Some Resurrection Theories

Eric Steinhart, Department of Philosophy, William Paterson University, Wayne NJ 07470, USA. Email: <esteinhart1@nyc.rr.com>, <steinharte@wpunj.edu>. <www.ericsteinhart.com>

1. Introduction

We present several resurrection theories. We group them into four categories: (1) revival theories; (2) reassembly theories; (3) replication theories; and (4) rebirth theories. Within each group, there are several versions of the theory. We thus consider: (1a) the Biblical revival theory; (1b) van Inwagen's body-snatching theory; (1c) Zimmerman's particle-fission theory; (2a) the Biblical reassembly theory; (2b) reassembly by God; (2c) reassembly by the soul; (3a) material replication in this universe; (3b) replication by simulation in a computer; (3c) material replication in another universe; (4a) rebirth in this universe; and finally (4b) rebirth in another universe.

2. Resurrection by Revival

2.1 The Biblical Version

The theory of resurrection as revival is one of the main theories of resurrection in the Bible. Many verses refer to the opening of graves and the raising of the dead.¹ Jesus revives Lazarus and the daughter of Jairus.² The revival of Jesus is obviously the primary example of resurrection in the New Testament. The theory of resurrection by revival goes something like this: (1) An earthly body is born. (2) The earthly body dies and is buried in its grave. (3) At some later time, the grave opens and the corpse is raised from the grave. God brings the corpse back to life. It is revived or re-animated. It becomes the new body. One of the most famous revival stories is the resurrection of Lazarus by Jesus:

1. Now a certain man was ill, Lazarus of Bethany, the village of Martha and her sister Mary. . . . 5. Now Jesus loved Martha and her sister and Lazarus. 6. So when he heard that he was ill, he stayed two days longer in the place where he was. 7. Then after this he said to the disciples, Let us go into Judea again. . . 11. Thus he spoke, and then he said to them, Our friend Lazarus has fallen asleep, but I go to awake him out of sleep. 12. The disciples said to him, Lord, if he has fallen asleep, he will recover. 13. Now Jesus had spoken of his death, but they thought that he meant taking rest in sleep. 14. Then Jesus told them plainly, Lazarus is dead; 15. and for your sake I am glad that I was not there, so that you may believe. But let us go to him. . . . 17. Now when Jesus came, he found that Lazarus had already been in the tomb four days. . . . 38. Then Jesus, deeply moved again, came to the tomb; it was a cave, and a stone lay upon it. 39. Jesus said, Take away the stone. Martha, the sister of the dead man,, said to him, Lord, by this time there will be an odor, for he has been dead four days. 40. Jesus said

to her, Did I not tell you that if you would believe you would see the glory of God? 41. So they took away the stone. And Jesus lifted up his eyes and said, Father, I thank thee that thou hast heard me. . . . 43. When he had said this, he cried with a loud voice, Lazarus, come out. 44. The dead man came out, his hands and feet bound with bandages, and his face wrapped with a cloth. Jesus said to them, Unbind him, and let him go. (Chapter 12) 1. Six days before the Passover, Jesus came to Bethany, where Lazarus was, whom Jesus had raised from the dead. 2. There they made him a supper; Martha served, and Lazarus was one of those at table with him. (John 11; RSV)

2.2 The Body-Snatching Version

Peter van Inwagen proposes a theory of resurrection based on the idea of "bodysnatching". The theory is adopted by Hasker (1999: ch. 8). It goes like this: (1) An earthly body is born. (2) The earthly body dies. (3) At the instant of your death, God literally replaces your corpse with a replica and takes your corpse to some other place. The corpse is immediately revived or reanimated – it becomes the new body. Here's what van Inwagen says (1978: 246):

It is of course true that men apparently cease to exist: those who are cremated, for example. But it contradicts nothing in the creeds to suppose that this is not what really happens, and that God preserves our corpses contrary to all appearance. . . . Perhaps at the moment of each man's death, God removes his corpse and replaces it with a simulacrum which is what is burned or rots. Or perhaps God is not quite so wholesale as this: perhaps He removes for "safekeeping" only the "core person" -- the brain and central nervous system -- or even some special part of it.

2.3 The Particle-Fission Version

According to Zimmerman (1999), resurrection happens by particle-fission. The particle-fission theory is also adopted by Corcoran (2001) and Hudson (2001: ch. 7). It goes like this: (1) An earthly body is born. (2) At the moment just before death, every particle in the body divides. Let *Lazarus* be the last living stage of a certain body. Lazarus divides into two sets of particles. Call one of these sets *Lucky* and the other *Unlucky*. Lazarus is connected to both Lucky and Unlucky by immanent causal chains. The particles in Lucky are arranged exactly like they were in Lazarus. Hence the life of Lazarus continues into Lucky. But the particles in Unlucky are not arranged in exactly the right way. So Unlucky is dead. Unlucky does not compete with Lucky for the life of Lazarus. Lucky is the new body. Here is Zimmerman's formulation:

Now we have a model for how God may resurrect this very body: He does so by, just before it completely loses its living form, enabling each particle to divide -- or at least to be immanent-causally responsible for two resulting particle-stages. One of the resulting particle-stages is right here, where the old one was; another is

either in heaven now (for immediate resurrectionists), or somewhere in the far future. (p. 206) . . . The heap of dead matter I leave behind is made of stuff which really was a part of my body (it is not a simulacrum; God is not a body-snatcher), and the resurrected body is really identical with this present one -- it is causally continuous with it in just the way adjoining stages of my present body are causally continuous, except that in this case there is a spatial or spatiotemporal gap which my poor body was given the power to cross by means of God's intervention (p. 207)

3. Resurrection by Reassembly

3.1 The Biblical Version

One version of the reassembly theory goes something like this: (1) Your earthly body is born and lives. (2) It dies and disintegrates. (3) After your death, you survive in the mind of God. God stores your biography. God encodes an atomic-level blueprint of your body. God tracks the smallest last parts of your body (e.g. its atoms) as they wander through the universe. At the time of the resurrection, God gathers these atoms back together. God uses its atomic-level blueprint to rebuild your body. So your new body is made out of its old parts according to its old form. It perhaps originates with Ezekiel's vision of the valley of dry bones (Ezekiel 37: 1-14).³ The vision of Ezekiel goes like this:

1 The hand of the LORD was upon me, and he brought me out by the Spirit of the LORD and set me in the middle of a valley; it was full of bones. 2 He led me back and forth among them, and I saw a great many bones on the floor of the valley, bones that were very dry. 3 He asked me, "Son of man, can these bones live?" 3b I said, "O Sovereign LORD, you alone know." 4 Then he said to me, "Prophesy to these bones and say to them, 'Dry bones, hear the word of the LORD! 5 This is what the Sovereign LORD says to these bones: I will make breath enter you, and you will come to life. 6 I will attach tendons to you and make flesh come upon you and cover you with skin; I will put breath in you, and you will come to life. Then you will know that I am the LORD." 7 So I prophesied as I was commanded. And as I was prophesying, there was a noise, a rattling sound, and the bones came together, bone to bone. 8 I looked, and tendons and flesh appeared on them and skin covered them, but there was no breath in them. 9 Then he said to me, "Prophesy to the breath; prophesy, son of man, and say to it, 'This is what the Sovereign LORD says: Come from the four winds, O breath, and breathe into these slain, that they may live." 10 So I prophesied as he commanded me, and breath entered them; they came to life and stood up on their feet ? a vast army. (Ezekiel 37:1-9; NIV)

3.2 The Action of God Version

Although the Ezekiel story is vivid, it might not really be a resurrection theory. But Jesus suggests resurrection by reassembly with his remarks that his body is a temple that will be rebuilt in three days. The reassembly theory is the dominant classical theory of the resurrection (Bynum, 1995). More recently, reassembly by the power of God is defended by Hershenov (2002; 2003). A fairly precise description of the reassembly of the atoms of the earthly body by the power of God is given in a fragmentary work ascribed to the early church father Justin Martyr. Here is Martyr's description:

Again, according to Epicurus, the atoms and the void being indestructible, it is by a definite arrangement and adjustment of the atoms as they come together, that both all other formations are produced, and the body itself; and it being in course of time dissolved, is dissolved again into those atoms from which it was also produced. And as these remain indestructible, it is not at all impossible, that by coming together again, and receiving the same arrangement and position, they should make a body of like nature to what was formerly produced by them; as if a jeweler should make in mosaic the form of an animal, and the stones should be scattered by time or by the man himself who made them, he having still in his possession the scattered stones, may gather them together again, and having gathered, may dispose them in the same way, and make the same form of an animal. And shall not God be able to collect again the decomposed members of the flesh, and make the same body as was formerly produced by Him? (Justin Martyr, 114-165: 297)

3.3 The Action of the Soul Version

Another version of the reassembly theory says that, at the time of the resurrection, your soul gathers your atoms. Your soul pulls them together. Your new body is built from the atoms and form of your earthly body by your soul. Gregory of Nyssa gives a good presentation of this version of the reassembly theory of resurrection:

we assert [that] the soul know[s] the natural peculiarities of those atoms whose concourse makes the frame of the body in which it has itself grown, even after the scattering of those atoms. . . . [the soul] remains after [the dissolution of the body] in those very atoms in which she first grew up, and, like a guardian placed over private property, does not abandon them when they are mingled with their kindred atoms, and by the subtle ubiquity of her intelligence makes no mistake about them, with all their subtle minuteness, but diffuses herself along with those which belong to herself when they are being mingled with their kindred dust, and suffers no exhaustion in keeping up with the whole number of them when they stream back into the universe, but remains with them, no matter in what direction or in what fashion Nature may arrange them. But should the signal be given by the All-disposing Power for these scattered atoms to combine again, then, just as when every one of the various ropes that hang from one block answer at one and the same moment to the pull from that centre, so, following this force of the soul which acts upon the various atoms, all these, once so familiar with each other,

rush simultaneously together and form the cable of the body by means of the soul, each single one of them being wedded to its former neighbor and embracing an old acquaintance. (Gregory of Nyssa, *On the Soul and Resurrection*, secs. 10 - 14).

4. Resurrection by Replication

4.1 The This-Universe Version

The theory of resurrection by replication states something like this: (1) An earthly body is born. (2) The earthly body dies and disintegrates. Its life does not continue. Its life is disrupted by death. (3) At the time of the resurrection, God takes some atoms and arranges them to make a replica of the earthly body. This act of replication produces the new body. The resurrection body is made of the same *types* of atoms arranged in exactly the same way as the earthly body just before its death. But it is not made of the same *token* atoms. Those tokens are irrelevant. Parfit (1971b) briefly discusses resurrection by replication.

The replication theory is also associated with a computational analysis of personhood: the soul is to the body as a program is to a computer. This is the old Aristotelian idea of the soul as the form of the body. Resurrection is the divine installation of the original earthly body-program on a new bio-computer. Reichenbach (1978: 27) describes resurrection in computational terms like this:

Viewed monistically, man is nothing more than a physical organism constructed and programmed in a certain fashion. ... Some have likened man to an extremely complex computer with a physical body. If one adopts this analogy, and applies it to the issue of life after death, the following would be the monistic re-creationist's thesis: just as one can construct two computers to look identical, program them identically, and feed them precisely the same program data, so it would not seem to be self-contradictory that an individual could be physically re-created to possess all the physical characteristics of the deceased in identical proportions and correlations, such that he would look identical to the person who died, and since consciousness is a brain process, that his brain could be re-created and programmed as to have identical neural and chemical components and structures, such that he would possess the same memories, ideas, perspectives, and personality traits as the individual who died. In short, a person precisely identical to the one who died could be re-created, with the result that the re-created person would be the same person as the deceased; he would begin to live where the deceased left off. Working from this thesis, the re-creationist argues that at some time in the future, a large number of individuals will reappear (will be re-created), each (respectively) making claims to be a particular individual who died sometime in the past, and that these beings will not be merely similar to those deceased individuals, but identical with them.

Polkinghorne also describes resurrection in computational terms (1985: 180-181; 2002). Mackay (1997: 248 - 249) sketches a computational resurrection theory in which programs are treated as mathematical properties of machines. On Mackay's theory, resurrection is the re-instantiation of an equation in a novel computational medium:

We are nowadays accustomed to the idea that a computer can be set up to solve a mathematical equation. . . . If we think of our mental activity as "embodied" in our brain activity, in the sense in which the solving of an equation can be embodied in the workings of a computer, then there is a clear parallel sense in which our behavior can be determined by that mental activity, regardless of the extent to which our brain activity is determined by physical laws. The two explanations, in mental and in physical terms, are not rivals but complementary. . . . we are here thinking of mental activity as *embodied in* brain activity rather than *identical with* brain activity.... the solving of an equation is not a separate series of events, running in parallel with the physical happenings in the machine. It is rather the mathematical significance of one and the same series of events, whose physical aspect is well-explained by the engineer. On the other hand it would be nonsensical on these grounds to identify equations with computers as physical objects . . . It might appear that thinking of our conscious experience as "embodied" in our brains would still be incompatible with the Christian concept of "life after death". What we have seen in the case of the computer, however, shows that there need be no conflict. The physical destruction of a computer is certainly the end of that particular embodiment of the equation it was solving. But it leaves entirely open the possibility that the same equation could be reembodied, perhaps in a quite different medium, if the mathematician so desires. By the same logic, mechanistic brain science would seem to raise equally little objection to the hope of eternal life expressed in biblical Christian doctrine, with its characteristic emphasis on the "resurrection" (not to be confused with resuscitation) of the body. The destruction of our present embodiment sets no logical barrier to our being re-embodied, perhaps in a quite different medium, if our Creator so wishes.

4.2 The Simulation Version

The theory of resurrection by simulation goes something like this: (1) An earthly body (call it *Original*) is born. (2) Original dies and disintegrates. (3) At the time in the far future, a Cosmic Computer emerges. (4) This Cosmic Computer somehow knows enough about the past to make a simulation of Original. This simulation is the *Double*. Thus Original is allegedly resurrected in Double. Many authors, typically computer scientists and physicists, have written about the simulation theory of resurrection (e.g. Barrow & Tipler, 1986; Tipler, 1988, 1995; and Moravec, 1988).⁴ For example, Moravec writes that "Wholesale resurrection may be possible through the use of immense simulators. (p. 123) . . . It might be fun to resurrect all the past inhabitants of the earth this way and to give them an opportunity to share with us in the (ephemeral) immortality of transplanted minds. Resurrecting one small planet should be child's play long before

our civilization has colonized its first galaxy"(1988: 123 - 124). We focus on Tipler (1995).

According to Tipler, our universe is structured in such a way that, at the end of time, it will converge to a Big Crunch. As the universe is compressed into a tiny dot, the Cosmic Computer emerges. Tipler refers to this Cosmic Computer as *the Omega Point*: "the Omega Point in Its transcendence is in essence a self-programming universal Turing machine, with a literal infinity of memory" (1995: 249 - 250).

According to Tipler, information flows from every object in the whole history of the universe to the Omega Point. Tipler says that as the universe is compressed into the Omega Point, all the information in the entire history of the universe is focused on the Omega Point: "*all* the information from the past [= all of universal history] remains in the physical universe and is available for analysis by the Omega Point" (1995: 158; italics and brackets are Tipler's). Tipler says further that "the Omega Point is omniscient; it knows whatever it is possible to know about the physical universe" (1995: 154).⁵

The Omega Point exactly simulates (emulates) the life of every earthly human. Tipler says: "the physical mechanism of individual resurrection is the emulation of each and every long-dead person – and their worlds – in the computers of the far future"(1995: 14). Hence it emulates the life of Original. The emulation is a process in a novel physical medium (not carbon chemistry). Thus Double is a software object in the energy flows in the Omega Point. Tipler describes resurrection by simulation in more detail like this:

all the information contained in the whole of human history, including every detail of every human life, will be available for analysis by the [Omega Point].... it is possible for [the Omega Point] to construct, using this information, a perfectly accurate simulation of these past lives: in fact, this simulation is just what a sufficiently close scrutiny of our present lives would amount to.... a sufficiently perfect simulation of a living being would *be* alive.... I shall argue that the drive for total knowledge – which life in the future must seek if it is to survive at all, and which will be achieved only at the Omega Point – would seem to require that such an analysis of the past, and hence such a simulation, would be carried out. If so, then the resurrection of the dead ... would be inevitable in the *eschaton* (last times).... This, then, is the physical mechanism of individual resurrection: *we shall be emulated in the computers of the far future* (1995: 219 – 220).

4.3 The Other-Universe Version

So far all replication theories have produced resurrection replicas in this universe. But Hick says that the replica is created in a distinct universe.⁶ Hick (1976: ch. 15) puts it like this:

I wish to suggest that we can think of [the resurrection of the person] as the divine creation in another space of an exact psycho-physical 'replica' of the deceased person. . . . it is logically possible for there to be any number of worlds, each in its own space . . . And the idea of bodily resurrection requires (or probably requires) that there be at least two such worlds, and that when an individual dies in our present world in space number one he is either immediately or after a lapse of time re-created in a world in space number two (pp. 279 - 280).⁷ . . . The picture that we have to consider is one in which Mr. X dies and his 'replica', complete with memory, etc., appears . . . as a resurrection 'replica' in a different world altogether, a resurrection world inhabited by resurrected 'replicas' - this world occupying its own space distinct from the space with which we are familiar... Suppose then that I exist, not as a disembodied consciousness but as a psychophysical being, a psycho-physical being exactly like the being that I was before death, though existing now in a different space. I have the experience of waking up from unconsciousness, as I have on other occasions woken up from sleep; and I am no more inclined in the one case than in the others to doubt my own identity as an individual persisting through time. I realize . . . that I have died, both because I can remember being on my death-bed and because my environment is now different and is populated by people some of whom I know to have died. . . . Resurrected persons would be individually no more in doubt about there own identity than we are now, and would presumably be able to identify one another in the same kinds of ways and with a like degree of assurance as we do now. (pp. 285)

5. Resurrection by Rebirth

5.1 The This-Universe Version

According to Sutherland (1964: 386), we can think of resurrection as a kind of cloning. Sutherland is motivated by a story told by Shorter (he says on p. 386 that Shorter's story is "more or less a possible account of bodily resurrection"). Shorter (1962: 81 - 84) describes a possible planet that is populated by clones:

There is in the universe a planet on which people live. Let us call the planet Juno. . . . The Junonians come into being in rather a peculiar fashion. In a certain part of the planet bodies of the normal human sort grow to maturity. While they grow they are in a state similar to a person in a coma. Periodically these 'come to life' and start to walk about and talk in a normal sort of way. . . . they are able to talk English and sometimes other languages too as soon as they 'come to life'. It also seems to them that they remember doing certain deeds, thinking certain thoughts and witnessing certain events, although these events and deeds they seem to remember certainly did not occur on Juno. . . . Now it is a fact that the occasion when each of these Junonians 'came to life' corresponds to the time when someone died in Britain. . . . each Junonian is in appearance, character, and

personality very like his [counterpart in Britain] was before he died. (Shorter, 1962: 82)

One might think that Shorter's story is an isolated piece of metaphysical fiction. But a similar story is apparently independently told by Forrest (1995: 58). Forrest is committed to naturalism. He argues that "God will provide us with an afterlife without breaking the laws of nature" (1995: 58). His cloning story goes like this:

Perhaps, then, in a distant part of the universe in the distant future, there would be, apparently by chance but really because God so intended it, a paradise replica of Earth. There are animals in this paradise which look very human, although their offspring grow up without challenges or education, and indeed with very little worth remembering. At least as children, the neuronal connections for these beings are only influenced by the surroundings to the extent of recording vague memories of their uneventful lives. Instead, their brains develop so that, apparently by chance, the events which occurred to us, in our lives, are stored as apparent memories. And perhaps they could re-live such 'remembered' events in a rather vivid way. Likewise their character, habits and capacities would effortlessly develop so as to be just like those we had. When they mature they have, therefore, apparent memory of having been us, and they have the appropriate character etc... . . whatever neuronal mechanism underlies consciousness operates only at the end of the whole process, by which time the life of a human being on Earth is totally recorded in one of these replicas. That would ensure an apparent psychological continuity between a life on Earth and the life in this paradise.

Kundera tells a similar story. One interesting feature of Kundera's story is that there is a series of rebirths on a series of planets. Here's Kundera:

Somewhere out in space there was a planet where all people would be born again. They would be fully aware of the life they had spent on earth and of all the experience they had amassed here. And perhaps there was still another planet, where we would all be born a third time with the experience of our first two lives. And perhaps there were yet more and more planets, where mankind would be born one degree (one life) more mature. That was Tomas's version of eternal return. Of course we here on earth (planet number one, the planet of inexperience) can only fabricate vague fantasies of what will happen to man on those other planets. Will he be wiser? Is maturity within man's power? Can he attain it through repetition? Only from the perspective of such a utopia is it possible to use the concepts of pessimism and optimism with full justification: an optimist is someone who thinks that on planet number five the history of mankind will be less bloody. A pessimist is one who thinks otherwise. (Kundera, 1999: part 5, sec. 16).

5.2 The Other-Universe Version

It is possible to combine Hick's theory of other-universe replication with Forrest's theory of this-universe rebirth. Just put the Paradise Earth in another universe. The hybrid theory goes like this: (1) Our universe runs through its whole existence. At some time, it comes to an end. (2) Either as the result of the action of God or as the result of some natural law, another universe comes into being. This other universe is the resurrection universe. It's history is an improved version of the history of our universe. For each living that appeared in our universe, a resurrection recreation of that living thing appears in the new resurrection universe. This recreation is the new body. The life of this new body is an improved version of the life of the earthly body in the previous universe.

There is a *super-cosmic law* that links universes. This law takes a universe as input and produces a new and improved universe as output. The new universe is physically similar to the old universe. After our earthly universe ends, another and better resurrection universe begins. It starts with something very much like our Big Bang. A solar system like ours condenses out of the primeval chaos. An earthlike planet forms around a sunlike star. Life evolves on that earth. Finally, humans appear. Since the new universe is biologically similar to the old, we appear in the new universe as we did in the old. For every body in the old universe, there is a new and improved resurrection counterpart – a better self – in the new universe. We all appear in genealogical order.

At the expected times, resurrection counterparts of your mother and father appear on the new earth. They meet and mate. The sperm of your counterpart father fuses with the egg of your counterpart mother. Thus your counterpart is conceived by the counterparts of your parents. Since your resurrection counterpart must share your essence, we must assume that the gametes of your counterpart parents are copies of the gametes of your new body thus begins with your essence and with a natural initial state. Your counterpart grows in the womb of and is born from your counterpart mother. Hick himself affirms that the resurrection life begins with "something analogous to birth" (H 465). As your new body grows, it gets a better input sequence. It has a better destiny. Its life is better than your life.

Notes

¹A partial list of verses referring to the revival of corpses includes: Isaiah 26:19; Ezekiel 37:12-13; Daniel 12:2; Matthew 27: 52-53; Mark 5:38-42; John 5: 28-29; John 11:1 – 12:2; 1 Corinthians 15:52; 1 Thessalonians 4:16. The New Testament contains many references to the revival of Jesus from his tomb and the general raising of the dead.

²The revival of Lazarus is in John 11:1 – 12:2; the revival of the daughter of Jairus is in Matthew 9: 18-25 and Mark 5: 22-42.

³Ezekiel is taken by God to a valley full of dry bones. He commands them to come to life. The bones reassemble to make skeletons. The skeletons are clothed with flesh. God causes the breath of life to enter the reassembled corpses, and they are reanimated.

⁴For example, Moravec (1988: 123 - 124) writes: "Wholesale resurrection may be possible through the use of immense simulators. . . . imagine an immense simulator (I imagine it made out of a superdense neutron star) that can model the whole surface of the earth on an atomic scale . . . Because of the great detail, this simulator models living things, including humans, in their full complexity. According to the pattern-identity position, such simulated people would be as real as you or me . . . It might be fun to resurrect all the past inhabitants of the earth this way and to give them an opportunity to share with us in the (ephemeral) immortality of transplanted minds. Resurrection one small planet should be child's play long before our civilization has colonized even its first galaxy."

⁵And yet, despite the alleged omniscience of the Omega Point, Tipler says that much of the original information about the past may be degraded by noise (1995: 158, 219). Since information about the past may be corrupted and therefore useless, Tipler proposes that the Omega Point may reconstruct every human life by brute force simulation of all finite machines. Since earthly humans are finite (1995: 20 - 44), an infinitely powerful computer can easily simulate all logically possible humans by brute force (1995: 220). However, if information about some Original person does not flow to the Omega Point, then the simulation that corresponds to that Original is not even a copy. It is not even a replica. A copy or replica requires the flow of information. Since the persistence of persons through time requires the flow of information, no brute force simulation is the same person as any earthly Original. And if resurrection requires that the simulation be the same person as the earthly Original, then there can be no resurrection by brute force.

⁶According to Hick (1976: 279 - 280, 285), the resurrection replica is made in a second space. This second space is geometrically isolated from earthly space (there is no continuous spatial path from any point in earthly space to the resurrection space). There are no natural causal connections from our earthly space to the resurrection space (though of course divine causality can connect them). The earthly space and the resurrection space share a common time. Hick's resurrection world is not a Lewisian world. But it satisfies the criteria given in Leslie (1989: ch. 4) for being a distinct universe.

⁷According to Hick, our actual universe is partitioned into a plurality of geometrically closed spaces. These closed spaces are known as *Hubble volumes* in current cosmology (Tegmark, 2003). Due to spatial isolation, we can neither travel to nor observe other Hubble volumes. These Hubble volumes share a common time and are linked by non-local causal laws. Our resurrection replicas are created in a distinct Hubble volume.

References

- Barrow, J. & Tipler, F. (1986) *The Anthropic Cosmological Principle*. New York: Oxford University Press.
- Bynum, C. (1995) *The Resurrection of the Body in Western Christianity*, 200 1336. New York: Columbia University Press.
- Corcoran, K. (2001) Physical persons and postmortem survival without temporal gaps. In K. Corcoran (ed.) Soul, Body, and Survival. Ithaca, NY: Cornell University Press, 201 - 217.
- Forrest, P. (1995) God without the Supernatural: A Defense of Scientific Theism.
- Hasker, W. (1999) The Emergent Self. Ithaca, NY: Cornell University Press.
- Hershenov, D. (2002) Van Inwagen, Zimmerman, and the materialist conception of resurrection. *Religious Studies* 38, 451 469.
- Hershenov, D. (2003) The metaphysical problem of intermittent existence and the possibility of resurrection. *Faith & Philosophy* 20 (1), 24 36.
- Hick, J. (1976) *Death and Eternal Life*. New York: Harper & Row.
- Hudson, H. (2001) A Materialist Metaphysics of the Human Person. Ithaca, NY: Cornell University Press.
- Kundera, M. (1999) *The Unbearable Lightness of Being*. Trans. M. Heim. New York: Harper Perennial Classics.
- Mackay, D. (1997) Computer software and life after death. In P. Edwards (Ed.) *Immortality*. Amherst, NY: Prometheus Books, 248 – 249.
- Moravec, H. (1988), *Mind Children: The Future of Robot and Human Intelligence*. Cambridge, MA: Harvard University Press.
- Parfit, D. (1971) On 'The importance of self-identity'. *Journal of Philosophy* 68 (20), 683 690.
- Polkinghorne, J. C. (1985) The scientific worldview and a destiny beyond death. In G. MacGregor (Ed.) *Immortality and Human Destiny: A Variety of Views*. New York: Paragon House, 180 183.
- Polkinghorne, J. C. (2002) Eschatological credibility. In T. Peters, R. J. Russell, and M. Welker, (2002) *Resurrection: Theological and Scientific Assessments*. Grand Rapids, MI: Eerdmans Publishing, 43 55.

- Reichenbach, B. (1978) Monism and the possibility of life after death. *Religious Studies* 14 (1), 27 34.
- Shorter, J. (1962) More about bodily continuity and personal identity. *Analysis* 22 (4), 79 85.
- Sutherland, S. (1964) Immortality and resurrection. *Religious Studies 3*, 377 389.
- Tipler, F. (1988) The anthropic principle: A primer for philosophers. *PSA: Proceedings* of the Biennial Meeting of the Philosophy of Science Association 2, 27 48.
- Tipler, F. (1995) The Physics of Immortality: Modern Cosmology, God and the Resurrection of the Dead. New York: Anchor Books.
- van Inwagen, P. (1978) The possibility of resurrection. In P. Edwards (Ed.) (1997) *Immortality*. Amherst, NY: Prometheus Books, 242 - 246.
- Zimmerman, D. (1999) The compatibility of materialism and survival: The 'Falling elevator' model. *Faith and Philosophy 16* (2), 194 212.