the global level in addition to addressing local issues. In this, striving for justice and equality with Jesus's commandment of loving one's neighbour as oneself at the forefront offers a key ethical principle and paradigmatic model of action, to be accompanied with critical analysis of past successes and failures and an openness towards innovation in the future.