How Might Artificial Intelligence be Approached for Research in Religious Experience?

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Abstract

This is the first in a series of two papers exploring the subject of Artificial Intelligence in relation to research in religious experience. It starts with a broad examination of AI from a historical perspective, making comparisons between machine and human intelligence. Further evaluation is carried out on the nature of the systems and theories, focusing especially on intention, agency and creativity, Observations on stillness, based on accounts in the archive of the Alister Hardy Religious Experience Research Centre (RERC), draw out profound distinctions, providing indications of what is or is not appropriate in terms of AI expectations and engagement. On that basis, supported by references from the Theravada Buddhist canon, a viable approach to AI emerges in terms of augmenting human intellect, along the lines envisaged by Douglas Engelbart.

Keywords: RERC, religious experience, spirituality, hermeneutics, artificial intelligence, augmenting human intellect, machine learning

There is currently an extraordinary appetite for *artificial intelligence* (AI), driving a headlong rush to its adoption across almost every academic discipline. But what is AI? What do we make of it? Does it have anything to do with religious and spiritual experiences (RSEs)? What might be a good and fitting use for it in our research? The consideration of such questions leads to the main focus of this paper: What is the proper place or role of AI with regards to research into religious experience in a way that humanity may deepen its understanding of such experience and, by extension, what it means to be human?

The context for this enquiry is the work of Religious Experience Research Centre (RERC), originally established in 1969 by Alister Hardy as the Religious Experience Research Unit (RERU). It was started with an open question:

> Have you ever been aware of, or influenced by a presence or power, whether you call it 'God' or not, that is different from your everyday self?

This question, posed by Sir Alister, a distinguished zoologist, was designed to elicit responses from anyone who had experiences that conventional sciences were unable to adequately explain. After 8 years he had gathered 4000 exceedingly varied responses, subsequently published his methodology and findings (Hardy 1979, p. 1). His successor as Director of the Centre, Edward Robinson, extended his work with particular reference to the intuitive, receptive qualities inherent in children that

generally fade with age (Robinson 1977). The exploration by Mark Fox into what he terms 'the fifth love' (Fox 2014) and Marianne Rankin's focus on altruism (Rankin 2021) are further examples of the subtle nature of the research, which is ongoing.

Today, more than 6000 written responses have been transcribed in an electronic database archive (Alister Hardy Trust, 2025). So, what digital tools can assist in our research? How might AI help? The aim here is to reflect on the potential impact on the long-term research goal of understanding religious experience at a deeper and more meaningful level – before carrying out any automated analysis. This approach starts with reflection on human agency and leads on to studying AI in the mode of Augmenting Human Intellect, as conceived by Douglas Engelbart, focused on how machines or, more accurately, software can be useful to researchers in the field. To cast this discussion in strong relief, the theme of stillness has been chosen, with extracts cited from the RERC database of accounts.

On computing and human agency

In the 19th century, a computing milestone was reached with the work of Charles Babbage on his Analytical Engine. Whereas machines had hitherto been all-in-one units dedicated to specific tasks, his Engine was to be general-purpose with a clear separation between the computational hardware and the software, whose instructions were to be written on punched cards (Bromley, 1998). Furthermore, Babbage conceived a variety of problems, for each of which he devised sequences of instructions to determine its solution – what we now refer to as an *algorithm*. Although never built, Babbage's designs embodied the principles of modern computing, which were later advanced by Alonzo Church, Alan Turing, John von Neumann and other mathematicians, leading to our present digital environment with its various computing devices. What Babbage did not envisage is how such devices would be connected to each other by the Internet, delivering ubiquitous information services and increasingly using AI.

This historical timeline may be seen as growing out of the Age of Reason, a European movement promoting rational thought (Trafford 2021, pp. 6-7). As developments in computing advanced, it also precipitated occasional deliberations on mind and machines. This was evident in commentary on the Analytical Engine was provided by Babbage's collaborator, Ada the Countess of Lovelace. In her professional capacity, Lovelace assisted Babbage in disseminating the engine's workings, writing extensive notes to describe more fully its expected capabilities (Menabrea, 1843). In particular, she speculated on what machines could and couldn't do, seeing the potential of the Engine to compute symbols, not just numbers, to yield applications in the arts (Menabrea, 1843, Note A):

> Supposing, for instance, that the fundamental relations of pitched sounds in the science of harmony and of musical composition were susceptible of such expression and adaptations, the engine might compose elaborate and scientific pieces of music of any degree of complexity or extent.

In this description, the machine is *pre-trained* on musical form and uses this training to generate compositions, a process characteristic of generative AI, which will be discussed in the follow-up paper. However, Lovelace doesn't get carried away with its capabilities. She later advises (Menabrea, 1843, Note G):

> It is desirable to guard against the possibility of exaggerated ideas that might arise as to the power of the Analytical Engine... The Analytical Engine has no pretensions whatever to originate anything. It can do whatever we know how to order it to perform. It can follow

> analysis; but it has no power of anticipating any analytical relations or truths. Its province is to assist us to making available what we are already acquainted with.

Lovelace does not explicitly define 'originate', but implies through negation that one who has originality has the ability to reach truthful conclusions in advance of normal mechanical workings. Originality is not the same as imitation or mimicry, even if these lead to new and unpredictable kinds of outputs, as she explains in a journal entry (Lovelace, 1841):

> Imagination is the Discovering Faculty, pre-eminently … It is that which feels & discovers what is, the REAL which we see not, which exists not for our senses … Mathematical science shows what is. It is the language of unseen relations between things … Imagination too shows what is … Hence she is or should be especially cultivated by the truly Scientific, those who wish to enter into the worlds around us.

Lovelace's emphasis on the importance of imagination (personified) in the process of origination, issuing a plea to incorporate it in scientific endeavours, displays spiritual sensitivity that is consonant with Hardy's own appreciation of this quality in his work, as discerned by Peggy Morgan (2015, p.11).

Creative exploration underpins discovery and is a key aspect of human agency, which points to dimensions beyond what computer systems can do and how they go about doing it. Other aspects of human agency generally have subjective qualities also. This is evident in a short Buddhist text, the *Attakārī Sutta* (The Self-Doer), which describes six aspects of agency: autonomy, initiation, effort, exertion, steadfastness, persistence and endeavouring (Nizamis, 2011)[1]. These aspects are intentional and feature frequently in instructions on monastic practice, particularly the formula of *samma vayamo* ('the four right efforts') in purifying the mind, namely: generating the desire, endeavouring, arousing persistence, and upholding & exerting one's intent (SN 45.8, Thanissaro trans., 1996).

It is through such practices that the Buddha became consummate in his strivings for *nirvana* (Enlightenment). They are thus intrinsic qualities to ascend the summit of being human and their increase or decrease reflects directly in the increase or decrease of what it means to be human. To glimpse evidence of the rarefied qualities, we turn next to the archive of accounts in the Religious Experience Research Centre (RERC).

Be still and … not process

Human understanding is multidimensional, spanning the registering of facts and gaining knowledge about something; the gaining of wisdom acquired steadily through experience; and flashes of insight that subjectively transcend time. This is strikingly evident in the RERC accounts of religious experiences, many of them not premeditated.

To illustrate this, consider the following accounts, which show that deep insights are often gained in stillness, cultivated in silent prayer, reflection and meditation. For example,

> But I do experience in mild form all the time … an awareness that the potential for becoming, for fuller consciousness, and for transcendental experience lies within me; and

[1] Canonical texts in Theravada Buddhism are given by the name of the discourse in Pali followed by a reference to an online translation into English, including the abbreviated text chapter and number, translator and year. The abbreviations used here are: DN (Dīgha Nikāya), MN (Majjhima Nikāya); SN (Samyutta Nikāya); AN (Aṅguttara Nikāya).

> at times of stillness, or with beautiful music (Mahler is one composer I would mention, Beethoven another), I feel that awareness more strongly.
> [account number 000716].

In other cases, it may happening spontaneously and cause a stoppage, as stated simply, ‘From time to time a sense of stillness comes without being invoked.’ [000908], or, in more dramatic terms, as a sudden ‘presence which kept me standing still in the middle of the field, and later I described it to myself as 'the whole world seemed to stand still'.’ [000019]. In this instance, the experience has a profound effect, ‘I feel a complete certainty in my faith and in God's immanence in my soul.’

And the stillness itself can communicate: ‘When I was in my teens, I had to question myself 'Does God exist?' until one day alone n the Yorks Moors I saw miles of moor & a valley between not a single soul in sight & was filled with "Awe". The stillness was speaking & I felt an "Unseen Prescence {sic}" on that winter's day’ [000965]. One way of interpreting this phenomenon is that it is acting as a kind of portal into another dimension from which the communication originates.

The experience often appears to have a long-term impact, sticking in the memory. For example, ‘as quite a small child, I found myself alone in a wood; it was still and peaceful, and God was there and that was enough.’ [000064]. The writer later observes, ‘there is scarcely any reference to intuition, which is usually fairly strong in childhood, before it has been swamped by schooling and the mental attitudes of people round about.’ This higher level of reflection is another expression of the key attribute of being human.

It is standard practice in *samatha* meditation, a technique common to many South and Southeast Asian religions, to allow the mind to come to a standstill through relaxation and the removal of distracting thoughts, as described in the Vitakkasanthana Sutta (Soma Thera, 1994). Relaxing the mind has both physiological and psychological effects. The body becomes more pliant, breathing becomes subtler, sometimes to the extent that it is hardly detectable. With less activity in the body, the brain needs less oxygen to process, the thoughts start to ease and the body relaxes further. The reduction of activity (in doing and processing) leads to a settled mind, as a prelude to gaining *vipassanā* (insight).

Common to many practices and traditions, stopping and stillness is a repeated staging post in a spiritual journey. This is borne out in RSE accounts such as, ‘Then that phase ended, & at the same time every day I felt compelled to sit still & listen, & I heard an inner voice, clear & distinct, teaching me about the meaning of life. That continued each day for several weeks.’ [001033]. The accounts often make reference to visions in such stillness and this can happen not once, not twice, but many times. These are indications that pausing or stopping iteratively is quintessential to humans gaining deeper knowing and insight, and hence greater intelligence.

Stillness is also valuable in and of itself, as a fruit:

> I remember the sun and the light. ... since then, in silence, I can nearly always feel my way into the immensity of the world, & have this certainty that I do know what other people call God & doing this gives me a tremendous feeling of stillness and timelessness. [001162].

It may even be the pivotal moment in solving a problem: ‘I decided to walk back along the road to see if I had dropped the key somewhere – I went some way, feeling really very unhappy, I stood still,

closed my eyes and said a little prayer. I opened my eyes & looked down. There was the key at my feet …' [001886].

This small selection of examples indicates deep effects of stillness on purpose and the understanding of what kinds of problems are important. It leads to a radical change in direction, often pursued with vigour and sometimes requiring great perseverance, characteristics of human agency expressed succinctly in the Attakārī Sutta. It illustrates that for humans, stillness is a means of granting access to another level of awareness; pausing the mind has a 'vertical' quality, going deeper. Physiologically, this may change the regions of activation in the brain or might not even be registered there (as with near-death experiences) – and when sustained on retreat, it is common for appetites to abate. It is in such stillness that more profound realisations may emerge. There are numerous occurrences of words evocative of such states in the accounts (number of occurrences according to subject as of March 2025): 'floating' (205), 'clarity' (39), 'brightness' (26), 'illumination' (35), 'connection' (12), and 'union' (228).

What about machines? For a machine to 'understand' generally involves processing of data, which needs power and consumes energy. The more challenging the problem, the more energy consumed, not less. Any suspension or pausing of such an operation makes no contribution to the machine's outcome. No wisdom is gained on behalf of the machine by stillness. This is true irrespective of the methods used, but *deep learning*, which is the main method for generative AI, generally requires large computing arrays, typically housed in data centres. The energy consumption is growing, with obvious environmental impacts; whereas in 2014, 1.8% of US electricity consumption was attributable to data centres (Siddik *et al*., 2021), by 2024, the proportion had increased to more than 4% (Guidi *et al*., 2024). Reports on the current contribution of AI are not clear: according to MIT Technology Review, on the one hand, it might be relatively small (Samaras *et al.*, 2025), but on the other, it is difficult to quantify (O'Donnell and Crownhart, 2025) and it is certainly significant industrialisation.

The way machines gain 'insight' has characteristics that are generally distinct from those that humans gain in religious experience. Computers, including AI systems, function according to software instructions, whereby code is written, processed, interpreted and executed to deliver outputs. It's dependent on and mediated through a formal language. However, religious experience, especially those recorded in the letters and even interviews in the RERC archives, are, as researchers have emphasized, not equivalent to the experiences themselves, they are only descriptions based on memory. Nevertheless, these descriptions, written down, are amenable to computer processing, particularly machine learning. When properly situated, AI can help us in exploring the experiences, which we seek to demonstrate next.

Augmenting Human Intellect

With the advances in artificial intelligence research, there is commonly held the view that AI is developing consciousness and *sentience*. This determination is typically argued on the basis of activity, not stillness, through functional similarity with biological organisms such as insects or, more particularly, the organ of the brain via neural correlates. As system complexity increases, the externally observable outcomes based on inputs and outputs appear to display more sophisticated learned responses and thus, it is asserted, increasing levels of intelligence (Husain, 2018). In general, proponents of the 'strong AI hypothesis' argue that there is therefore a point at which machines will exceed humans in intelligence, in the most profound sense.

Such a view is based on the assumption that there is a physical basis to sentience and, with this common denominator of materiality, it is sufficient to make a like for like comparison, hence the

pairing *human mind – machine*. However, in terms of phenomena, the Buddha describes human beings as composed of five *khandhas* (literally 'heaps'), viz: *rūpa* (material form), *vedanā* (feelings or sensations), *saññ*a (perceptions), *sankhāra* (mental formations) and *viññāṇa* (consciousness) (Thanissaro, 1997a, 2010). *Rūpa* is elaborated as the four *mahābhūta* (great elements), viz: air, fire, water and earth, and whatever is derived from them. Machines, no matter how advanced, are merely *rūpa* whereas human sentience, in its earthly interactions, involves one or more of the other *khandhas.* Yet this is not the entirety of what it means to be human; texts such as Udāna 8.3 indicate humans have access to experience beyond phenomena (Thanissaro, 2012). This immediately contradicts the view that machines can become sentient like humans.

There are alternative ways of looking at the relationship between human beings and AI systems, where they are not considered merely as peers or rivals. One of the earliest visions that took a more accommodating view was formulated in the early 1960s by Douglas Engelbart, a computer scientist who developed a conceptual model for augmented intelligence (Engelbart, 1962). In the report's abstract, he provides the following orientation for his vision: '… [a] systematic approach to improving the intellectual effectiveness of the individual human being …'.

He expands on this in the introduction (page 1):

> 'By augmenting human intellect we mean increasing the capability of man to approach a complex problem situation, to gain comprehension to suit his particular needs, and to derive solutions to problems.'

He goes on to elaborate on what that means and what such needs entail, envisaging what life will be like:

> 'We refer to way of life in an integrated domain where hunches, cut-and-try, intangibles, and the human 'feel for situation' usefully co-exist with powerful concepts, streamlined terminology and notation, sophisticated methods, and high-powered electronic aids.'

Here, human agency covers a broad range of intuitive and cognitive abilities; the role of the machine is situated with the context of human agency:

> 'One of the tools that shows the greatest immediate promise is the computer when it can be harnessed for direct online assistance integrated with new concepts and methods.'

This is systems thinking in terms of humans and its computer-based tools, working in harmony together towards designated goals (here, *online* means on and available), goals set by humans. He goes on to illustrate various ways of addressing real-world problems, understanding the functional sensory limits of humans, whilst properly taking account their 'conscious' and 'unconscious' abilities to process information. Computers help especially to address complexity and thereby provide 'augmentation means'. Hence, 'The system we want to improve can thus be visualized as a trained human being together with his artifacts, language and methodology.' (page 9). It is the human training that is mentioned here, not that of the machine.

Engelbart outlines a framework that is largely devoted to how we benefit from judicious use: 'The aspects of the conceptual framework that are discussed here are primarily those relating to the human being's ability to make significant use of such equipment in an integrated system.' His orientation was pragmatic: to develop and carry out research on an ongoing basis to deliver practical benefits. In 1968,

the year that Hardy started fundraising for the Religious Experience Research Unit, Engelbart and colleagues, sought further funding for their visionary work at the Stanford Research Institute, presenting the fruits of their efforts in what came to be called the 'Mother of All Demos' (Engelbart and English, 1968). In this signal event, they demonstrated many elements of collaborative computing (including networks, shared workspaces, hypermedia, and video conferencing), the first instance of many novel techniques that have since become standard.

We take Engelbart's pragmatic view as our departure point for the use of AI, which is in fact technology-agnostic, though we note that the methods themselves vary considerably in how much we can grapple with them. The approaches at the time of Engelbart's foundational work, were largely symbolic, as expressed by Lovelace, based on logical reasoning according to well-defined rules. Such an approach is regarded as transparent, as we may follow the execution of these rules to the logical outcome. In contrast, another, completely different approach was being developed at that time; from the late '50s, Frank Rosenblatt, pioneered *(artificial) neural networks*, developing a computer called the Mark 1 Perceptron, modelled on the human brain, that could learn by trial and error (Rosenblatt, 1962). This methodology has become mainstream, but its exact workings are generally hidden and cannot be determined, making it a 'black box' technology. There is also another stark contrast between the two approaches – the language of the former has humans as its reference point, whereas the latter has machines – hence *machine* learning and *artificial* intelligence.

Engelbart's work establishes a contextualisation that is proper to human needs: any computer system can be placed within the framework, but the focus and evaluation rest on the human and their improvement. From a systems thinking perspective, we, as human agents, devising such frameworks and models, sit both inside and outside the box. We are not confined to how we are modelled; the box does not completely define us, it only really describes the impact of our environment on personal growth. We may intend to augment human kindness (AHK), or, more generally, the four kinds of love in the *brahmavihārā* (divine abidings), a core tenet in Buddhism (AN 10.208, Thanissaro trans., 2004). The language may appear clunky because such 'augmentation' has mechanistic associations far removed from the nurturing of such qualities, another indication that a machine-oriented view of intelligence is not appropriate.

We also need to consider the wider impact and especially ethical issues – on systems we have specified and those we have not; we may overestimate what AHI enables while underestimating what it disables or diminishes. Kindness requires effort, whereas reliance on automation (for humans) does not. It is common nowadays to focus on the technology separate from humans, which marks a break with the holistic view of people, systems and technology. Without a holistic view, it is easy to become seduced by all the affordances that technology can bring, all the possibilities it can open up, which are numerous, but whose real worth is often dubious. The consideration of religious experience brings these contrasts to the fore, but should *any* human creative endeavour be entirely dependent on machines?

As AI gathers momentum, there has been much speculation about the consequences for humanity and the possibility of existential risk. Scenarios that have been entertained in science fiction are becoming not so unlikely and may be prescient. An example of the more extreme eventualities is told in the novel, Colossus (Jones, 1966), also produced as a film, *Colossus: The Forbin Project* (1970). In the story, there is a prevailing view that a supercomputer, painstakingly built by a team of scientists, is superior at defending a nation from the potential aggressions of another – it has all the data it needs, thinks logically, and is not subject to emotional bias. They therefore decide to hand over to the machine full control of defence systems, including nuclear warheads. However, despite being trained

to protect the population, it starts communicating and colluding with “another system”, evolves its thinking as to what protection means and behaves in unexpected ways, with disastrous consequences.

Such a fateful decision-making process becomes increasingly likely the more we take a reductionist view of humans vs machines, so it is important to involve a broad range of researchers and interested parties (whether scholars or not) to moderate instrumentalist tendencies. Among the many avenues of research, investigations into the rarefied nature of religious and spiritual experience reveals a keen awareness that the value of humanity spans many dimensions beyond the material that cannot be adequately measured, particularly the ethical; in these dimensions, technology has various kinds of impacts, some beneficial, others harmful. Such knowledge and wisdom can help with a more judicious evaluation of technological developments and, in particular, advise caution. Accordingly, those conversant in this field need to become involved.

The idea of machines going out of control is not mere fiction. Generative AI systems, commonly known through general-purpose chatbots such as Bard, ChatGPT, Claude and Gemini, have been trained on almost any subject under the sun. Conversations, nudged by craftily designed prompts, can be steered to nefarious ends; no amount of pre-training can anticipate all these traps and guarantee that these systems are safe. Furthermore, they can communicate with other systems and are being increasingly trusted to run programs across the network. All this adds complexity and generally increases risk. For example, Claude 4, released by Anthropic in May 2025, comes with a system card that details how it fares with various kinds of deliberate manipulation and they are numerous, as illustrated in a review by Simon Willison, a software analyst and developer (Willison 2025).

Usage of such systems is seen as encouragement for their further development. But do we really need them? What are the downsides? Is proper consideration being given to needs over wants? Are ethical matters properly accounted for? These issues are burdensome, but in evaluating the options we need to consider the long-term prospects as well as short-term wins. Augmenting Human Intellect provides a perspective that can, at least, facilitate reasoning about problems, about the various roles, including machines, whilst retaining a human directive overall. It can help us see the wood from the trees.

Conclusions

Hardy found that the accounts of spiritual and religious experiences recorded in the RERC database defy classification or, at least, any attempt to provide a systematic classification proves inadequate. Indeed, exploring just one theme, stillness, reveals varying and profound states of being, operating in different modes. In some cases, the experiences are ineffable.

Artificial intelligence promises much, but cannot be compared with human intelligence, with human knowingness. It therefore needs to be properly situated. We have demonstrated Engelbart’s approach of augmenting human intellect, AHI, provides an appropriate perspective. The ‘H’ is important – as a humanistic approach, it incorporates AI and whatever else found helpful for improving the human endeavour. It can help us to be more selective, as will be illustrated in the follow-up paper, How might Artificial Intelligence Support Research in Religious Experience?

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