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The questions for post-apartheid South African missiology in the context of the Fourth Industrial Revolution

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South African missiology has seen a shift in its praxis since the late 20th century. David J. Bosch made a crucial contribution in this regard. The shift includes mission as a contextualised praxis and agency. In mission studies, agency has become necessary in postcolonial mission, primarily because of the loss of identity of the oppressed in colonised countries. Through contextual theologies of liberation, African theology, Black Theology of Liberation and postcolonial studies, theologians were able to reflect on the human dignity of the colonised. However, there are still significant efforts needed in this quest, and therefore, the praxis cycle used in missiology is useful to also assess effects on the oppressed and marginalised through the emerging context of the Fourth Industrial Revolution (4IR). In the task of doing mission in the world differently, the questions that missiologists ask are important. The emergence of the 4IR aims to merge the biological with the technological and will bring more challenges to mission work in Africa. This will bring upon us the responsibility to reflect on the notion of human agency, the theologies espoused in such a time and missiologists' contextual lenses and strategies employed. These should have to be carefully considered especially in a post-apartheid context. The researcher will, therefore, use the commonly used praxis cycle in missiological research to explore through a Socratic (questioning) approach what the implications will be for missiologists and mission agents in the quest of transforming church and the post-apartheid society.

Contribution: Though there has emerged a few theological contributions from missiology, there has not been a missiological contribution on the 4IR. The author therefore uses one of the theological methods in the discipline to put on the table the imperative questions that those doing missiological research should pose in the context of the 4IR.

Keywords: Fourth Industrial Revolution; Praxis cycle; Human agency; Spirituality; Mission strategies; Spirituality of communion; Spirituality of incarnation; Post-apartheid.

Introduction

The *missio Dei* has in the last decade been used as a notion to re-imagine mission within different contexts and has been employed to discuss the cutting-edge challenges in societies.[1] Nico Smith (2002:18) reminds us that just as mission is about God's work in the world, it is also about God's love for human beings (*missio hominum*). The shift in missiology has also been taken further through the *oikos* journey of the Oikos Study Group in South Africa that argues that mission is about God's *oikos* – the 'household of God'.[2] This is argued to function as a metaphor to understand God's mission in the world beyond the human interests exclusively. The Oikos Study Group (2006:24) that particularly focuses on poverty and how the *oikos* metaphor would operate states, 'God's economy concerns how the bounty of the world in terms of earth, water, air, plants, help human life to flourish'. All these contributions usher within mission studies a different paradigm in God's mission on earth: a move from the linear to the circular, a move from humanity to *oikos* (whole inhabited world). Bosch (1991:355) also refers to the symbioses against the subject–object approach in mission.[3] Mission is also about the interdependence of God's creatures on earth.

1. See, for instance, the missiological contribution of Botha (2009:287) on transformation within missiology, where he suggests that the mere 'mission as' of David J. Bosch opened up missiology for other possibilities, which was a transformative act in itself. I quote, 'His consistent description and analysis of "mission as," rather than "mission is," is in itself a major transformation from clinical, watertight definitions to a more open-ended understanding of mission'.

2. See also the Book on the *oikos* journey entitled, *The Oikos Journey: A Theological Reflection on the economic crisis in South Africa (2006)*, published by the Diakonia Council of Churches in Durban South Africa (Oikos Study Group 2006).

3. Bosch states (1991:357), 'A basic reorientation is thus called for. One should, again, see oneself as a child of Mother earth and as sister and brother to other human beings. One should think holistically, rather than analytically, emphasise togetherness rather than distance, break through the dualism of mind and body, subject and object, and emphasise "symbiosis"'.

Bosch (1991:355) showcases that God's mission is liberating and transformative for all God's creatures. Whether the Fourth Industrial Revolution (4IR) would espouse such a paradigm and features mentioned earlier depends on the critical questions that need to be posed by missiologists.

Therefore, this article will focus on the imperative questions that missiologists should ask in a 4IR context in a post-apartheid South Africa. The author will provide a brief definition of the 4IR followed by an introduction of the praxis cycle that will function and operate as a theological/missiological method in this article. It will then proceed with four critical and imperative questions that a missiologist in post-apartheid South Africa should pose in a 4IR context.

The Fourth Industrial Revolution

Klaus Schwab (2016b), as the director and founder of the World Economic Forum, was the first to coin the new emerging context as the Fourth Industrial Revolution (4IR) during the economic forum meeting in Switzerland. He refers to the effects that the emerging context will have on all societies. He argues that it will 'fundamentally alter the way we live, work, and relate to one another'. It will blur 'the lines between the physical, digital, and biological spheres' (Schwab 2016a:5). He further explains that it is 'a culmination of emerging technologies' fusion into the physical and biological worlds, the likes of which has not been seen before' (Schwab 2016a:5; cf. Andreoni 2019:vi; Skilton & Hovsepian 2016:9). Since the work of Klaus Schwab and his book *Fourth Industrial Revolution* (2016), missiology has not adequately responded to the challenges that such a context would pose to the South African society in terms of missiological research. The challenges in South Africa would relate to that of any other neocolonial[4] context – which cannot rule out the ongoing marginalisation, and dehumanisation of persons. Nevertheless, quite recently (2020), an edited volume *Engaging the Fourth Industrial Revolution: Perspectives from Theology, Philosophy and Education* was published as an outcome of scholars in theology that also reflects on the 4IR. Van der Berg (2020:10) admits that within the field of theology, the dialogue between 4IR and theology is non-existent. Although the volume provides some theological reflection on such a context, it does not address missiological concerns. Therefore, this contribution shows the gap in the missiological discussion, which this article will attempt to provide. Though these brief mentions to the 4IR are insufficient to understand it and its effects, the author will elaborate on it within each question-section as related to the praxis cycle.

The current social imagination within missiology

The contextual scope of the disciplines of missiology and practical theology (twin disciplines) has been considerably associated with the physical sphere as the 'practical' and contextual spaces in which the discipline functioned and is

imagined.[5] This is quite evident in the conceptualisation and social imagination within these disciplines by a mere cursory reading in missiological discourse. For instance, in practical theology, the work and theological method of Richard Osmer is commonly used at Faculties of Theology and Religion in South Africa. On close analysis of his book *An Introduction to Practical Theology* (2008), it is apparent that the case studies in his book, particularly his characterisation of 'listening' and 'presence' in his vignettes, are based on the physical sphere. In missiological discourse, there has also been a similar case. In a recent book published by missiologists at the University of South Africa (UNISA), *Pavement Encounters for Justice. Doing Transformative Missiology with Homeless People in the City of Tshwane* (Mashau & Kritzinger 2014), it is interesting to note the reference to 'pavement' encounters, which the editors argue signify the hard (pavement) realities that homeless people in the urban setting of Pretoria have been challenged with. Although the notion 'pavement' is clearly defined, this in itself would also signify the 'context' of missiology to be done primarily within the physical contexts – which eventually happened, during the research process – to engage the homeless people personally through contact at one of the centres in Pretoria.[6]

Nevertheless, within various missiological research projects itself at South African universities, where the praxis cycle has been used, the focus was on case studies and contexts that have often been less virtual or non-virtual than physical. However, the difference is not only between virtual and physical but the blurring of those lines, which Klaus argues would be the new context that the discipline will have to speak to. This has not been addressed before within missiological research and therefore provides a research gap in terms of providing the necessary methodological methods and instruments (questions) that would transform the way missiologists could re-imagine research in the 4IR context.

In the 1990s, missiologists at the University of South Africa (UNISA) introduced the praxis cycle (an adaptation of the pastoral circle of Holland & Henriot 1982). This cycle has been argued to be appropriate to unearth the realities that the marginalised and oppressed people have experienced in neocolonial contexts, including South Africa (Baron 2020:5). It is also crucial to state that the challenges posed by the 4IR was not part of the arguments and discussions at the time and factored into the pursuit of missiologists to address societal transformation. Therefore, based on the two arguments, it is necessary to explore what the impact of 4IR would pose as a novice context with regard to missiological research in the future, and moreover, what would be the appropriate questions to ask.

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5. See also Kritzinger's paper in which he also formulates, correctly so, within the predominant sphere, as the physical, for missiological 'encounters'. I quote his section on the notion of neighbourliness, that he replace with encounterology as a notion to discuss missiological praxis in interreligious dialogue, 'The unique role of missiology in relation to other theological (and social scientific) disciplines is to reflect on all the factors shaping the intentional encounters between followers of different religious ways. The title of this paper – "faith to faith" – is meant to sound like "face to face," since this is what a missiological approach wishes to achieve in response to the challenge of other religions: an informed and respectful faith-to-faith encounter that happens "uncushioned," face-to-face' (Kritzinger 2008:770).

6. The research was conducted at the Tshwane Leadership Foundation in Pretoria.

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4. Where the former coloniser and colonialist share the same geographical space.

Mission as transformation

The previous section focused on the role that a missiological method would have in terms of transforming society. This section discusses the importance of missiological research to change the livelihoods of South Africans, which has been suffering within a post-apartheid context. It is within such a framework that this article proceeds. This issue of mission as the transformation has been well addressed by Botha's (2009) review of the International Missionary Council meetings and subsequently the Commission on World Mission and Evangelism (CWME) meetings under the auspices of the World Council of Churches (WCC), showcasing the epistemological transformation that missiology has undergone but also the transformation that mission itself posed towards societies where mission agents participated in. It is important that in the light of the transformative role of mission in church and society, the questions and the conceptualisation of human agency in mission should be addressed. Moreover, how would the kind of questions missiologists pose transform the situation of the poor in the 4IR context?

The mission approach in post-apartheid South Africa should be based on the preferential option of the poor in society. The notion 'preferential option for the poor' has been well articulated and placed at centre stage not only in ecumenical Protestantism but also during the World Mission Conference in 1980 in Melbourne with the theme 'You're Kingdom come'.[7] The author argues that the dimensions of the praxis cycle are based on the perspective of the poor and to transform their condition. It would enable missiologists to pose the appropriate questions on human agency, on how to interpret the context and theology and on how to conceptualise the appropriate missiological strategies to usher the 'shalom' of God into the spaces of the marginalised, oppressed and poor in a post-apartheid context. Botha (2009:287), in his study on transformation, refers to Tiina Ahonen's study on Bosch. In her study, she refers to the Christian community as God's mission of transforming the world (Ahonen 2003):

> 'We know', Bosch asserts, 'that evil, injustice, hatred, estrangement, prejudice and fear will never entirely disappear from the face of the earth before the kingdoms of this world are finally consummated in the Kingdom of God. Nevertheless, the moment we allow this harsh reality to paralyse and sabotage our efforts, we can no longer pray the Lord's Prayer – "thy kingdom come, thy will be done, on earth as in heaven." To offer that prayer implies believing that Christians make a difference to this world … the community of those who are enjoying the foretaste of perfection – should get involved in God's mission of transforming the world'. (pp. 114–115)

Let me refer to other issues that Botha raises in terms of mission as transformation. Through a cursory look at Stephen Neill's contribution at the Whitby World Mission Conference in 1947 and his reference to the centenary of the

Communist Manifesto in 1948, Botha argues that 'ideas on transformation in Christian Mission should be kept in creative tension with secular ideas of transformation'. In fact, he argues that if this is done, Christian mission would be able to contribute immensely to the world (Botha 2009:289). Botha mentions the immense contribution of the Bangkok World Missionary Conference in 1973, where a clear association was made between personal salvation and the transformation of social, political and economic structures of society as 'an instruction of God' (Botha 2009:289). This is based on the biblical text in Luke 4:18–19. In terms of this biblical text, Botha (2009) argues that mission as salvation (transformation) is reflected in four dimensions:

> [T]he struggle for economic justice and against the exploitation of human beings by human beings, the struggle for human dignity in the face of political oppression, the struggle for solidarity in the face of the alienation of human beings, and the struggle for hope against the hopelessness in individual lives. (p. 290)

This is in a nutshell how mission as transformation could be conceptualised. It is within this paradigm that the arguments of this article operate.

Therefore, in the context of transforming South African society for the vulnerable, what questions should South African missiologists pose in a post-apartheid context and, at the same time, in the context of the emergence of the 4IR? The following section is structured in terms of the four dimensions of the praxis cycle that would raise some of the critical questions in each section that missiologists in a post-apartheid context should ask in a 4IR context.

The conceptualisation of human agency in Fourth Industrial Revolution

One of the paramount questions that missiologists should ask within a postcolonial context is to identify how the mission agents perceive themselves in relation to the community they are participating in. It is about how they understand themselves and how they want others to understand their role and function.[8] This has been highlighted by Kritzinger as a two-way encounter in mission praxis, the 'self-identification' and the 'self-knowledge' continuum (Kritzinger 2008:76). It is apparent in the discourse of the 4IR that it will produce a 'mixed reality' (Nandram 2019:15) – this situation will warrant people to envisage each other through their experience of physical contact as well as how they experience others through the digital platforms (e.g. applications on their phones) (Nandram 2019:15). Mission agents should therefore be able to integrate these 'presentations' and experiences in a creative way. There is evidence that this would be complex in the face of the split of social identities between the physical and the virtual.

7.See Botha's (2002:25) reference to the notion and its discussion at the CWME of the WCC.

8.Nandram (2019:16) argues, 'In the Fourth Industrial Revolution, we can augment the use of our senses through, for example, implants of artificial eyes in our bodies. These implants are not extra accessories that we can decide to use. Instead, they become part of ourselves. How will one be able to know what the real self is? The question of "who am I?" will have to be reconsidered many times in life. As contextualising things again and again will become important, a special kind of intelligence is required — an intelligence that is contextual'.

The analysis of an online community will, therefore, require a different kind of analysis of people's expression, participation and interaction. Missiologists who were only focused on the either/or situation – meaning its either online or physical engagement – will have to deal with the conflation of the two. The person's reaction within an online context might not be congruent with that of a physical contact situation.

Missiologists should address the particular experiences of each participant in an online, digital environment. In the post-apartheid situation, the notion of black consciousness has become crucial to promote the experiences of black people in South Africa. However, those new (online) spaces should become liberating spaces not only for black faces but also for black experiences.[9] It is evident that the struggle in the post-apartheid context is both a class struggle and a struggle of racism (white supremacy). This encapsulates Mbembe's (2007:144) notion of formation of a new black solidarity in the post-apartheid context. Therefore, missiologists should investigate how these online and digital spaces would be liberating (or not) to the 'black experience' in a post-apartheid context.

A second issue that would be key in terms of human agency in mission is the idea that the 4IR will reproduce the human being's functions and abilities in the form of artificial intelligence (AI). Though this would rapidly change the efficiency of responsibilities and tasks being carried out in business environments, as well as promise various benefits within ecclesial contexts, missiologists should be posing critical questions on the (non)-agency of human beings in the post-apartheid context. Williamson-Lee (2018) writes on AI:

> From these language models, they create associations between words, some problematic like '"he" is to "she" as "brilliant" is to "lovely"'. With people's implicit biases modelled through language, machines become trained in the sexism and racism predominant in our culture. (p. 1)

Nandram (2019:16) underscores the reproduction of human beings' functions and abilities during 4IR. Though this might also pose various benefits in terms of efficiency, it would, at the same time, pose serious concerns for mission practitioners and missiologists. It would be imperative for them to ask in terms of human agency: whose human being standards, actions and patterns would all human beings be standardised? This is crucial to ask in the post-apartheid context, where all human life is mostly standardised in terms of the middle-class citizens' lifestyles and personhood, and in the apartheid context – whites. It would, therefore, be important to observe what those new standards will be, and in terms of who and which human being's actions, patterns would be reproduced and standardised. Would such standards also take into consideration the effects of apartheid, which has not left its claws from the most vulnerable and the poor in our society? In the latest attempt by scholars at the University Free State,

9. The reference here is primarily based on Mbembe's argument that pigmentation should not be the only determinator of black solidarity but also 'class', especially because in post-apartheid South Africa there emerged a new black elite.

that included a theological perspective on the matter, it has been affirmed that 'technology is never neutral'. Van der Berg (2020) states:

> Technology is increasingly becoming embedded within societies, objects and even our human bodies. The impact of the Fourth Industrial Revolution thus resulted in dramatic changes in the industry, markets, employment trends, society, culture, and even the balance of global power. Unfortunately, technology is never neutral. (p. 3)

This standardisation will also find concreteness through the introduction of 'robotics' that has already found its way into some specialised fields and instruments. The notion of 'robotising' will become a new way of singularising purpose and actions (Nandram 2019:16), which makes up most of the critique in Bosch's seminal work *Transforming Mission* (1991). In postcolonial discourse, it has strongly been argued that there should be a movement away from singularity to plurality and contingency – which would mean endless possibilities! However, the 'robotising' that forms part of the new technological advances that the 4IR would usher into post-apartheid South Africa would move society also in a philosophical way back to the modernism paradigm. In contrast, Bosch (1991:349) introduced a new paradigm shift, namely, the postmodern approach in mission – that he argues is a move towards boundless creativity, naming it the eschatological.

Nevertheless, robotising would, on the other hand, frame human existence in standardised patterns that Bosch equates with an 'evolutionary' pattern and a non-eschatological pattern (Bosch 1991:356–357). However, the praxis cycle itself fosters new adaptation and fluidity in the process of engagements aligned with Bosch's (1991:356) suggested postmodern paradigm. In contrast, the approach within the 4IR process is too neatly pre-packaged with all its accommodations, simulations and algorithims. Therefore, it is evident that the 4IR will offer a middle-class epistemology. This being said, missiologists who want to do missiology from the perspective of the poor and the marginalised should keep tab on indigenous knowledge systems as often a 'cinderella' episteme in science and technology and would become a rare one in the 4IR context.

The agency of the world in 'God's mission' (*missio Dei*) will also be tested on the sharing of authentic experiences of God's creatures. The 4IR technologies would pose challenges to black people when 'experience' of an agent as an intergral part of the praxis cycle would be outsourced to robotics and AI (Waghid et al 2019:6). For instance, when doing mission in the context of trauma: what will it mean in terms of the interception of robotics in the realm of pain and trauma? There would be lack of an authentic 'encounter'. It would mean more if a person who caused the hurt and pain would be the one who would 'physically' confront the 'other' as part of the healing process. This would pose a challenge for AI where a robot could be used to do it on behalf of humans? That cannot be translated

into the interception of technology between human persons and the cosmos.[10] Africans, in terms of the philosophy of ubuntu, would argue that a person is a person through another person and therefore this would not suffice in an African spirituality. The migration to various technologies could also endanger the function of the soil and the cosmos that serve the purpose of flourishing African life and cultures.

The question in this section is also about where the power will lie through the novice developments in South Africa. Bosch critiques in terms of a Western development approach, the approach of development through European models in Africa, when he states, 'The consequences of the development model were, however, contrary to what had been expected. The rich countries became richer, and the poor still poorer'. Human beings in the non-developed world became 'regarded as mere objects in a network of planning, transfer of commodities, and logistic coordination in which the development agent was the initiator, planner, and master' (Bosch 1991:357). However, more importantly, on development (in this case, technological development), Bosch (1991:357) argues, 'It became clear, deep down, this [*power*] was the real issue, and that authentic development could not take place without the transfer of power'. Bosch also reminds us that with the West having a head start with technological advances, it will make it 'virtually impossible for other countries even to catch up'. This reminds us to be cautious and ensure that the poor will not be left powerless again through the structural ramifications of 4IR and lose its agency in the hope of the promising benefits of the emerging context.

In terms of human agency, in a 4IR context, it should be important to think critically about the replacement of humans and their empowerment in mission. Klaus Schwab (2016b) states, 'As automation substitutes for labour across the entire economy, the displacement of workers by machines might exacerbate the gap between returns to capital and returns to labour'. This calls for cautionary measures and to be careful that it does not circumvent the role and function of human beings to facilitate transformation. This projection of Klaus on the effects of the 4IR also makes it imperative to ask how mission agents interact with their communities. Will it take place through proxy, and will it value personal, physical contribution? Schwab (2016a) illustrates how this will unfold in reality: 'Ordering a cab, booking a flight, buying a product, making a payment, listening to music, watching a film, or playing a game — any of these can now be done remotely'.

Moreover, the sense of 'outside' control of neurotechnologies for practical expediency in the 4IR context poses a danger for decoloniality in Africa. According to Nandram (2019):

> Virtual reality devices can be used to analyse users' responses by tracking their eye movements and head positions, and by monitoring their emotions. This data then can be used to influence human behaviour. (p. 16)

This might be incredible and efficient, especially the emergence of medical equipment that would be able to 'take-over' the tasks and roles of a person. However, the 'encounterology' approach that Kritzinger (2008) proposes for mission praxis that should form an integral part of mission encounters could easily become obsolete. This is important in the post-apartheid context, where trust should be developed between people in a former racially divided country that has not yet overcome its racial past. This authentication in relationships through 'encounters' that Kritzinger suggests is of crucial importance for validation, trust and hope. Kritzinger argues that it is not only the mission agent and the community or individual who participates in the act of mission but the 'encounter' itself. This is what would be 'missing' when human agency has been 'outsourced' through neurotechnologies.

The challenge will also be in mission encounters, and missiological research, to re-imagine 'physical' encounters and reflect on what 'virtual encounterology' would entail. Waghid (2019:6) provides an appropriate illustration of how this can be imagined in 4IR context through three-dimensional imaging. This might help the 'encounterology' and the experiencing of others when a person, through virtual reality, experiences the 'other', whether in poverty or unemployment, and these technologies would serve as a good alternative.[11] But what would this mean for an African culture that is in essence linked to the cosmos (the earth) – this would, in African culture, not meet the criteria of 'encounterology'. Therefore, the negotiation and replacement of online encounters can only function as a substitute and not a replacement on physical encounters.

However, on the other hand, certain 4IR technologies do not focus on the role of a person and their 'self-identification' and 'self-determination' in the process. This should be a critical aspect that should be analysed by missiologists in a post-apartheid context. Williamson-Lee (2018:1) reminds us that computers are not 'conscious'. This does indeed go against the notion of 'human agency' as integral to the process of doing mission. She states, 'Perhaps conscious machines in the future would have the reflective capacities to recognise their own biases, but as it stands now computers are not capable …'. Mission agency cannot be outsourced – the church and God's creation alone can fulfil his *missio Dei* in the world. The awareness of God and one's agency in the world is important, which cannot be replaced. Bosch (1991) states:

> First the machine replaced the human slave, then humans were turned into slaves of the machine. Production became the highest goal of being human, resulting in humans having to worship at the altar of the autonomy of technology. (p. 355)

The notion of agency, as in the missiological praxis cycle, will become inclusive of 'digital beings' and not only

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10.See Van Schalkwyk's (2019) article on ubuntu and land African culture as part of ubuntu philosophy.

11.'Put differently, when students, for example, are initiated into deliberations about poverty and inequality in South African communities, teachers could use 3D images on the basis of which students would be exposed, through virtual reality, to images depicting poverty and unemployment. In this way, students could become more compassionate towards vulnerable others in their learning – a matter of exercising compassionate imagining through seeing and putting oneself in the shoes of vulnerable others' (Knot-Craig 2018:6).

'real human beings' within 4IR contexts. The interactions and relationships could become more 'digital', and such 'encounters' would become the norm in a 4IR context. Missiologists would be required to become skilful in the analysis of those digital interactions and power relationships that transpire on 'digital' platforms. Nandram (2019) argues:

> It seems that our ability to make decisions will be diminished in the Fourth Industrial Revolution. Decision making or, in other words, exercising wisdom is a core human activity. Wisdom, put merely, is knowing when to do what and to what extent. (p. 16)

The praxis cycle within missiological research also placed emphasis on collective participation in terms of solving missiological problems. Schwab (2016b) states:

> The fourth industrial revolution renders technology an all-pervasive and predominant part of our individual lives, and yet we are only just starting to understand how this technological sea-change will affect our inner selves. Ultimately, it is incumbent upon each of us to guarantee we are served, not enslaved, by technology. At a collective level, we must also ensure that the challenges technology throws at us are properly understood and analysed. Only in this way can we be certain that the fourth industrial revolution will enhance, rather than damage, our wellbeing. (p. 97)

Bosch (1991:362) asserts, 'The enlightenment creed taught that every individual was free to pursue his happiness, irrespective of what others thought or said'. However, Bosch argues that in the postmodern paradigm of mission, it should 'retrieve togetherness, interdependence, "symbiosis"'. In contrast, the digital spaces have become in some ways often isolated spaces where people would become unauthentic, indifferent 'selves', but also become isolated from the outside world (Nandram 2019:16). In terms of effective mission practice, mission agents should be able to discern those patterns and encourage people not to construct online enclaves. Online platforms become more exclusive and often involves groups that could enforce conformity instead of diversity. For instance, it is interesting to observe how many groups would be formed on social media platforms that would encourage uniformity instead of pluriformity. This would lead to a narrow and singled-storied view of the 'selves', but it can also lead to a 'pluri-view' of the 'selves'. This should be negotiated in new ways within digital social spaces. The choices that people make in this regard will determine their agency in society, transformation in the world and the impact of their choices. In terms of an online environment, connections and relationships could easily be formed, but at the same time, it can also easily enforce 'group pressure' and social pressure that could stifle individual creativity, autonomy and self-determinism (Knot-Craig 2018:2). Botha (2009:283) addresses mission as transformation in one of the edited volumes of the Edinburgh 2010 centenary series when he argues that mission as transformation would 'reject conformism'.

However, there is no need to underplay the bridging between communities that virtual platforms can create: 'More people connecting with more people makes for a bridge between communities, and one big community from many little ones' (Knot-Craig 2018:4). Knot-Craig (2018) also states:

> [W]hen university teachers and students become increasingly engaged in the digital world, there is invariably more pedagogical space for disruption and dissent as a manifestation of the engagement of such teachers and students with otherness. In this way, university education would become connectivists rather than just instructivists, which leaves open the door for more innovative and flexible ways of becoming. (p. 4)

Imperative missiological questions for the Fourth Industrial Revolution context

The contexts would indeed change and would require different questions from missiologists for the emerging context. Excluding the manner in which human beings would be regarded in a 4IR context, we should look at other contextual issues that would require critical questions from missiologists. In terms of the praxis cycle, the context analysis would primarily focus on physical contact. However, in a 4IR context, missiologists should engage their context beyond the physical but still need to pose critical questions in those spaces – relating to the social and political spaces – and engage the effects of and impacts on 'missiological' issues and its manifestation on digital platforms. It would be imperative that missiologists should become more skilled in analysing the political, economic and ecclesial issues on those platforms. It would be important to note that such an experience would be different from experiences of physical contact. Missiologists should analyse the influence of the digital environment on a person or community's physical experiences. How do their online engagements influence their engagements with people in physical encounters? This would be one of the questions that would be crucial in a 4IR context. Moreover, missiologists should be aware of the interplay between the two environments, and this should be taken into account when engaging the online communities. This is well illustrated through the example of Knot-Craig (2018:3) that 'we will behave better' when all movements are under surveillance.[12] In psychological discourse, it is a scientific fact that people behave differently when they are aware of the attention on them (for example, before and after an interview compared with during the course of an interview). The dynamics of this interplay between the physical and virtual spaces would need some critical engagement from the vantage point of missiologists when analysing their new context. There would be a definite emerging consciousness of mission agents needed, as well as participants, in mission in terms of how they experience

12. He states, 'Today there are cameras everywhere and more people connected to the internet who has access to what they film — accountability in high definition. Everything exists forever and is easily accessible and distributable. Bad behaviour is shared and shamed, so you can't do anything anymore without risking public exposure'. He further states, 'Would the Gupta brothers have been as brazen if they knew that their business emails were going to be leaked? No. Would Mduduzi Manana have beaten-up two women outside of a Cubana if he knew that the video of it was going to make the rounds? Unlikely. Would Adam Catzavelos have thought twice before throwing around the k-word on his Aryan holiday if he knew what the backlash would feel like?'

the world (Nandram 2019:16).[13] The mission agents should discern what the 'world' and 'reality' (ontology) is for the participants in the mission encounters. There would be instances where the 'reality' is virtual and their exposure to 'physical spaces' is limited. Their experiences of the world and 'reality' will also be different. Therefore, as one enters into the emerging 4IR context, this would require additional analytical skills and missional discernment of missiologists.

The design of the praxis cycle is also to empower and transform the lives of the most vulnerable. Therefore, the dimension of context and, in this case, the emerging context of 4IR should not be engaged with, without laying bare the influence of the new context on the inequality, power and domination that it will pose for the African context. The argument that Williamson-Lee (2018:1) makes is that the 4IR would not work if society, which the author understood as post-apartheid (neocolonial) and 'classist', does not change. Artificial intelligence and other 4IR instruments will perpetuate the conditions that are entrenched in human society. Therefore, missiologists should be able to observe who has been profiting out of the new context and how does it disempower others. Nandram (2019:16) argues that new technologies 'can undermine trust, collaboration, and empathy. Where these technologies can be used, they can also be misused'. The National Development Plan (2030) of the South African government does refer to the 'digital divide' that the 4IR can create (cf. Waghid, Waghid & Waghid 2019:3–4). However, it remains crucial that missiologists would be able to keep tabs on the livelihood of the poor and the vulnerable in South Africa.

Klaus Schwab (2016a) states about the inequality that the 4IR context will bring about:

> In addition to being a key economic concern, inequality represents the most significant 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 explains the rising gap in wealth between those dependent on capital versus labour. 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 result is a job market with a strong demand at the high and low ends, but a hollowing out of the middle. (n.p.)

It is apparent that the 4IR would provide access to some but would become inaccessible to others. Therefore, missiologists, through their research on 4IR, should always ask who is not part of this community, especially when it is an online research instrument and platform that is being used. Who does not participate? It would perhaps, within a 4IR context,

be more appropriate to analyse the context through the perspective of 'class' and not exclusively race as a socio-analytical conceptual instrument.

Nandram (2019:16) argues, 'As contextualising things again and again will become important, a special kind of intelligence is required — an intelligence that is contextual'. It is also possible that the online environments will become 'too global' through interconnections and networks that are unrelated, irrelevant and inappropriate to the physical context. This might threaten mission engagements that aim to be first contextual and, through its lens, provide global solutions and interventions. It requires mission agents to discern amongst various global networks in their context and that of the participants. This would be more than ever a challenge for those in the African context who have, in the recent past, been able to employ its contextual approaches to their situations. Therefore, it would be important to ensure that Africa employs tools and instruments within the 4IR that are appropriate to address the challenges in South Africa.

Chiweshe (2019) cautions missiologists of the emerging bias and prejudices that will be further entrenched in society as an outcome of the 4IR context:

> The assumption is that computer programmes are bias-free and algorithms can reduce the influence of gender, race, age or any other factors that may affect how people are evaluated. However, algorithms are programmed by humans and as such have an inbuilt gender bias in their language, indicators and measurements, which in many ways perpetuate inequalities. For example, algorithms that measure the productivity of workers may not take into account historical, cultural and social factors such as work-life imbalances that women have to deal with in patriarchal societies. (pp. 5–6)

Finally, what questions should the church pose as an agent of God's mission in the world? The church should, as part of its mission in the world, provide effective and efficient alternatives in relation to the rest of South African society. It is interesting to note that the churches are not included in the sectors that need to be developed in terms of the 4IR strategies that are gazette by the Department of telecommunications and postal services, by the South African government's strategies (RSA 2018:6). Therefore, churches and congregations should become intentional and deliberate in their integration and embracing of 4IR strategies with caution. The church, especially the Sunday School, might be a relatively good environment to expose children and develop their skills to use such technologies and, in such a way, also prepare the effectiveness and efficiency of the future church for doing mission work in the world. However, the church is also cautioned in its embrace of the 4IR technologies to be cautious of its tasks for character formation and how 4IR could also allow deformation instead of moral formation (cf. Conradie 2006). It is apparent also that in a 4IR context, there would be a shift from character to skills, and this would be a focus

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13.'Virtual, augmented, and mixed technologies will blur the lines among artificial technology, the external world, and the role of human intuition. They will also give rise to existential questions about how humans experience the world. With these technologies, a person can realistically simulate being in another country' (Nandram 2019:16).

within communities such as the church environment. What will happen to the moral formation task if people become more focused on their skills and the task of moral/character formation becomes less important? This would be a challenge to the church to still focus on the task of forming Christian virtues that are needed to be God's agents in the world. However, as observed during the COVID-19 pandemic, the church can also become too comfortable with its 'e-church' services, whereas within most parts of South Africa this remains inaccessible to the majority of South Africans. The church should also not forget about the incarnational nature of the good news, as has been demonstrated through the earthly life of Jesus.

How should missiologists reflect theologically on encounter in Fourth Industrial Revolution context?

There exist good theological interpretations and missiological contributions on the physical presence of doing mission and 4IR context. Those who would argue for a biblical mission paradigm have often used the examples of physical contact, especially Jesus' mission on earth (incarnation) and the understanding of the 'Great Commission', and also mission at a distance – 'Paul's letters' to his congregations whilst he was in prison. Although the Pauline missionary approach would be close to the 4IR context, it is not the same. Therefore, missiologists should be able to come up with a theological interpretation of mission and articulation that would demonstrate the shift in a theological–missiological hermeneutic of 4IR context based on an appropriate biblical hermeneutic. However, in terms of agency, the contact between people will indeed pose a challenge for the theology of mission in the postmodern paradigm that Bosch (*Transforming Mission*, 1991) was advocating in his seminal work.

Missiologists should ask the following question: how does the 4IR context allow missiologists and participants in mission to understand God and the *missio Dei*? For instance, when there are computers and robots to do things for us, with limited hassle and less frustration to get things done, how would we be able to understand the notion of 'grace' if we had less to be dependent on in the world? Furthermore, one wonders, if a computer can do a better job of playing chess, how would it affect our spirituality? How do we see their computerised feelings? What if a computer tells you he feels bad because he can pick the negative feelings in the air? What will it mean for our biblical narratives of human beings in God's image? There is, therefore, a need to reflect on the theology of incarnation. What does the situation pose to our understanding of Jesus becoming human, and to make contact with the world in human 'clothes'. Our confession that he is both God and fully human is one that reformed Christians hold on as foundational to their understanding of Jesus' incarnation.

There is a need for missiologists to have their contextual theologies (postcolonial, Black Liberation, etc.) in their front

pockets. It will be imperative to read the Bible from the perspective of the most vulnerable and marginalised in society. Public theology of human dignity is crucial to understand our value, contribution and agency in the Kingdom of God on earth. There should be a reflection on a biblical interpretation of justice in the Kingdom of God and what it means to leave the 99 and focus on the marginalised. Chiweshe (2019) states:

> It shows that automation in productive sectors is placing women's employment at risk, as they are largely found in low-skill and routinised professions. Studies demonstrate that in specific female-dominated industries, technology will reduce jobs. The other misgiving in Africa is that the 4IR, like its antecedents, will further entrench gender inequalities. (p. 1)

This would necessitate the prophetic role that missiologists should embrace during the 4IR context, especially in the light of the deafening silence of the prophetic voice of the church, as argued by Makofane and Botha (2019), as well as Kritzinger (2012). Missiologists should also ask in a 4IR context for whom is the *good news*? Especially because Chiweshe (2019:6) mentions that '[t]echnological advances in Africa have not been met by a change in socio-cultural systems, which underpin women's exclusion and gender disparities'. The danger is that the new technologies will entrench these patriarchal inequalities, as women still lack access to resources such as land, technology and credit. The neocolonial context, the class society in the post-apartheid context, calls for a new kairos, an opportune time to prophecy the good news for *all* and that the 4IR would only be embraced once it is good news for *all*. However, Kwet (2019:2) focuses on not only what conditions it will create (inequality and bias) but also who will possess the political, economic and social power. He argues that the Global South will again loose its power to another country (United States of America) if it does not ensure that, during the emerging 4IR context, the people in the Global South do not succumb to digital colonialism.

Missiologists should continuously use the poor and the marginalised as their primary interlocutor. Although it is apparent that the 4IR will deliver myriad benefits for developing countries (including South Africa), the mission of God through Jesus Christ demonstrates his main concern in the devastating effects caused by the powerful systems of the day. It should be a theology in the context of 4IR that still raises the challenges and conditions of the poor. The 4IR context requires missiology to be primarily based on not only a 'race-based' critique but also a 'class-based' critique (Knot-Craig 2018).[14] Therefore, a theology that speaks to inequality through 'class' would be the most appropriate critique in 4IR context, especially in the emergence of a new black elite in South Africa (cf. Mbembe 2007).

The reflection of mission constitutes a question for the shalom in the household of God (*oikos*) that includes the

14.It is interesting to note that Knot-Craig does not mention 'class', but that 'Societies and business will become more inclusive and less defined by race or gender'.

environment and calls for the appreciation of God's mission and conservation of the earth (cf. Conradie & Ayre 2016:7–8). Missiologists should ask questions not only on the human agency but also on the effect it might pose to the environment. They would need to reflect theologically on the sustainability of the environment and the transitioning to a 'low-carbon economy' (RSA 2018:10). These systems have been implemented and created by those who are not always close to the vulnerable and the poor and familiar with the conditions of the marginalised. Therefore, all these systems would not necessarily take into consideration these categories. A theological response from these perspectives would, therefore, offer an oversight function to continuously assess the effect and impact on the environment and its impact on the marginalised.

How would the Fourth Industrial Revolution change the strategies for mission?

The mission strategy of mission agents will have to change especially from a conservative position to a position of interaction and encounter. The open and connected environment would immediately allow the frequent interaction between various religious and cultural traditions and would be able to enrich the mission enterprise (Knot-Craig 2018:4).[15] However, it would then be crucial for missiologists to allow their positions to be open to engaging the 'other', which differs from their theological persuasion. This has been emphasised through discussions at the World Mission Conference in New Delhi (1961) with the theme 'Mission and Unity' (Ross 1983). The 4IR, therefore, would also allow for opportunity or threat – depending on the kind of actions and interactions that the agents would be willing to expose themselves to and integrate. Therefore, missiologists would require a more fluid approach in their encounters. The engagement with online communities that were previously inaccessible would, in a 4IR context, be able to allow for frequent and closer engagement.

In contrast, in the past, most missiologists would only be able to enter those communities through physical contact and encounters. This would especially be good for South Africa that is still struggling to deal with its racial, gender and geographical segregation. The fusion of identities would be growing at a much faster pace on such digital platforms and would be beneficial for social cohesion.

Nevertheless, the mission strategy should be that of inclusion. Therefore, it would be important to ask how mission would engage with those communities and persons who would be out of the 4IR radar: the homeless, the technologically impaired and the psychologically impaired and conditions that would not be able to make it possible to engage within such an environment. What about those who are mentally impaired and who cannot be reached? Surely the 4IR would

also be able to have instruments that would enhance mission engagement to those people and communities. However, mission agents would have to be able to facilitate it and provide tailor-made interventions to those communities to ensure that the mission remains contextual. The physically impaired would perhaps be better served through technological advances. However, as the church was involved in walking alongside the poor and the marginalised in South Africa, solidarity through mentorship will also be one of the core tasks of the church. The church should create platforms and engage with stakeholders and investors to assist the poor in order to gain access and develop the technical skills of the communities they engage with. Manda and Dhaou (2019:249) state, 'The skills challenge in South Africa is as a result of the complexity of socio-economic and socio-historic factors'. This is said against the backdrop of various scholars who are projected as jobless in the 4IR context (Manda & Dhaou 2019:247). Manda and Dhaou (2019) state:

> An estimated 30% of workers in South Africa are unskilled with semi-skilled workers constituting 46% and skilled workers being the least at 24% (Statistics South Africa, 2018). The skilling and re-skilling of workers is an immediate priority in preparing for the 4th industrial revolution. The majority of unskilled and semi-skilled workers come from historically disadvantaged groups (Statistics South Africa, 2018). These groups have for decades, been denied socio-economic opportunities such as access to quality education. The effects of the social injustices perpetrated by the apartheid government are still being experienced two decades. (p. 249)

It should change missiologists' (and mission agents) approach from a primary physical and contact one to that of a 'virtual' and 'distant' one. It would warrant missiologists to make use of the instruments within the 4IR context that would allow the rapid and boundless engagements with people in various contexts and communities to participate in the *missio Dei*. Knot-Craig (2018:5) argues that projects of public participation would be made convenient, faster and quicker and will inform all participants about the latest developments on an issue. This has been demonstrated through the COVID-19 pandemic in all countries. Therefore, it is crucial for missiologists and theologians to be involved in the construction of, or in an advisory capacity that serves to provide data of, the African context and the 'cutting-edge' developments in communities such that it is streamlined with the approaches and technological advances that will become apparent in society. It is not time for mission agents to become pietistic, isolate themselves and focus on the old paradigmatic approaches but to provide clarity and guidance to transform contextually the societies that will be affected by the 4IR technologies.

What spirituality is imperative in the Fourth Industrial Revolution context?

Although the praxis cycle has four dimensions, in which the author also poses the critical questions that missiologists should ask at each dimension, the cycle is inherently driven

15.He states, 'Online, people are not restricted by geography, gender, sexual orientation, race or religion. This allows them to connect with people that would usually be physically, culturally or socially out of their reach. Moreover, connect because of who they truly are, behind the labels we lump onto them'.

by the missiologist's spirituality. Therefore, in light of the four dimensions and the subsequent questions, the author now wishes to address the kind of spirituality that is appropriate within a 4IR context.

The 4IR requires a spirituality of communion. This would mean that missiologists should be driven inherently by an ethos of inclusivity, togetherness and interdependence. This is true to the postmodern paradigm that Bosch argues should be a new approach in missiology and mission. This would address issues of inequality as well as individualism that would endanger an individual effort towards the complete liberation of the poor and the marginalised. This is equally needed as has been the case during apartheid South Africa; a sensitivity towards the poor and the marginalised. Though the 4IR technological advances would assist South Africans to create more financial capital within the current dire economic situation, it would be equally important to ensure that the government and missiological research would promote the notions of equality, equal opportunity and human dignity, and therefore, the innovations should also benefit the poorest of the poor. A spirituality of communion would be needed in a church environment, where people would become accustomed to digital church platforms and not obliged to 'enter' physically the spaces of others – especially those who need to 'feel' the embrace and inclusion. Therefore, spirituality that would be consistent in creating efforts of inclusion, belonging and justice on these platforms is required. Nandram (2019) argues:

> The Fourth Industrial Revolution needs people who know how to intelligently drive technology in a more holistic and integrative way. It also requires the rebuilding of the narrative of who we are and why we exist as human beings. Spirituality is at the heart of both of these needs. (p. 21)

There should be a spirituality of love for people and their dignity. It is God's household, not robots, things (IoT) and AI, that remains important in missiological research. The spirituality of mission agents should be that of a love for God's household.

Finally, the author argues that missiologists and mission agents should embody a spirituality of incarnation. This is addressed by Bosch (1991:447) when he refers to mission as inculturation. It would still be important for missiologists to become part of communities by making bodily contact with them and 'experiencing' other cultures. Bosch (1991:452) states, 'The Christian faith must be rethought, reformulated and lived anew in each human culture'. The 4IR context might easily become a means of demonising humanity and our bodily existence in the world. Jesus' incarnation, his bodily interactions, is what Christians throughout the ages have celebrated with our confession that he is not only God but also fully human when on earth. The Bible demonstrates his vulnerability through his 'hunger', his excruciating pain and death as paradoxical as it is – to present the humanness of God as well as his 'divine' redemption. In the African context, it would be crucial for people to connect also with the humanity of Christ through the tangible actions of Christians in the world. The missiologists should be critical of this and promote, therefore, such a spirituality of incarnation.

Conclusion

There is not an extensive body of knowledge related to missiological research and the 4IR context in post-apartheid South Africa. Therefore, this contribution explores some of the critical questions that missiologists should pose because of the work of David J. Bosch (1991:349–519) and his proposal on a Relevant Missiology for the 20th century and beyond. The author uses the praxis cycle not only as a method but also as a means of structuring the article and to pose the relevant questions that missiologists should ask in a post-apartheid context. The praxis cycle, as a tool for missiologists, is still appropriate within the 4IR context, and it unearths the grave inequalities and the dire conditions of the poor in South Africa. It is apparent that the 4IR will be challenged by the historical injustice of the apartheid government and that mission should reflect critically on the effects and challenges of 4IR that are posed towards transformation in society.

Acknowledgements

Competing interests

The author declares that he has no financial or personal relationships that may have inappropriately influenced him in writing this research article.

Author's contribution

E.B. is the sole author of this research article.

Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

Funding information

Data availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Disclaimer

The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of any affiliated agency of the author.

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