

## Jesus wept, robots can't: religion into the future

*Sam Gill*

### Abstract

*Exploring the implications of the shortest of biblical verses 'Jesus wept' in contrast with the incapability of robots to weep or feel empathy and emotion as exemplified in the classic post-apocalyptic film Terminator 2, this essay argues that movement, gesture, body, experience and improvisation are essential elements to any emerging valued world. Certainly religion, despite our strong association of it with the spiritual and the immaterial, does not and cannot exist, or even be imagined, apart from these distinctively human biological features. The study of religion must be, among other concerns, grounded in biology.*

KEYWORDS: TECHNOLOGY; RELIGION THEORY; ARTIFICIAL INTELLIGENCE; WEEPING/  
CRYING, BODY

---

### Affiliation

University of Colorado, Boulder, USA.  
email: [sam.gill@colorado.edu](mailto:sam.gill@colorado.edu)

The 1991 film *Terminator 2: Judgment Day* (directed and written by James Cameron; co-written by William Wisher) unfolds in a post-apocalyptic world resulting from Judgement Day, which occurred in August 1997, a holocaust event that killed most human beings. The year 2029 is a dark world ruled by roving lethal robots attempting to destroy the final small group of human resistance. The robots' plan is to send a terminator model T-1000 liquid metal prototype robot back in time to the days when John Connor (Edward Furlong), the leader of the continuing human resistance, was a boy. To kill John when he was a boy would eliminate the adult leader of the resistance. Learning of this ploy, John Connor sends his own robot, a terminator model T-800 (Arnold Schwarzenegger), to his boyhood past to protect him.

The film follows the adventures of the T-800, joined by the boy John and his mother Sarah (Linda Hamilton), in their efforts to protect John from the evil T-1000 and to save the world; and, of course, it tracks the human-robot relationships that develop. By the final scenes of the film, they have managed to destroy all of the technology that will lead to the rise of evil machines. They have also finally destroyed the T-1000. The avoidance of the still future apocalyptic judgement day seems finally possible.

At the end of the film, the T-800, who has come to be something of a surrogate father to the boy John, does a surprising thing, a seemingly human kind of thing. The devastating robot technology has been destroyed on present-day Earth, save for the one copy of this technology that remains as integral to the friendly terminator. Acknowledging that despite his good intentions, his own existence might be used against human beings, the T-800 performs the ultimate sacrificial act. His programming (a nod to Asimov's Laws<sup>1</sup>) does not allow him to destroy himself, so he beseeches Sarah Connor to do it for him. Supported on the chain cable of a winch, the terminator positions himself over a huge vat of molten metal and, using the controls, Sarah lowers him slowly to his destruction. The last thing we see as his body disappears into the cauldron is his hand doing a 'thumbs up' sign of approval and completion.

The self-sacrifice of the terminator makes a distinctive allusion to Christ, who sacrificed himself that humans might be saved; the death (or at least destruction) that kills death itself. Yet there are inversions. As machine, the terminator T-800 demonstrates again and again throughout the film that its existence is almost invulnerable, its artificial body practically indestructible. The fragility and vulnerability of flesh are not qualities of the terminator despite its outwardly human fleshy appearance. The terminator neither lives nor dies, it just functions or is melted down. When John asks the terminator if it fears death, it appears not to comprehend the question

and answers with a statement about the length of its battery life. The terminator's act of self-sacrifice is not marked by a bodily resurrection and eternal life, but *only* (!) by the prevention of a future global disaster, the avoidance of the judgement day we've seen through the shocking images of Sarah's visions. It is a descent into a fiery pit leading to his final obliteration; a meltdown, not death.<sup>2</sup>

In *Terminator 2*, other scenes are important in establishing the machine/human distinction. Midway through the film the terminator is hanging out with young John as they prepare to escape the pursuit of T-1000. John, who is finding the terminator to be something of a father he never had, tells the terminator that, although they were only together one night, he thinks his mother still misses his father. He says that sometimes she cries, and when he sees her she just says she has something in her eyes.

The terminator asks John, 'Why do you cry?'<sup>3</sup>

John answers, 'You mean people?'

Terminator, 'Yes.'

John, 'I don't know, we just cry. You know, when it hurts.'

Terminator, 'Pain causes it?'

John, 'Ah, no ... it's different. It's when there is nothing wrong with you, but you hurt anyway. ... Get it?'

Terminator, 'No.'

In the following scene, Sarah has a recurrence of her dream vision of the future destruction of the world as the result of the coming 'singularity'<sup>4</sup> when the robots take over. She is seen crying.

Much of the last half of the film involves the terminator helping Sarah and John to destroy all of the robot technology, but also helping Sarah and John to escape the dogged pursuit of T-1000. When they finally destroy this robot, they believe that they have abolished the last computer chip left from the earlier invasion and Sarah says, 'It's over.' Yet the terminator tells her that one chip remains, the one in his head. He says, 'I cannot self-terminate. You must lower me into the steel.' Recognizing what is about to happen, young John protests; the terminator has become like a father to him. The terminator comes to say goodbye to John. He looks steadily into John's face and notices him crying. The terminator says, 'I know now why you cry, but it is something I can never do.' He then touches the tear running down John's cheek. This exchange over crying suggests that the terminator has somehow gained empathy, or at least it now has the knowledge that the anticipation of separation and loss is associated with an emotion expressed by crying. Presumably this information was gained through his relationship with John. But is it empathy?

The film ends with Sarah's voiceover: 'I look into the future and face it for the first time with a sense of hope because if a machine, a terminator, can learn the value of human life maybe we can too.' The evidence for her rising hope is perhaps both in the sacrifice and in the terminator's seeming empathy with John's feelings of sadness. However, according to Asimov's Laws the terminator's self-sacrifice is but a feature of his directive from the John Connor of the future to protect John's life and assure a human future. Sarah was more likely moved by the terminator's understanding of John's crying. Crying is something distinctive to humans; robots,<sup>5</sup> as the T-800 clearly states, can never cry. Researchers have determined that emotional crying, weeping, is distinctively human (summarized by Collier 2014; see also Gračanin, Bulsma and Vingerhoets 2018). Still, the terminator doesn't actually feel anything at all. Its seeming to be understanding, to be empathetic, is mechanical action based on dynamic probabilistic algorithms developed based on information amassed and shaped by its programming; it is artificial intelligence or, in this case, artificial empathy. Sarah is being generous and also typically human in bestowing human qualities on a machine.

The crux of the issue here is that in *Terminator 2* empathy is examined and presented as a distinction of humanity, perhaps also humanity at its best. The relationship of crying or weeping is the focus throughout the film for examining and articulating this difference. To recognize in a non-human entity the signs of empathy, though not based on any actual feelings, almost without exception reflects on the importance of the biological distinctiveness of being human. The bestowal of human-like qualities and values on robots has nothing to do with whether or not they will ever gain such capacities for feeling and knowing; indeed, the very distinction of robot as a category precludes such an accomplishment, as the Terminator clearly states. Robots are not born, grow, age, feel pain, love, die, feel self-doubt, act irrationally or even think in the strangely muddled processes so distinctively human. Human-like actions by robots, even if indistinguishable from actual human behavior, are always simulations. While there is enormous promise of the interface of silicone and steel with carbon and tissue, what results is a metahuman cyborg,<sup>6</sup> not an empathetic robot.

Crying also invokes another Christian connection. The shortest verse in the Bible is John 11: 35, 'Jesus wept.' This emotional response occurred when Jesus was meditating on the state of his friend Lazarus, the grief his two sisters felt and the greater plight of the world. Invariably, the commentaries on this shortest of Bible verses indicate that the tears of Jesus have been understood as testimony to the fullness of the humanity of Jesus. Jesus was not God in the mere guise of a human being, some spectral highly

realistic hologram; his tears assure us that Jesus was fully human. It is the distinctively human biology of emotion<sup>7</sup> and the connection of emotion with fellow feeling, empathy, expressed by the physical act of weeping that assures us of what is most fundamental to Christology, the branch of Christian theology that focuses on Jesus, and also the distinctiveness of Christianity. Biology is inarguably central, primary.

In light of Christ's tearful humanity, not to mention his bodily death and resurrection, it is a fascinating aspect of the history of Christianity that bodied biological human nature has so broadly been regarded with suspicion in European and American Christianities, although less so in southern hemisphere Christianities. And, to call upon my own extensive research and experience, it is fairly evident that northern hemisphere Christianities are exceptional among religious traditions throughout the world in their having a long contentious relationship with a further form of bodied human nature – dancing (see Gill 2012).

Lewis Carroll explored the same connection between human distinctiveness and crying in *Through the Looking Glass*.<sup>8</sup> Alice questions her own reality, considering the possibility that she exists only as a figure in the Red King's dreams.<sup>9</sup>

Tweedledee says to Alice, 'You know very well you're not real!'

'I *am* real!' said Alice, and began to cry.

'You won't make yourself a bit realer by crying,' Tweedledee remarked: 'there's nothing to cry about.'

'If I wasn't real,' Alice said – half laughing through her tears, it all seemed so ridiculous – 'I shouldn't be able to cry.'

'I hope you don't suppose those are real tears?' Tweedledum interrupted in a tone of great contempt.

There is in this exchange the extra nuance of Carroll's suggestion that tears themselves may not be 'real'; perhaps implying that they are theatrical or disingenuous, or even a construct in virtual reality accomplished by the evolving algorithms of artificial intelligence. This concern with the real is also often interpreted theologically on the basis that Carroll is questioning whether human reality is but a figment of God's imagination; in contemporary terms, that our existence is a virtual reality game played by God. Nevertheless, the premise is surely the same as that of John Connor; weeping is recognized evidence of being a real human.

Another example of tears that makes an interesting connection with Mary Shelley's classic 1818 *Frankenstein; Or, The Modern Prometheus*<sup>10</sup> is found in John Logan's 2014–15 British American horror television drama series *Penny Dreadful* set in Victorian London. In the first episode, we meet a young scientist madly obsessed with discovering the secret that

distinguishes life from death. He has a clandestine laboratory in which he experiments with the construction from parts of whole human bodies, which he endeavors to animate using such methods as galvanism. Near the end of the first episode, there is a sudden lightning bolt surge of power in the lab, a jolt of electricity sufficient to animate the body he has literally on ice. The animated naked body walks out of the shadows to meet the young scientist, his maker/creator. Emotionally overcome by his success in animating a body, his seeming creation of life, tears stream down the scientist's face. Standing face to face, the creature reaches out and touches his maker's face. He uses his finger to collect a tear and transfers it to his own face just below his eye, a gesture of recognition that tears are the mark of human feeling, sentience and vitality; the creature's act to complete his vitalization by becoming capable of crying. The episode concludes when the young scientist says to the creature, 'I am Victor Frankenstein.' Who else?

Jesus, as Christ, not only wept, he also bled and suffered and died. Jesus was not body normal (the statistical body of medicine), not the body informational (the measured and weighed body), not the Bit Reality body (the transduced body of virtuality); Jesus was quotidian biological body, his individual distinctiveness in time and space being essential. Surely, this is a central point of his impossible conception.<sup>11</sup> It is the particularity of the individual body of Jesus – his historical birth, life, death, *bodily* resurrection – that provides the basis for the distinction of the two millennia development of the Christianities that followed. The inconsistency of the body of Jesus with the body normal, the body informational, is not pathological, it is theological; so, too, the extraordinary bodies and experiences of prophets and saints and shamans and mystics and ascetics. And certainly, we must recognize that every human being's distinctive body cannot be adequately understood, as is common to science and medicine and politics and economics among many other areas of contemporary life, as pathology or deviance of simply data. Not only is pathology a product of normalized, informationalized body, so also are racism, sexism, ageism, discrimination of those differently abled, together with most prejudices, hate acts and judgements. These perspectives are often marked and effected in terms of body, body difference. Yet, of course, the body may be also distinguished in terms of its acuity, skill, strength, intelligence and achievement.

Yet, despite the centrality of Christology to the history of Christianities, the attributes of body – biological, individual, improvisational, often unpredictable – have often been devalued with a preference for the transcendent God (often interestingly and ironically referred to as 'father,' given there is no 'mother') and the resurrected Lord.

Although, from a Western intellectual perspective, persistently overlooked, dismissed and all too often ignored or denied since at least Pythagoras,<sup>12</sup> the body is nonetheless there, always there. In order to right the past neglect, the shape of the future of the study of religion – and also the practice of religion itself – is inseparable from the living, active, biological, improvisational body, the body of seduction and play, the body of an array of colors, the body of singing and dancing.

In the contemporary period marked by the increasing embrace of Bit Reality – in *Terminator 2* the technology genius, Miles Dyson, who is creating the platform for the singularity, has a sign on his computer monitor that reads ‘Bit Happens’ – we must ask, is there any role remaining for religion, for religious institutions, for religious traditions? Will the traditional established religions – those with roots stemming back centuries, if not millennia – that have changed relatively little in the last couple of centuries, especially when compared with the measure of technological change, become increasingly marginalized until they finally disappear? The presently documented decline in membership, especially among young adults, suggests that this is a possibility. Are we heading for a post-religion era? Might traditional religions remain mostly as fossilized forms that serve as a nostalgic reminder of a ‘better’ time; as ossified monuments to the fondly remembered, if romanticized, past like the paintings of Norman Rockwell? My hunch is that for many people, religions function largely in these terms today. Will traditional religions become increasingly identified with violence, prejudice, dogmatism, narrow-mindedness and intolerance? Certainly, these are the attributes broadly held and experienced across the world today, particularly in the way most view the religions of others. Will religions become predominantly cells of resistance, isolation and radicalism? In this trajectory, will being religious increasingly become identified with the hostile and offensive, an association about which others are suspicious? It is clear that there are suggestions of this tendency across the world today which identify both Christianity and Islam, especially Islam, with radicalism and violence. Will traditional religions come to serve a largely palliative function, soothing the agony of inexplicable grief or to somehow offer enhanced, if superficial, manufactured joy?<sup>13</sup> As widely held today, will traditional religions principally serve the role of offering some sort of response to questions seemingly unanswered by science? This function of religion is one increasingly marginalized to the moments before the ‘big bang’ or after the final dissolution. Will traditional religions somehow find a way to employ technology – media and information, AI and robots – to engage change so as to become more compatible and relevant to a world of Bit Reality? Would such developments even be recognized as ‘religious’?

Will Bit Reality and the broad acceptance of the algorithmic reality of the cloud provide a new transcendent, all-knowing, omnipresence that will function as 'truth' for a new bit theology? Might the 'Informational All' become recognized as the new god? Are places like Silicon Valley now becoming the Jerusalem for the worship of such gods? We, that is all those of us who find ourselves inseparable from our smartphones and other devices, can see the new glass cathedrals in these places now, and most of us carry our own little worship portal and confession booth with us wherever we go. What might become of human bodies in such a religion? Will we all simply give way to the 'normalized informational body' and ignore or simply lose our own feeling bodiment, our individuality, our experience, our capacity to weep? Might we simply ignore the value of experience and suppress it long enough so that we finally do not recognize that it exists? Might bodies be real and religious only to the extent that they are 'jacked in' to the Bit Reality and have virtual rather than bodied experience, as imagined by so much of cyberpunk fiction?<sup>14</sup> Or, as is currently the case, that we engage the real<sup>15</sup> only by means of our constant dependence on the Web to confirm that we exist? Search engine algorithms are, after all, something of a collective selfie.

Most of these futures of religion seem to me rather bleak, yet there is clear evidence that most of them already exist or are rapidly emerging.

Although completely speculative, there are a few expectations for the future. I consider the realization of the singularity that Vernor Vinge imagined marking the break after which AI/robots will dominate to be nearly impossible. Yet, should it happen, robots still can't weep,<sup>16</sup> they don't have sentient bodies, and what religion that survives would be that of underground bodied human survivors (surely weeping), something like the many post-apocalyptic images of John Connor in movies like *Terminator 2*. The question we might discuss with Alice is, 'Can there be a religion among those who cannot weep?' It is a follow-up to Lyotard's question, 'Can thought go on without a body?' (Lyotard 1991 [1988])<sup>17</sup> The same outcome seems likely should we become *information cyborgs*, operatives of a hive mind, integrating organic matter with the informational all of Artificial Intelligence. Of course, with our heads in our hands, we have already mostly become such borgs. Should the current religious traditions continue with their present strategies of change in a world of technology on its current trajectory, it seems likely that these religious traditions will play a diminishing role in human life, and that such a role will surely be largely one of nostalgia for a world no longer possible.

Our rising inspiration and hope are perhaps largely that of the *metahuman cyborg*; the organic body enhanced with technology that functions



prosthetically as a tool and multiplier of organic faculties. As Donna Haraway showed in 1991, we have become this kind of cyborg as well (1991:149–82). Both kinds of cyborgs hold as fundamental the continuity and development of biological bodies, while allowing for mechanical and non-biological enhancement or prostheses by means of tools and gestures. One could suggest that, in many ways, this pattern is in continuity with the makings supported by the use of tools that have always been distinctive to human beings. We have entered a modern high-tech development in this phase with wearable and implantable electronic prostheses enhancing and extending our natural biological limitations. The acceleration of this high-tech development seems inevitable, unstoppable, its ultimate future perhaps unfathomable and nearer than we might think. However, one thing seems to me to be certain; should the basic platform for existence cease to be fundamentally biological, that is, should there be a time when biology is not the dominant and essential part in the cyborg amalgam, all (in the fullest sense of the term) is lost. No matter how clever the algorithmic programs for AI/robots might appear (but to whom?), the world would be cold and dead. Even if we entertain the shrinking of biology as a fundamental life platform, we can only imagine the future as the shriveled, deformed creatures that seem somehow to be the living force of the Dalek in *Doctor Who*, or the embryonic beings harnessed to power the machines. Recall the images of ‘human batteries’ depicted in *The Matrix* and similar representations, as imagined in so many other films and fictions.

Movement, gesture, body, experience, improvisation are essential elements to any emerging valued world. Certainly, religion, despite our strong association of it with the spiritual and the immaterial, does not and cannot exist, or even be imagined, apart from these distinctively human biological features. To have a future, we must imagine a world based on singing and dancing, on body and experience. We must carefully contemplate the implications of Michel Serres’ statement, ‘After the musical offertory hymn, might the Word itself have arisen from the uprightness, disquiet and quiet, of the flesh’ (Serres 2011:13)<sup>18</sup> The musical offertory hymn is the song and dance of the living body in all the glorious chaos of its fleshy individuality and irrationality and improvisations. The Word – that is, what we have identified as the Word of God – arises from the human upright posture where the ear is fundamental to posture and balance and to the harmonics of singing and dancing. Notably, this possibility for religion(s)<sup>19</sup> is not a new religion, but rather a fresh understanding of religions as they have always existed. Religion is fundamentally of the human body; religion requires the embracing of the living body’s ‘disquiet and quiet,’ its anxiety and ease, its creativity and predictability, its fundamental finitude and

unlimited imagination, its capacity to thrive on an aesthetic of impossibles – impossible co-presents – and its delight in the surprises of non-linearity, that is, novelty and unpredictability.<sup>20</sup> This view of religion is nothing new. It is the Christian wisdom reflected in the verse 'Jesus wept.' It is the Indian wisdom that imagines the world created by Nataraja, the lord of dancing, in his ongoing dancing that is for no purpose other than that it is his nature to dance. Or Purusha, the cosmic man. Religion everywhere and everywhen is of practice and people and food and sex and relationship. Religion is of the moving flesh.<sup>21</sup>

## About the author

Sam Gill, Professor Emeritus at the University of Colorado at Boulder, is the author of many books and articles, most recently: *Dancing Culture Religion: Religion* (2012), *Religion and Technology into the Future* (2018), *Creative Encounters, Appreciating Difference* (2019), and *The Proper Study of Religion: Building on Jonathan Z. Smith* (2020).

## Notes

- 1 Widely present in many films and stories about robots are the safeguards programmed into robots to ensure that they do not exceed their subject relationship with their makers. These are commonly referred to as Asimov's Laws, as articulated by Isaac Asimov in his 1942 short story 'Runaround' (included in the 1950 collection *I, Robot*). The laws are: 1. A robot may not injure a human being or, through inaction, allow a human being to come to harm. 2. A robot must obey orders given it by human beings except where such orders would conflict with the First Law. 3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law. What is fascinating is that Asimov's many robot stories were often developed around the impossibility that these laws actually work. See also Gill (2018), chapter 11 'I-Robot'.
- 2 Another connection I cannot help but think about is John Neihardt's (2002 [1912]) epic poem 'A cycle of the West,' which chronicles the end of Native Americans. He depicts a symbolic 'last Indian' about to be killed by a rifle butt blow to his head by a white soldier. Seeing his own death, that Indian speaks of his own willing self-sacrifice that those greater than he might rise.
- 3 There is one other scene in the film relevant to crying. After the terminator and John rescue John's mother Sarah from the mental institution where she has been kept, as they are fleeing from the T-1000, John and Sarah hug and reconnect. The terminator recognizes that John's eyes are teary and he asks him, 'What's wrong with your eyes?' John answers, 'Nothing.' Boys don't cry!
- 4 The concept of singularity was invented by the mathematician and writer Vernor Vinge in his (1993) essay 'The coming technological singularity'; see also Gill (2018), chapter 7 'Her'.
- 5 The terminator describes itself, when asked by John, as a 'cybernetic organism, living tissue over a metal skeleton.' Of course, this film was made in 1991. I think it important to make distinctions among the various classes and types of AIs. Clearly,

for the terminators the ‘living tissue’ isn’t actually living tissue, but an artificial construct that looks like living tissue. It is injured and even totally destroyed and either ‘heals’ almost instantly or can be completely absent without changing the terminator at all. I suggest that the term ‘cyborg’ be reserved for those entities that have human living tissue as the fundamental living platform for their existence without which they cannot exist. I’d call the terminators simply robots with a sophisticated artificial covering resembling human flesh.

- 6 I make the distinction between metahuman cyborgs and information cyborgs. Information cyborgs are the result of the hyperreal simulations that reconstruct behavior in terms of the algorithms of global data. We become information cyborgs when, as humans, our wants and desires and feelings and actions are subtly manipulated by algorithms. The information cyborg is part of the hive mind of a non-biological calculating entity. Metahuman cyborgs are biological bodies enhanced by technology in infinitely imagined ways, yet they remain fundamentally bodies – individual, historical, psychological. Metahuman cyborgs are human biological beings taking advantage of tools and prosthetics, from charred sticks with which to draw pictures, to typewriters and tablet computers, to wearable and implant computer technologies.
- 7 I certainly believe that emotion is biologically based, thus animate (that is, biological) organisms are all part of a spectrum with the capacity to feel emotions. What I’m suggesting in this full statement is not that humans are the only beings to experience emotions, but rather that humans are distinctive in their capacity, indeed their forte, for objectifying and reflecting on emotions. All animate organisms, by virtue of their being biological, have and experience emotions – they feel pain or feel distinctions in their encounters with their environments – yet only humans write poems about, take up scientific studies of, have a rich vocabulary for these emotions.
- 8 Is there anything that Carroll didn’t consider with insight?
- 9 Perhaps reminiscent of *The Matrix* (1999), written and directed by Andy and Lana Wachowski. A major influence on the film is Jean Baudrillard’s *Simulacra and Simulation* (1994 [1981]). See also Gill (2018), chapter 16 ‘The Matrix.’
- 10 See also Gill (2018), chapter 6 ‘Cursed cursed creator. Why did I live?’ The 200th anniversary of the publication of Mary Shelley’s *Frankenstein* has occasioned an explosion of publications on both Shelley and her novel. Yet, of course, interest in her novel has not waned since the first Frankenstein film in 1931.
- 11 Elsewhere, I have discussed the power of embracing impossibles in terms of an aesthetic of impossibles. See Gill (2019) and Gill (2020).
- 12 An outstanding example of Pythagoras ignoring the experience of his ears occurred in the process of his creation of his theory of harmony. See Heller-Roazen (2011).
- 13 This understanding of religion approximates the core factors in Thomas Tweed’s (2006) theory of religion.
- 14 The classic novel that set the terms of this ‘jacked in’ virtual reality is William Gibson’s *Neuromancer* (1984).
- 15 Certainly, this is the era when we have become obsessed with whether or not we can even distinguish between fake and real, between human- and bot-generated information.
- 16 Of course, some readers will note that there is no reason that should an AI be able to simulate empathy, it will not be accompanied by a robot built to shed tears. Yet,

- surely, simulated tears correlated with the affects calculated by an algorithm does not weeping make.
- 17 Neither Lyotard nor I believe this is possible. See Gill (2018), chapter 20 'Watson and the Jeopardy! Test: machine learning.'
  - 18 This is a notable reversal from the usual interpretation of the phrase 'In the beginning was the Word!' Serres invokes the long evolution of human upright posture and the evolution of the distinctions of the human biological body as giving rise to the Word.
  - 19 I use the term 'religion' (singular) to indicate the scholar's invention as well as the designation of the general category as used by the general population, and I use the term 'religions' (plural) to refer to the cultural and historical realities that tend to correlate with the constructed term 'religion.'
  - 20 The notion of an aesthetic of impossibles has been extensively developed in Gill (2019) and Gill (2020).
  - 21 In *The Proper Study of Religion: Building on Jonathan Z. Smith* (2020), especially the final chapter, I develop the biology and philosophy of movement, explicitly human self-moving, as the foundation for a theory of religion appropriate to the secular study of religion.

## References

- Asimov, I. (1950 [1942]) *Runaround*. In *I, Robot: The Day of the Mechanical Men*. New York: Gnome Press.
- Baudrillard, J. (1994 [1981]) *Simulacra and Simulation*. Ann Arbor: University of Michigan Press. <https://doi.org/10.3998/mpub.9904>
- Collier, L. (2014) Why we cry: new research is opening eyes to the psychology of tears. *American Psychological Association* 45(2): 47. <https://doi.org/10.1037/e501432014-009>
- Gibson, W. (1984) *Neuromancer*. New York: Berkeley Publishing Group.
- Gill, S. (2012) *Dancing Culture Religion*. Lanham, MD: Rowman & Littlefield Publishing Group, Inc.
- Gill, S. (2018) *Religion and Technology into the Future: From Adam to Tomorrow's Eve*. Lanham, MD: Rowman & Littlefield Publishing Group, Inc.
- Gill, S. (2019) *Creative Encounters, Appreciating Difference: Perspectives and Strategies*. Lanham, MD: Rowman & Littlefield Publishing Group, Inc.
- Gill, S. (2020) *The Proper Study of Religion: Building on Jonathan Z. Smith*. New York: Oxford University Press.
- Gračanin, A., Bylsma, L. M. and Vingerhoets, A. J. J. M. (2018) Why only humans shed emotional tears: evolutionary and cultural perspectives. *Human Nature* 29: 104–33. Retrieved on 27 June 2019 from <https://doi.org/10.1007/s12110-018-9312-8>.
- Haraway, D. (1991) A cyborg manifesto: science, technology, and socialist feminism in the late twentieth century. In *Simions, Cyborgs, and Women: The Reinvention of Nature* 149–82. New York: Routledge.
- Heller-Roazen, D. (2011) *The Fifth Hammer: Pythagoras and the Disharmony of the World*. New York: Zone Books.
- Lyotard, J.-F. (1991 [1988]) Can thought go on without a body? In *The Inhuman: Reflections on Time* 8–23. Cambridge, UK: Polity Press.
- Neihardt, J. G. (2002 [1912]) *A Cycle of the West: The Song of Three Friends, The Song of Hugh Glass, The Song of Jed Smith, The Song of the Indian Wars, The Song of the*

- Messiah*. Lincoln: Bison Books.
- Serres, M. (2011) *Variations on the Body* 13. Minneapolis: Univocal.
- Tweed, T. (2006) *Crossing and Dwelling: A Theory of Religion*. Cambridge, MA: Harvard University Press. <https://doi.org/10.4159/9780674044517>
- Vinge, V. (1993) The coming technological singularity: how to survive in the post-human era. Conference paper, Department of Mathematical Sciences, San Diego State University, California.