

# **Defending Resurrection:**

## A Scientific Apology for the Christian Doctrine of Bodily Resurrection

### I.

As Easter Sunday approaches, many people in the world will ponder the question “Did Jesus Christ really rise from the dead?” Upon the heels of this resurrection question, follows a more personal one, “Will I rise from the dead?”

The fact is that most Americans do believe in life after death, perhaps up to 85% of us.<sup>1</sup> “The most common beliefs were that one is reunited with family and friends, that the afterlife is comforting, that there is heaven, and that the transition is peaceful.”<sup>2</sup> “In many popular views, this continued existence often takes place in a spiritual or immaterial realm. Deceased persons are usually believed to go to a specific realm or plane of existence after death, usually determined by their actions during life.”<sup>3</sup> Most people seem to believe that human personalities will persist post mortem as immaterial spirits in communion with each other and with God.

### II

In contrast to this popular eschatology of disembodied spirits, Christianity has consistently maintained a bodily resurrection from the dead. The Apostle Paul states this doctrine explicitly: “So will it be with the resurrection of the dead. The body that is sown is perishable, it is raised imperishable; it is sown in dishonor, it is raised in glory; it is sown in weakness, it is raised in power; it is sown a natural body, it is raised a spiritual body. If there is a natural body, there is also a spiritual body. [I Corinthians 15:42-44, NIV]”

“Jewish teaching about the afterlife is sparse: The Torah has no clear reference to afterlife at all.”<sup>4</sup> Yet, we do read of physical resurrection in the Old Testament. “I know that my Redeemer lives, and that in the end he will stand upon the earth. And after my skin has been destroyed, yet in my flesh I will see God; I myself will see him with my own eyes-- I, and not another. How my heart yearns within me! [Job 19:25-27, NIV]”

It must be added, that according to Christian teaching, not only will the righteous undergo bodily resurrection, but the unrighteous as well. Jesus Himself tells us, "Do not be amazed at this, for a time is coming when all who are in their graves will hear his voice and come out – those who have done good will rise to live, and those who have done evil will rise to be condemned [John 5:28-29, NIV]”. Of course this bodily resurrection of the condemned refers to an afterlife in hell.

The belief that all humans, both good and evil, are destined to receive a reconstituted body has been a cornerstone of orthodox Christianity throughout its 2000-year history. As one example, when Dante Alighieri wrote his *Divine Comedy* around 1300, he did not describe ethereal beings floating on comfortable clouds. Rather, Dante portrayed real human flesh burning in an eternally hot inferno and true human eyes forever transfixed in

a beatific vision. Hope in a bodily resurrection has anchored the Church since the day of Pentecost.

### III

Although the resurrection of the dead remains official doctrine in most Christian denominations, the actual belief of rank-and-file Christians differs little from the population at large. Many church-going evangelicals envision their eschatological end point as floating incorporeal beings.<sup>5</sup>

In Protestant churches, teaching about the bodily resurrection began to diminish in the 19<sup>th</sup> century. In the early 20<sup>th</sup> century, the famous orator Billy Sunday often preached about the “road to heaven”, but seldom mentioned that at the end of the road was a human body. “The emphasis on the immortality of the soul in heaven instead of the resurrection of the dead continues largely in the 21st century through popular charismatic and evangelical preaching. Jesus is often spoken of as ‘the way to heaven’ and personal eschatology is generally seen in terms of whether or not a person gets into heaven when they die, rather than how they will fare at the eschatological resurrection of the dead.”<sup>6</sup>

In many Protestant circles, resurrection has been abandoned altogether. John Shelby Spong, the former Anglican bishop, says “Resurrection is an action of God. Jesus was raised into the meaning of God. It therefore cannot be a physical resuscitation occurring inside human history.”<sup>7</sup> Spong is hardly the first to profess unbelief. Rejection of resurrection traces all the way back to the first century when Greek philosophers first heard Paul expound the Christian gospel: “When they heard about the resurrection of the dead, some of them sneered, but others said, ‘We want to hear you again on this subject’. [Acts 17:32, NIV]”

### IV

I believe in resurrected bodies. I concur with Millard Erickson, that:

“The full range of the biblical data can best be accommodated by the view that we will term ‘conditional unity.’ According to this view, the normal state of a human is as a materialized unitary being. In Scripture humans are so addressed and regarded. They are not urged to flee or escape from the body, as if it were somehow inherently evil. This monistic condition can, however, be broken down, and at death it is, so that the immaterial aspect of the human lives on even as the material decomposes. At the resurrection however, there will be a return to a material or bodily condition. The person will assume a body that has some points of continuity with the old body, but also a new or reconstituted or spiritual body.”<sup>8</sup>

The scientist-theologian, John Polkinghorne, describes the spiritual body as not “some ethereal entity, the oxymoron of a body made of spirit, but rather as a being totally suffused by the life-giving spirit of God”.<sup>9</sup> C.S. Lewis adds, “The destiny of redeemed man is not less but more unimaginable than mysticism would lead us to suppose –

because it is full of semi-imaginables which we cannot at present admit without destroying its essential character.”<sup>10</sup> We are not given details of our redeemed body, but scripture clearly teaches that a spiritual mind will persist in a spiritual body – perhaps a body that is just as recognizable and palpable as the resurrected body of Jesus Christ. [see John 20:27 and Luke 24:39].

If we grant that biblical data, church history, and church doctrine all affirm a bodily resurrection, it is not impertinent to ask: “But why would our immaterial aspect – once separated from our earthly bodies – require a new materialized body?” “What is the point?” Posed in different way, “Since the human mind is immaterial anyway, why can’t it abide in an immaterial ghost?”

For centuries theologians could offer only philosophic answers to these questions. Now it appears that scientists may be providing answers as well. In the 21<sup>st</sup> century, many researchers and theorists in the field of artificial intelligence are corroborating Christian teaching, concluding that a mind cannot exist apart from a body.

## V

What then is “Artificial Intelligence”? Martin Lorenz is a professor of mathematics at Temple University and a leading authority on Artificial Intelligence. Dr. Lorenz explains that AI comes in three flavors: Hard AI, Soft AI, and Embodied AI. It is this third AI that provides insight into an embodied afterlife.

“Never ask a researcher in the field of AI what AI is! So if you really want to ask me, here’s a try to give the three most heard answers: AI is the attempt to make computers smart. This means that computers can really think and we want to make them able to do so. This is known as hard AI.

AI is the simulation of human or human-like thinking on a computer. This means that computers are as dumb as you always knew. The only thing they can do is simulate small parts of human thinking. This is the so called soft (or weak) AI.

Intelligence is only possible in a real environment. Therefore we need to build real-world entities that behave in a somehow intelligent manner. This paradigm is the youngest and calls itself the embodied AI or the new AI.”<sup>11</sup>

Why would a mind (human or artificial) require a body (fleshly or robotic)? Here are the five reasons that scientists posit as to why a mind requires a body.

1. It is necessary for an intelligent system to have a body.
2. Bodies are the way that minds connect to the outside world.
3. The main task of the mind is to produce the next action. We need a body for this.
4. We do not simply inhabit our bodies. We literally use them to think with.
5. Imaginations need bodies.

## 1. It is necessary for an intelligent system to have a body.

Dr. Erich Prem is a past researcher at the Austrian Research Institute for Artificial Intelligence. As Dr. Prem spells out, most researchers who specialize in embodied artificial intelligence do believe that bodies are a necessary requisite for an intelligent being. After all, that's why they strive to put an artificial mind into a robotic body.

“In embodied artificial intelligence the foundational questions concern the nature of human thinking and intelligence. Is it necessary for an intelligent system to possess a body, as claimed by leading scientists of robotics and AI and is it a necessary or useful requisite for the construction of intelligent systems? Is there evidence thereof? What are necessary elements of embodied architectures, what drives these systems? How are we to proceed in a science of embodied systems? What are the philosophical implications of an "embodied" perspective?”<sup>12</sup>

It is reasonable to conclude that bodies are a necessary requisite for intelligence. This is true for both artificial and human intelligence; for both souls in this world and for souls in the world to come. Minds just require bodies.<sup>13</sup>

## 2. Bodies are the way that minds connect to the outside world.

Stan Franklin is a research professor at the University of Memphis and co-director of the Institute of Intelligent Systems. In this abstract, Dr. Franklin points out that a disembodied mind cannot connect to the outside world. To be a genuine autonomous agent, a mind must interface with its environment.

“Many believe that the major problem facing traditional artificial intelligence (and the functional theory of mind) is how to connect intelligence to the outside world. Some turned to robotic functionalism and a hybrid response that attempts to rescue symbolic functionalism by grounding the symbol system with a connectionist hook to the world. Others turned to an alternative approach, embodied cognition that emerged from an older tradition in biology, ethology, and behavioral modeling. Both approaches are contrasted here before a detailed exploration of embodiment is conducted. In particular we ask whether strong embodiment is possible for robotics, i.e. are robot "minds" similar to animal minds, or is the role of robotics to provide a tool for scientific exploration, a weak embodiment?”<sup>14</sup>

C.S. Lewis makes the point in philosophic terms in *the Problem of Pain*, “People often talk as if nothing were easier than for two naked minds to meet or become aware of each

other. But I see no possibility of their doing so except in a common medium which forms their external world or environment".<sup>15</sup>

In whatever heaven or hell we may imagine, we must suppose that the departed soul connects in some way with its new environment. It is reasonable therefore to conclude that this connection is made possible by means of a new material body made of similar stuff as its new environment.

### 3. The main task of the mind is to produce the next action. We need a body for this.

Dr. Stan Franklin affirms that a body is necessary for a mind to operate. The mind must have a means to collect outside information for its own purposes from its own environment: something akin to sight, sound, smell, touch, or taste. The mind also must possess some means to create a physical next action by choice; something analogous to hands, feet, or voice. That's the point of manufacturing robots.

- "(1) The overriding task of mind is to produce the next action.
- (2) Actions are selected in the service of drives built in by evolution or design.
- (3) Mind operates on sensations to create information for its own use."<sup>16</sup>

Once more Lewis contributes to the conversation: "Again, the freedom of a creature must mean freedom to choose; and choice implies the existence of things to choose between. A creature with no environment would have no choices to make; so that freedom, like self-consciousness (if they are not, indeed, the same thing), again demands the presence to the self of something other than the self."<sup>17</sup>

If we conjecture that a soul in the afterlife is an autonomous agent, then we must also suppose that the soul possesses a will of its own. But how can an autonomous soul exercise its will without a body? How could it produce the next action – push or pull? It could not. It is reasonable therefore to conclude that a glorified mind exercises its glorified will through its glorified body – all to the glory of God.

### 4. We do not simply inhabit our bodies; we literally use them to think with.

Dr. Prem states something that athletes and dancers recognize intuitively. A mind requires a body of dimension and substance in order to flow through its environment and to commune with similarly embodied minds.

Indeed, there are no eternally fixed representations of the external world in the "motor system" rather, it is under the guidance of both internal and external factors with important linkages to frontal, parietal, cerebellar, basal ganglionic, and cingulate gyrus areas that subserve cognitive and motivational activities. Indeed, the motor system including related structures, is a self-organizing dynamical system contexted among musculoskeletal, environmental (e.g., gravity), and social forces. We do not simply inhabit our bodies; we literally use them to think with."<sup>18</sup>

As an intelligence (robotic or soulish) moves through its native environment, it needs a knowledge of itself in relation to its surroundings. As intelligence grows accustomed to its body, a part of thinking is delegated to its body. We may say that the actions of the body then become “automatic”, “instinctive”, or “thinking”.

### 5. Imaginations need bodies.

Dr. Tsukimoto Hiroshi is a professor at Tokyo Denki University School of Engineering, Evening Division Department of Information and Communication Engineering. Dr. Hiroshi suggests that imaginations – that is art, music, literature, anything creative – require a body. If scientists were ever able to develop an “artificial imagination”, artificial neural networks would need to inhabit an artificial body. The body is key.

“EAI insists that symbolic processings should consist of artificial neural networks trained for bodily movements. Imaginations need bodies. Robots can realize imaginations, and so can realize EAI. Current computers do not have bodies, and so cannot realize imaginations. Since the main linguistic aspects of imaginations are metaphors, EAI is realized as Metaphor Based AI (MBAI) in the current computers.”<sup>19</sup>

Do human beings expect their imaginations to accompany them into the afterlife? If so, then we need a body. How could we sing praises without something akin to vocal cords? How could the “pure in heart” see God without something like eyes? Most importantly, how could we continue to love without any means of expressing our love to others?

## VI

As Easter Sunday approaches, many people in the world will ponder the question, “is there really such a thing as a resurrection from the dead?” The Christian response is a joyful and emphatic “yes”. As disciples of Jesus Christ, we sing along with the libretto of Handel’s *Messiah*: “The trumpet shall sound, and the dead shall be raised incorruptible, and we shall be changed. For this corruptible must put on incorruption, and this mortal must put on immortality” [I Corinthians 15:51-53, KJV]. It appears that modern science is corroborating that ancient Christian hope. Perhaps, in the future, science will join in the Hallelujah Chorus.

Author's after note: This is a scientific apology for a theological doctrine. Because I confess to being an untrained theologian and an even more untrained scientist, I have relied on the words of those more qualified than I. As far as I know, none of the EAI scientists has expressed a view on personal eschatology. Nevertheless, it is fair to say that their conclusions do provide a scientific apology for the Christian doctrine of bodily resurrection as opposed to an incorporeal afterlife. I believe that I have quoted all experts fairly and have not misrepresented their positions.

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13. At this point one may ask "What about God? He is an intelligent Being. Is He embodied?" The answer is "no" for two reasons. First, Scripture clearly teaches that God the Father is a Spirit [John 4:24]. Second, the Trinity -- that Unity in Community -- exists in a realm (environment) of its own. As Creator, all creation responds to His will. This is unique. His Transcendence knows all without need of sense organs. God is not like us: created souls co-existing in a common medium. A body is not required.



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