

Hacking the Divine : A possible metaphor for theology-technology engagement

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Abstract

In this paper the metaphors of 'God as hacker' and human beings as *created co-creators* are linked with the narratives of creativity, novelty and experience that can be seen within contemporary technoculture. This type of approach is envisaged as one of many that might be used to engage with technology theologically. Drawing upon the tradition of God as creator and a functional interpretation of the *imago Dei* in humans it aims to open up a conversation with technology. This conversation looks to move beyond mere abstraction and into existential questions raised by new technologies together with identifying how to live wisely within the everyday technological world.

Introduction

What place does the Christian church and theology have with respect to a twenty-first century technoculture? How might the theological imagination be stimulated in such a way as to bridge the gap between theology and the technological culture that we find ourselves within. Theologian and bioethicist Ronald Cole-Turner in contemplating this asks the following critical questions,

Can theology – that communal process by which the church's faith seeks to understand – can theology aim at understanding technology? Can we put the words *God* and *technology* together in any kind of meaningful sentence? Can theology guess what God is doing in today's technology? Or by our silence do we leave it utterly godless? Can we have a theology of technology that comprehends, gives meaning to, dares to influence the direction and set limits to this explosion of new powers?¹

Cole-Turner goes on to state that two crucial tasks facing the contemporary Christian church are the relationships firstly between science and religion, and secondly between theology and technology. In terms of the interaction with science he notes that theology becomes an interpretive task. A task which draws upon science for an understanding of how divine

¹ Ronald Cole-Turner, "Science, Technology and Mission," in *The Local Church in a Global Era: Reflections for a New Century*, ed. Max L. Stackhouse, Tim Dearborn, and Scott Paeth (Grand Rapids: Eerdmans, 2000), 101.

creativity has been and is currently manifested. The recent developments in work in this area seen in the increasingly active science-religion area are signs that the church is beginning to realize this.

The second task of engagement between theology and technology is much less developed. Here he argues that theological engagement needs to be based upon an understanding of human creativity and how God is active in the technological process. Furthermore he asserts that there are pastoral implications in how technology might be used within the church to serve God.²

This division between science and technology into two related but distinct entities stems, Willem Drees contends, from the idea that technology is about *transforming reality* whereas science is about *describing reality*. This is a view that he rejects arguing that while the science of cosmology has little to do with human transformation of creation chemistry on the other hand spends much of its time seeking the power to transform materials. Modern technology and science are interwoven he claims, a view supported by others in the social sciences, leading to neither being able to be discussed totally independent of each other.³ In saying this however Drees does imply that technology lending itself to transformation and science to description are useful points of view for some levels of engagement with them.

It is with this distinction in mind that a possible metaphor helpful to theology-technology engagement is proposed. That the creative impulse found in technological culture might be served by the metaphors of God as a technologist – a hacker – and of human beings made in the image of God being technologists after their creator. It is hoped that this type of metaphor might open an avenue for further engagement with narratives of creativity and novelty found among the many in technological culture.

We're not in Kansas 1st century Palestine any more

In addressing the gap between theology and technology Cole-Turner stresses that there need to be open places where people can meet to discuss the role and implications of technology. Not just upon the private, individual life of the believer but also the impact that technology has upon communities of faith and the wider world. Within these dialogues the community of faith might offer back to wider society not just critical reflection upon technology as it affects the common good but also assessments of the appropriateness of particular technological developments and options for its application. There is a need to fill in the gaps between the broad generality of using technology to glory God, through serving God and others, and the complicated details that crop up when contemplating technologies like therapeutic cloning, germ-line modification or even technology that creates the World Wide Web.⁴

Certainly there appears to be a need for this sort of discussion. In reflecting upon the contemporary narratives, especially in cinema, Lelia Green points out that there is now a “widespread fascination with the interface of biology and technology, and the potential for

² Cole-Turner, "Science, Technology and Mission," 102.

³ Willem B. Drees, "Human Meaning in a Technological Culture," *Zygon* 37, no. 3 (2002): 598.

See also some brief comments on the fusion of science and technology under the influence of contemporary Western capitalism in Iain H. Grant, "Postmodernism and Science and Technology," in *The Routledge Companion to Postmodernism*, ed. Stuart Sim (New York: Routledge, 2001; reprint, 2002), 75-76.

⁴ Ronald Cole-Turner, "Science, Technology, and the Mission of Theology in a New Century," in *God and Globalization: The Spirit and the Modern Authorities*, ed. Max L. Stackhouse and Don S. Browning (Harrisburg, Pa.: Trinity Press International, 2001), 162-163.

fusion between the two.” It is in these stories that society and its members are confronted with boundary questions created by the development of new technologies. Questions about how to live and how to be human are addressed, as well as the hopes and fears of people who are increasingly dependent on technology and the cultures it creates. There is almost an enthrallment with the question of how much technology compromises the essentially human.⁵

In the face of technology that is colonizing not just the environment but also the individual person where is the boundary between person and artifact? Thus Green identifies that one of the purposes of these narratives is the social reflection that asks ‘When does the human become technological; when does the virtual become real?’⁶

Sociologist Brenda Brasher is one who thinks that tradition religions will struggle to address these issues. The fusion of the material and the virtual, often described using the metaphor of the cyborg, challenges religious emphases in both the material and spiritual planes. If identity is created by participation in both a material world and a virtual world then how can something like Christianity with its life-affirming focus on embodied existence speak into that world. Likewise how can religions, in particular Eastern ones, that reject the material also engage with this mixed-mode existence?⁷

The key problem she asserts is that the pastoral and agrarian imagery and symbols found in the religious texts and imagination of religions like Christianity will struggle to connect with the world around us. At one level religion must respond to the existential questions of the age, to boundary question such as life and death, gender, bodily augmentation and transgenic modification that are created in light of new technologies. Secondly, religion must also address the issue of how human beings should live through the creation of symbols, stories and images that describe the world and life-giving behaviour within it.⁸

So the question becomes how does, or even can, the Christian theological imagination grapple with the technocultural world that it finds itself when technology is not just artifacts but the very environment in which people exist? Can the response of the community of faith move beyond simplistic reactions to technology? For example, Lutheran bioethicist Ted Peters points out that when faced with new technologies, such as biotechnology, the typical response is to withdraw into apparently safe, religious conservatism stating ‘We say, “No.”. And we add, “We say no because God says no.”’⁹

In analyzing the role of the mass media in the United States Gregor Goethals argues similarly to Cole-Turner that the church’s role here is to both use technology to inform and develop their own faith as well as to critique the culture that technology supports. In practice, he declares that many Christian communities have little or no desire to engage with technology either. In some cases he comments it is even considered ‘unpatriotic’ to do so, leaving those who do want to engage in dialogue with it with more in common with those outside their

⁵ Lelia Green, *Technoculture: From Alphabet to Cybersex* (Crowsnest, NSW, Aus.: Allen and Unwin, 2002), 167.

⁶ Green, *Technoculture*, 168.

⁷ Brenda E. Brasher, *Give Me That Online Religion* (New Brunswick, N.J.: Rutgers University Press, 2004), 151-152. For example, not just through cyberspace technologies but also biotechnology and psycho-pharmaceuticals,

⁸ Brasher, *Online Religion*, 153-156.

⁹ Ted Peters, "Cloning Shock : A Theological Reaction," in *Human Cloning : Religious Responses*, ed. Ronald Cole-Turner (Louisville, Ky.: Westminster John Knox Press, 1997), 16.

faith community than within it.¹⁰ Brasher echoes this stating that beyond establishing a web presence in cyberspace established religious institutions are only slowly entering into this type of engagement.¹¹

If as Stanley Grenz asserts “metaphors play a central role in the actual structuring of our experiences of the world” then what metaphors might assist us in making sense of the technological world around us.¹²

Models, metaphors and symbols

John Polkinghorne notes that both science and theology are often faced with unseen realities, whether they be quarks or God. In either case analogical language is used to try and describe these realities so that we can make sense of them. So models, metaphors and symbols come into play as we attempt to simplify complex situations so that we can understand aspects of them.¹³

The first of these, models, are created by developing an abstract subset of the features that are considered of greatest significance. Using this subset a limited explanation of a system or phenomenon can be achieved. So in theology a variety of models might be developed in response to a particular divine encounter, each describing a particular type of interaction or understanding of the experience.¹⁴ The models may be contradictory but helpful in understanding an important feature of phenomenon, such as the range of models developed to engage with the concept of the Trinity or the atonement.

Metaphor is a literary device invoked when one speaks of one entity in terms of another one. For example, science uses simile in many of its use of models and in theology the desire to express the infinite using finite language means that metaphor is a common tool. Polkinghorne argues that symbols may be better equipped than metaphor because they have the power to transcend the metaphor. Firstly a symbol might be a literal artifact and secondly it can participate in the reality it is embedded within. Hence the symbols in the Eucharist serve apprehension at a deeper level than a literary construct by engaging the senses in a variety of ways.¹⁵

Grenz echoes this when he highlights the theologian is a poet who crafts meaningful pictures about our world and our relationship to the transcendent. The purpose of this he argues is so that theology will be of service to the church and the mission of God. It achieves this by constructing a Christian worldview, made up of various models and metaphors, that is rooted in biblical tradition and the community’s reflection upon its faith. In doing so it must express this in a language relevant to the contemporary world.¹⁶

¹⁰ Gregor T. Goethals, *The Electronic Golden Calf : Image, Religion, and the Making of Meaning* (Cambridge, MA: Cowley Publications, 1990), 188-189.

¹¹ Brasher, *Online Religion*, 152. There are, of course, exceptions to the rule such as the Church of Scotland’s “Society, Religion and Technology Project” (<http://www.srtp.org.uk>).

¹² Stanley J. Grenz, *The Social God and the Relational Self : A Trinitarian Theology of the Imago Dei*, Matrix of Christian Theology. [V.1] (Louisville, KY: Westminster John Knox Press, 2001), 7.

¹³ John C. Polkinghorne, *Science and Theology : An Introduction* (London: SPCK, 1998), 22.

¹⁴ Polkinghorne, *Science and Theology*, 23.

¹⁵ Polkinghorne, *Science and Theology*, 23-24.

¹⁶ Grenz, *The Social God*, 8-9.

In this case the language need to be relevant to the world of technology that the community of faith finds itself in. With this in mind the following section looks at two different narratives from the technological setting – purpose and creativity.

Technological Stories

At first glance one of the places that one might turn for some assistance here is the ongoing dialogue between science and theology that was mentioned earlier. However models of science and religion interaction tend to be based around the interaction of “pure” or “abstract” scientific and theological concepts, such as cosmology and the nature of God’s involvement in the universe. Stahl points out that this discussion tends to be in terms of what science, in the specified field, means for theology. From a social science viewpoint the roles of both experience and community in science and religion are downplayed or ignored.¹⁷

Technology on the other hand more closely impinges upon everyday life and demands that the theological discussion is more practical and grounded in the everyday. Furthermore the issues raised in technology often cross a variety of scientific domains making science and religion dialogue more complicated. Often the messy details of how the actual interaction happens is left as an exercise to the reader. Indeed science-religion dialogue is often separated from the technology-ethics conversation, with little about technology making it into the science-religion discussion. There are also ongoing interactions between science and technology, as well as other domains such as the arts, that may impinge on the discussion (See Figure 1.) If we’re thinking metaphorically about the theology-technology interface then there may be an elements from the arts domain also involved.

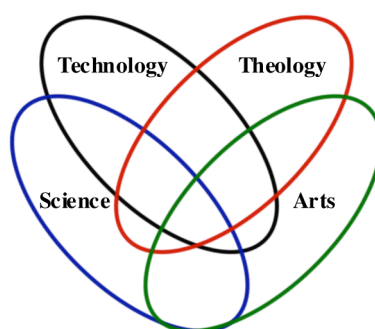


Figure 1 – Interaction of various domains

Cole-Turner proposes that in the technocultural community multiple narratives, rather than a single unified one, draw things together. In particular he identifies the twin stories of purpose and creativity as areas that theology might interact with. The first of these, purpose, will be covered briefly before the second narrative, that of creation, is dealt with in more detail leading into a possible metaphor for engaging with technology.

Purpose

The narrative of purpose is seen as problem-solving, where there is a drive toward improving the human condition by overcoming problems such as disease, poverty and elements of the natural world. Cole-Turner argues that this narrative has its roots in the ideas of Francis

¹⁷ William A. Stahl and others, *Webs of Reality: Social Perspectives on Science and Religion* (New Brunswick, N.J.: Rutgers University Press, 2002), 7.

Bacon, who saw technology and the power of the human intellect as a means of returning to the idyllic state in Eden. "The Baconian confidence believes that a perfect condition of nature is knowable, that nature has deviated from that perfection, and that technology's mandate is to restore it to its right order."¹⁸

As noted by Mitcham and Grote the theological virtue of charity is the one that has been most often used to provide the strongest case for technology and a Baconian stream developed which asserted that the technological endeavour was purposed to the relief of suffering motivated out of charity developed. That knowledge should not exist for its own sake but rather be channeled into provided "material mercies" to humankind.¹⁹ However, while originally this stream was related to a kind of divine guidance leading toward technological progress, the absence of an empirical normative past leads to a constant tyranny of progress. Technology must press on in the name of achieving some unattainable final state of perfection.²⁰

Creation and novelty

Kevin Kelly contends that technology has become a new culture within the Western world standing alongside the sciences and the arts. This new culture is characterized by creation, experience and novelty. These things shape and drive what Kelly calls the Third Culture.

Kelly's language is drawn from CP Snow's second edition of *The Two Cultures* (1964) in which he describes the notion of another culture that stood between the competing cultures of the arts and the science, a culture that allowed space for meaningful dialogue between the two. Kelly has appropriated this metaphor to describe technological culture. Science, he asserts, exists to pursue the truth of the universe while the arts expresses the human condition. Technoculture exists pursue novelty and experience, though it acknowledges both the human condition as a starting place and scientific method.²¹ In such a culture Kelly argues,

One would expect to see frenzied, messianic attempts to make stuff, to have creation race ahead of understanding, and this we see already.²²

Novelties are created as a means to truth and experience. For example, Kelly cites the example of the human mind. In the scientific community the mind would be measured and tested, in the arts community it is contemplated and abstracted. In the technological community he argues the preferred mode of action is creation so one would attempt to build a mind and then develop insight from interacting with created system. Likewise, he describes how interacting with a new virtual world gave its creator, Jaron Lanier, both a sense of enchantment and surprise.

So here was the god of the world, limiting himself by donning crude goggles and gloves, reducing his senses and freedoms to a narrow spectrum, and then immersing

¹⁸ Cole-Turner, "Science, Technology, and the Mission of Theology in a New Century," 156.

¹⁹ Carl Mitcham and Jim Grote, "Aspects of Christian Exegesis : Hermeneutics, the Theological Virtues, and Technology," in *Theology and Technology : Essays in Christian Analysis and Exegesis*, ed. Carl Mitcham and Jim Grote (Lanham, MD: University Press of America, 1984), 33.

²⁰ Cole-Turner, "Science, Technology, and the Mission of Theology in a New Century," 156. See David Noble's work here especially David F. Noble, *The Religion of Technology: The Divinity of Man and the Spirit of Invention* (New York: Alfred A. Knopf, 1997), 43-56.

²¹ Kevin Kelly, "The Third Culture," *Science* 279 (1998): 992-993.

²² Kelly, "The Third Culture," 992.

himself — all of himself — into his made world. He kept thrashing his body about as he explored the world he made and kept exclaiming, “Oh, I had no idea that was there! I had no idea it would be like this!”²³

This idea might be what Michael Heim, in borrowing from A.N. Whitehead’s process philosophy, calls “aesthetic occasions”. The creation of technology that produces moments of surprise as one explores a virtual world and encounters something that generates a dynamic experience of being in that world.²⁴ Tools such as computers require us to revisit things, to rethink about things. This is exactly what Brasher is on about – the tools demand explanations for the new things and experiences they spawn.

Kelly argues that if science and art generate truth and beauty then technology generates opportunities – new things to explain, new ways of expression, new media of communications, new forms of destruction. It is a world that provides above all else raw opportunity that needs to be tempered by science and the arts if it is to address social ills or provide deeper meaning.²⁵

God as hacker

What metaphor might be useful then for engaging with this Third Culture, *nerd* or *hacker* culture, that Kelly proposes? What imagery or symbols do we have theologically that might be able to bridge the gap between this new world and our existing Christian framework? And how might it do so in such a way as to inform us, to help us answer some of the questions raised? One such metaphor might be the concept of ‘God as hacker’, drawing upon the creation and anthropological traditions found within Christianity.

Hackers

Within technoculture hacking might be seen as “an appropriate application of ingenuity” that brings something new into existence, whether a temporary fix to a problem or an elegant creation. Not only that but it also captures that sense of interacting with technology, especially computers, that isn’t goal oriented but instead is playful and exploratory.²⁶ As Steven Levy describes it a “hack” might be considered “a project undertaken or a product built not solely to fulfill some constructive goal, but with some wild pleasure taken in mere involvement.”²⁷

Sherry Turkle, capturing some of the nuances of the culture described by Kelly, argues that hackers display a different motivation for doing things. Rather than being motivated by ego

²³ Kevin Kelly, "Nerd Theology," *Technology in Society* 21, no. 4 (1999): 390-391.

²⁴ Margaret Wertheim, *Playing God in Your Very Own Universe* [Internet] (Guardian Newspapers Ltd., 5 August 1999, accessed 11 September 2001); available from <http://www.guardian.co.uk/Archive/Article/0,4273,3889647,00.html>.

²⁵ Kelly, "The Third Culture," 993.

See also Cole-Turner, "Science, Technology, and the Mission of Theology in a New Century," 156. Here Cole-Turner says, “The overarching metaphor is evolution, and creativity functions through mutations, some of which are retained, most of which are not. There is no guidance but there is advance, no purpose but always more stuff.”

²⁶ Eric S. Raymond, *The Jargon File : The Meaning of Hack*, Version 4.4.7 [Internet] (29 December 2003, accessed 28 January 2005); available from <http://www.catb.org/~esr/jargon/html/meaning-of-hack.html>. It’s also worthwhile noting that a secondary meaning of hacking is creative practical joking but the theological implications of this won’t be drawn out in this paper.

²⁷ Steven Levy, *Hackers : Heroes of the Computer Revolution* (New York: Dell, 1994), 23.

and money she maintains that they have a deep relationship with their tools and creations that is similar in a what to priests and poets. For the hacker, she intimates, one exists to create blurring the boundary between work and play.²⁸

Turkle cites the example of a hacker building a harpsichord so that he might understand, not the aesthetic feel of the music, but rather to comprehend the system that J.S. Bach used to compose his music. By building Bach's "computer" the hacker is able to identify with Bach as a fellow hacker, one who developed complex programmes expressed as music.²⁹

How then might a technologist approach understanding God? Or a theologian technology? Maybe not by appreciating the beauty of creation but by attempting to build those things that the God has made. In a sense, to understand the mind of God by becoming a little god.³⁰ In order to understand the transcendent human beings create something for themselves to transcend. Turkle argues this is a recurrent theme among technologists – this desire to create new worlds. A student interviewed highlights this stating,

Even in Logo programming, children can create worlds that operate by Aristotelian principles instead of Newtonian ones. No physical constraints. Make a whole new world with its own rules.³¹

In a sense, technologists might be looking for what is often called "the Hack". Often likened to the Holy Grail it is that one act or work of novelty or creativity that transcends all others and will bring the hacker completion, if only for a little while. If one were fleshing out the metaphor of God as the ultimate hacker then "the Hack" might be likened to something like the Incarnation—an event never before contemplated that injects something unforeseen and wonderful into the world.³²

Creation traditions

The metaphor of God as hacker incorporates into it the concept of God as creator of new things as well as a certain playfulness. A God who, in this particular imagery, is defined by being creative and enjoying it. The idea of God as a creator, not just of the universe, but of all manner of things has a rich history within the Christian tradition.

Within the Hebrew Scriptures God is clearly envisaged as a creator. Not just as the creator of the physical world as seen in the creation accounts of Genesis 1 and the book of Job, but also being personally involved in creation (Gen 2), in the creation of peoples (Ex 15; Isa 43:21) and claiming that his creative activity is "very good" (Gen 1:31) – an aesthetic that might be linked not to moral goodness but to enjoyment. Furthermore we see the concept of creation in terms being involved in creating something new within people (Ps 51:10) and in the Psalms the linking of God's creative activity with the establishment of a social order in the world (Ps 89).

²⁸ Sherry Turkle, *The Second Self: Computers and the Human Spirit* (London: Granada, 1984), 210-211.

²⁹ Turkle, *The Second Self*, 226-227.

³⁰ Kelly, "Nerd Theology," 388-390. Our spiritual dimension to technology comes from what Kelly calls *regensis* – the urge that human beings have to recreate creation. Cyberspace gives us the power, he asserts, to not only create new worlds but to enter into them as part of them – to become incarnate within them. He argues that the human quest for truth is found not in what we find but in what we create. Furthermore in the process of *regensis* we become mini-gods, seeking God by creating ourselves as gods.

³¹ Turkle, *The Second Self*, 229.

³² One might even consider theology 'hacking' – the attempt to create new and novel metaphors that capture something of the divine in a finite form.

These themes are carried on into the New Testament. The opening passage of John's gospel sees the divine Word as being involved with creative activity – not just in terms of creation of the world but also in a new status of human beings where they might become children of God (Jn 1:12-13). The initial part of the letter to the Colossians is also wrapped up in creation imagery – Christ, through who all things was made sustains and reconciles all in his creative power (Col 1:15-23), and then the final book of the New Testament has the creation of a new heaven and a new earth as God brings his purposes to fruition (Rev 21-22).

In many other places in the history of Christian thought and reflection the creativity of God and the potential for novelty are used to engage with God and the world. For example, Hildegard of Bingen (1098-1179) saw within the created world a creative power bursting to get out. This power, the greening power of God or *viriditas*, brought forth life in the world as God generated new things within creation.³³ More recently process theology, especially that related to A.N. Whitehead's process philosophy, sees God's role in the world as supplying novelty to the universe in order to that creativity shapes and forms a newer and better world.³⁴ Jennifer Cobb describes it as,

Creativity, the very essence of the divine, is the life-giving principle that is also itself alive, moving, changing and growing. On the simplest level, divinity is the cosmic force that continually ushers novelty and creativity into the world. The divine is not the process but the creative aspect of the process.³⁵

So there is a richness here. A tradition infused with narratives and metaphors of God as a creator, bringing novelty into the world. So the idea of God as hacker may not be so different from the concept of God as potter found sprinkled through the Hebrew Scriptures (Isa 64:8; Jer 18:6).

Hacking in the image of God

If the themes of creation and novelty might be used as a useful metaphor for engaging with the divine then how does this connect to human beings? How is the act of creating new technologies linked in with the idea of a God who creates, injecting novelty into the wider world. The Christian doctrine of *imago Dei* – the assertion that humans, female and male, are made in the image and likeness of God might serve as this point of connection, drawing us toward another metaphor that of the *created co-creator*.

Imago Dei

The doctrine of *imago Dei* is based upon a small number of biblical texts, of which Gen 1:26-28 is the key passage, that have formed a critical part of Christian anthropology.

Interpretation of that exactly it means to be a bearer of God's image has varied but three main strands of interpretation exist: substantive, relational and functional. The substantive tradition implies that the *imago Dei* is found in the substance of the human person (e.g. physical form or rationality). The relational view holds that the image and likeness are seen in the ability to relate to both God and other human beings, while the third interpretative strand, the

³³ Stephanie Roth, "The Cosmic Vision of Hildegard of Bingen," *The Ecologist* 30, no. 1 (2000): 40.

³⁴ Stanley J. Grenz and Roger E. Olson, *20th Century Theology : God & the World in a Transitional Age* (Carlisle ; Downers Grove, IL: Paternoster Press : InterVarsity Press, 1992), 136.

³⁵ Jennifer J. Cobb, *Cybergrace : The Search for God in the Digital World*, 1st ed. (New York: Crown, 1998), 56.

functional view, argues that human beings bear the image of God in what they do. It is this latter strand that will be picked up here, though the other strands form part of the larger picture.

The functional interpretation of the image of God draws its understanding from studies of Ancient Near Eastern cultures based in the early part of the 20th century. From these studies Old Testament scholars linked the image of God to the concept that human beings represent God in some way here in earth, much as a statue of a monarch represented the royal presence even when that personage was absent. Human activity, in relation to God and creation, becomes the key aspect of the image. In particular the most frequently mentioned function performed is the exercise of dominion over creation.³⁶

In a nutshell, one finds that humankind is not created *in* the image of God but instead *as* God's image representing the transcendent creator in the world. The image is realized existentially, as human beings represent God in the world through activity rather than in essence. The physical presence of human beings points to the divine overlord, while the likeness maintains that this representation remains faithful to God. How then might being created in the image and likeness of a God who hacks be manifested?

Created co-creators

Philip Hefner has developed the metaphor of human beings as *created co-creators* as part of his work in examining the relationship between technology and theology, and in particular how should we understand how God is present in the technological process.³⁷ In Hefner's view the world around us is part of an ongoing creation full of processes such as evolution that serve God as he draws the world on to its consummation. Within this ongoing act of creation human beings might be seen as one of the many agents of change the God allows to participate in his creative work. Human beings creativity can be channeled so that they co-create with God.³⁸

The term *created co-creator* has several dimensions. The emphasis on being created stands against human *hubris* for all that we are is ultimately sourced in the God who created us. We are finite and dependent creatures, rooted in the same creation that we are able to act upon. Through the image of God we are called into a relationship with our maker that is linked to us being creators, using our cultural freedom and power to shape history and the world, injecting novelty as we participate with God in the ongoing creation. Hefner goes further arguing that in Christ this has an eschatological or teleological dimension as participation in Christ leads to a new freedom to be creative that is linked with the ultimate redemption and perfection of creation.³⁹

³⁶ Gunnlaugur A. Jónsson, *The Image of God : Genesis 1:26-28 in a Century of Old Testament Research*, Coniectanea Biblica. Old Testament Series ; 26 (Stockholm Sweden: Almqvist & Wiksell, 1988), 219-220. He notes that this understanding of the image of God now stands as the dominant view amongst Old Testament scholars.

³⁷ Philip Hefner, *Technology and Human Becoming* (Minneapolis: Fortress Press, 2003), 79. Here Hefner asserts that "God is a *participant* in the technological process, since the purposes of God are now embodied through technology and techno-nature." One of the theological questions then becomes "do we understand God's technological purposes?"

³⁸ Philip Hefner, "The Evolution of the Created Co-Creator," in *Cosmos as Creation : Theology and Science in Consonance*, ed. Ted Peters (Nashville: Abingdon Press, 1989), 212.

³⁹ Hefner, "Created Co-Creator," 225-231.

If we revisit our hacking metaphor we might express these ideas like this. We hack - create technological novelty – because we are made in the image of a God who hacks. We have been called into the world as creatures who, through working with our creator, can be agents of change through our technological endeavors. In doing so we are called to work toward the *telos* or end that God has for creation and is found in God's valuing of this world and of us. And when we hack in harmony with God then we become truly human.

Addressing the questions?

Coming back to Brasher's two questions about what the role of religion in technoculture do these metaphors help in anyway? Certainly they might prove helpful in theologically understanding why it is that human beings are driven to create new things simply for the experience of creating. Of why people like Kelly talk of a Third Culture. Being made in the image of a creator God, the hacker God, goes some way towards answering the questions of why we develop technology that presses us up against the boundaries of our understanding. Hefner's metaphor of human beings being *created co-creators* would mean that it would be unnatural for us not to do this. But what about the second question of how we should live in light of this?

We will need more than just these metaphors that we have discussed. The question of whether a particular technology is appropriate or not, whether it is life-giving or life-denying, will require engagement with other theological reflections upon the human condition and the wider world.

The doctrine of the *imago Dei* has to wrestle with the implicit violence found within its functional view. The identification of the image with domination over nature has led to what some see as a cultural mandate to do whatever one feels like to the wider world. One has a divine mandate to do so.⁴⁰ Old Testament scholars, such as Walter Brueggemann, argue that the human being is called to exercise power, to subdue and rule. However the way to do it is to exercise power as God exercises it. That is, with a creative usage that invites, evokes and permits. He contends that,

the human creature attests to the Godness of God by exercising *freedom with* and *authority over* all the other creatures entrusted to its care. The image of God in the human person is a mandate of power and responsibility.⁴¹

Furthermore Brueggemann would argue that we must acknowledge that we are called to be accountable for that power that is given us, and look to the example of Christ (cf. Mk 10:43-44) as the one who rules being the one who serves.⁴² Thus our hacker ethic might be to hack as God would hack.

This is similar to Ted Peters' concept of beneficence as guideline for engaging with technology so that the ethical sense of non-maleficence is not the only criterion guiding our behaviour. If we can use technology to do good then we are obliged to do so and if we don't

⁴⁰ Lynn White, Jr., "The Historical Roots of Our Ecologic Crisis," *Science* 155, no. 3767 (1967). White's paper, arguing that the current ecologic crisis was the result of this type of view has caused Christian theologians to revisit their understanding of creation and humanity's place within it. As a consequence much deeper reflection upon the value of creation to God and the role of human stewardship has taken place.

⁴¹ Walter Brueggemann, *Genesis*, Interpretation (Atlanta: John Knox Press, 1982), 32.

⁴² Brueggemann, *Genesis*, 32-33.

then we reject the potential God has given humanity for social transformation found in the *imago Dei* motif.⁴³

We must also take into account the other narratives present within technology. So, as Cole-Turner notes, when we encounter the Baconian story of a purpose-driven technology restoring creation to its glory we must take into account the nature of a "fallen" creation, as well as incorporating not only theological reflection upon creation but also scientific insight as well. There is scope for technological engagement with creation but when that becomes an idol in its own right, especially with no clear goal of what a "perfect" creation would look like, then it will become life-denying.⁴⁴ Hacking becomes an end in itself rather than a creative force for good in the world.

Conclusion

Technology is a many faceted thing, made up of a range of competing narratives that shape its culture. The metaphors of God as hacker and of human beings as being made in the image of a God who hacks are possible avenues for engaging with the creative narratives found within technoculture – in the drive to create new things, to build first and ask questions later, and to create new worlds, virtual and physical, to inhabit. In doing so some of the existential and practical issues of living in such a world might begin to be addressed.

But any metaphor is limited in scope and theological engagement with technology needs to develop a broad range of metaphors that speak to different aspects of technology. Furthermore given the pace of technological development we should expect that these metaphors may have a limited life-span and be prepared to let them go if they are no longer helpful in this conversation. Our ability to create novel metaphors may lead us down the path where theology not only meets hacking but becomes it.

⁴³ Ted Peters, *Is Our DNA Sacred?* [Internet] (Response: The Seattle Pacific University Magazine, Summer 2004, accessed 5 November 2004); available from <http://www.spu.edu/depts/uc/response/summer2k4/dna.html>.

⁴⁴ Cole-Turner, "Science, Technology, and the Mission of Theology in a New Century," 164.

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