The Revision Theory of Resurrection

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ABSTRACT: A powerful argument against the resurrection of the body is based on the premise that all resurrection theories violate natural laws. We counter this argument by developing a fully naturalistic resurrection theory. We refer to it as the revision theory of resurrection (the RTR). Since Hick's replica theory is already highly naturalistic, we use Hick's theory as the basis for the RTR. According to Hick, resurrection is the recreation of an earthly body in another universe. The recreation is a resurrection counterpart. We show that the New Testament supports the idea of resurrection counterparts. The RTR asserts that you are a node in a branching tree of increasingly perfect resurrection counterparts. These ever better counterparts live in increasingly perfect resurrection universes. We give both theological arguments and an empirical argument for the RTR.

1. Introduction

A powerful argument against the resurrection of the body goes like this: (1) All resurrection theories entail violations of natural laws.[1] (2) If any theory violates natural laws, then it is physically impossible.[2] Therefore (3) all resurrection theories are physically impossible. And (4) since our bodies are entirely physical things falling under the natural laws of our universe, it follows that (5) our bodies will not be resurrected.

One way to defeat this argument is to exhibit a resurrection theory that does not entail any violations of natural laws. We think this can be done. We are not aware of any resurrection theory that is fully consistent with natural laws. But we are aware of one that comes close, namely, the *replication theory* developed by John Hick in *Death and Eternal Life* (Hick, 1976: chs. 15, 20, 22; hereafter abbreviated as H).[3] According to this theory, your death causes the appearance of an exact replica of your old earthly body on an earthlike planet in another universe. This other universe is the resurrection universe. Your resurrection replica is repaired and rejuvenated and goes on to live its new life.

The replication theory has many naturalistic features. It does not require anything like an immaterial soul or spirit. It is thus compatible with the scientific idea that human persons are entirely physical animals. The resurrection universe is not a spirit world. On the contrary, it is "a real spatio-temporal environment, functioning in accordance with its own laws" (H 418). It is a *physical* universe. And Hick tells us that the resurrection itself (the creation of the replica) is an entirely natural and lawful process. He says it is a law of nature that when an earthly body dies, a replica of it appears in the next resurrection universe (H 287).[4] Hick thus posits three physical systems regulated by laws: (1) the earthly universe with its natural laws; (2) the resurrection universe with its natural laws; and (3) the laws that link the two universes. Of course, all these laws may

be regarded as stable dispositions of the will of God. As Hick intends it, the replication theory does not require any special divine interventions. It does not require miracles.

Although Hick intends his theory to be naturalistic, he does not develop it in a fully naturalistic way. There are places where it violates natural laws. Since our goal is to develop a fully naturalistic resurrection theory, we will have to repair Hick's theory at those places where it still involves miracles. We are therefore developing a new (though derived) theory, which we refer to as the *revision theory of resurrection* (the RTR). We believe the RTR is fully naturalistic. Section 2 discusses Hick's theory in some detail. Section 3 develops a more naturalistic account of the many universes needed for resurrection. Section 4 develops a more naturalistic account of resurrection counterparts. Section 5 presents an account of perfection through multiple (branching) resurrection. It gives an empirical argument for the RTR. We then conclude in Section 6.

2. Extinction and Recreation

2.1 An Overview of Hick's Replica Theory

According to Hick, the resurrection is "the divine creation in another space of an exact psycho-physical 'replica' of the deceased person" (H 279). Physical reality is thus divided into at least two cosmic domains (1) the earthly domain and (2) the resurrection domain. These two domains are spatially isolated (H 279 – 280, 285). They share the same timeline (H 290). Causal chains run from the earthly domain, through God, and into the resurrection domain. Although the two domains are not completely disconnected, we think they are sufficiently large and isolated to qualify as universes (see Leslie, 1989: ch. 4). So we refer to them as the *earthly universe* and the *resurrection universe*.

We know that our earthly universe operates according to its own natural laws.[5] Hick says the resurrection universe acts according to its own natural laws (H 418). It has its own natural history. What can we infer from this? We are told that the resurrection universe will be a home for replicas of earthly humans. Since replicas are very similar to earthly humans, we can infer that their universe must be very similar to the earthly universe. We may infer that it starts with something like a Big Bang; it goes through a similar physical evolution; an earthlike planet will appear around a sunlike star. The laws of the resurrection universe have to be very similar to the laws of our universe. But we may suppose that they are more biologically friendly: they support longer and richer lives.

Hick tells us that the mechanism of resurrection works something like this: God observes the events going on in both universes (H 279, 290). God knows all the physical facts about all earthly bodies. For every earthly body, for every moment of its life, God knows the blueprint of that body at the atomic level. For example, at some moment on the common timeline, your earthly body dies. God knows its atomic blueprint at that time. God operates according to a rule: when any earthly human dies, God causes a replica of that human to appear on the resurrection earth. So God causes some atoms to be

arranged on that planet to make your replica. God uses his blueprint of your body at the last moment of its earthly life to make your replica. Your replica duplicates the last living stage of your earthly body (H 294). Since your replica is dying, God immediately subjects your replica "to processes of healing and repair which bring it into a state of health and activity" (H 294). Your replica may even grow "physically younger to an optimum age" (H 294).[6]

2.2 The Failure of Personal Identity

A naturalistic outlook entails physicalism about persons. You are your body and your body is a physical machine. This is not to deny the existence of the soul. Your soul is the form of your body.[7] Your soul is to your body as a program is to a computer. So we'll refer to it as your *program*. Your program starts out in an initial state. As your body receives inputs from your environment, your program changes its state. So as you live, your program runs through a series of states. Its series of states is your *biography*.

Our physicalism commits us to the finality of death. A logical way to affirm the finality of death is to justify it by means of an argument. We refer to this argument as the *Reaper*. It goes like this: (1) Every person is identical with his or her body. Thus personal identity is biological continuity. (2) After some finite period of life, every person dies. It is not the case that death is merely apparent or illusory. It is an indisputable fact that all persons die and that death is the end of all human biological activity in every part of the body.[8] Our next two premises come from Baltimore (2006). He writes that (3) "the death of a person's body entails the non-existence of the person" and that (4) "if a person ceases to exist, then the numerically same person cannot come back into existence" (2006: 417). It follows immediately that (5) for every earthly body x, there will not exist any body y such that y is the same person as x and y exists after the death of x.

Against the finality of death, the New Testament offers the promise of eternal life. We put this promise in the form of an argument. We call it the *Reviver*. It goes like this: (1) According to the New Testament, all will be resurrected (John 3:16; 1 Corinthians 15). (2) A reasonable initial definition of resurrection says that for any earthly body x, x *will be resurrected* if and only if (iff) there will exist some body y such that y is the same person as x; y exists after the death of x; and y is functionally superior to x. It follows immediately that (3) for every earthly body x, there will exist some resurrection body y such that y is the same person as x and y exists after the death of x. The conclusion of the Reviver obviously conflicts with the conclusion of the Reaper. This is the *Contradiction*.

Since we are defending the resurrection, we must escape from the Contradiction. One might try to get out of the Contradiction by denying one or more of the premises in the Reaper. However, since our approach to persons is rigorously naturalistic, the premises of the Reaper are secure. We have no choice but to look more closely at the Reviver. The Reviver has two premises. The first premise is the assertion that all will be resurrected. We aren't going to deny that premise! Our whole purpose here is to defend

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the resurrection of the body. The second premise is our initial definition of resurrection. If there is any way out of the Contradiction, it is by rejecting some part of that definition. There are three parts: (a) the resurrection body is the same person as the earthly body; (b) the resurrection body exists after the death of the earthly body; and (c) the resurrection body is more perfect than the earthly body. Part (c) is not relevant. It does not generate the Contradiction. Part (b) agrees with the Reaper. It does not generate the Contradiction. All that remains is the claim that (a) the resurrection body is the same person as the earthly body.

Although it has long been popular to affirm that the resurrection body is the same person as the earthly body, we are aware of *no* direct and univocal support in Scripture for the thesis that personal identity is retained in the resurrection. On the contrary, there is considerable support in Scripture for the thesis that personal identity is *not* retained in the resurrection. After all, *earthly* flesh and blood cannot enter the kingdom of heaven (1 Corinthians 15: 50).[9] The resurrection is like a second birth (John 3: 1-7; 1 Peter 1:23). But a second birth begins a second person. According to the New Testament, a conversion to life in Christ begins the death of the old earthly self and the birth of a new self (Romans 6: 1 – 11; Galatians 2:19-20; Ephesians 4:22 – 24). The new self is a *new creation* (2 Corinthians 5:17). It is arguable that the death of your old self and birth of your new self parallel the crucifixion and resurrection of Christ. Your old self dies when your sinful earthly body dies; your new self is born when your resurrection body is born (Colossians 3:3-4). Far from affirming continuity, Scripture affirms extinction and recreation.

Since we find no clear support for the thesis that personal identity is retained in the resurrection, we drop it from our definition of resurrection. Your resurrection body is not the same person as your earthly body. Personal identity is *not* retained in the resurrection. It is *sacrificed* (Luke 17:33). One might object that legalistic considerations justify the requirement of personal identity. It has often been argued that the purpose of the afterlife is punishment or reward. And it would be unjust to punish or reward someone else (e.g. a replica) for what was done by an earthly body (Flew, 1976: ch. 8). Our reply is that many ethical complaints have been raised against the idea that the purpose of the resurrection is punishment or reward. Those ethical complaints are decisive. The purpose of the afterlife cannot simply be reward or punishment. On the contrary, Hick argues that the purpose of the afterlife is *universal salvation* (H ch. 13). Universal salvation implies the eventual perfection of every life.[10] Although one might define perfection in many ways, the core idea seems to be this: a thing is *perfected* iff all its positive potentials are actualized. If this is right, then the purpose of the afterlife is the actualization of all the positive potentials of every earthly person. It is the perfection of the flesh. And if the purpose of afterlife is the perfection of the flesh, then the objection from punishment or reward is blocked.

2.3 Resurrection Counterparts

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An alternative to personal identity is provided by *counterpart theory*. Counterpart theory was proposed in modal logic to solve problems involving trans-world identity (Lewis, 1968, 1986). Counterpart theory was also proposed in temporal logic to solve problems involving trans-time identity (Sider, 1996, 2001). We propose to use counterpart theory to solve problems involving trans-death identity. Although God cannot make a body that is identical with your earthly body after its death, God can make a body that is a *resurrection counterpart* of your earthly body after your death. This other body is not you *on earth*. However, it is you *in the resurrection context*. It *is not you* here and now; it *is you* there and then. We thus replace our initial definition of resurrection with a better final definition: for every earthly body x, x *will be resurrected* iff there will exist some body y such that y is a resurrection counterpart of x; y exists after the death of x; and y is functionally superior to x. And the Contradiction falls apart.

According to our reading of the relevant New Testament texts, a resurrection counterpart is a kind of recreation. Your recreation is defined in terms of your soul and its history. It is defined in terms of your program and your biography. We say that y *is a recreation of* x iff (1) the program of y depends on the program of x and (2) the biography of y depends on the biography of x. Although recreation is necessary for being a resurrection counterpart, it is not sufficient. A *resurrection* counterpart is more than just a recreation. The qualifier *resurrection* is not idle. Resurrection requires improvement. We say that y *is a positive recreation of* x iff (1) the program of y is an improvement of the program of x or (2) the biography of y is an improvement of the biography of x.[11] Resurrection also requires the death of the earthly body. And with that we're in the position to precisely define resurrection counterparts. We say y *is a resurrection counterpart of* x iff y is a positive recreation of x and y exists after the death of x. Of course, our definition of resurrection now contains some redundancy. But that doesn't hurt. We want it to be clear that your resurrection counterpart is a new and improved person who exists after your death. After your death, nobody is identical with you. Sorry, you're dead.

Your resurrection counterpart is that thing in the resurrection context that is maximally similar to you. But the similarity is not accidental. Your resurrection counterpart depends on you for its features. So your resurrection counterpart is more than a mere modal counterpart (contra French, 1982). A resurrection counterpart is a kind of temporal (future) counterpart. Sider (1996, 2001) shows how temporal counterparts serve as truthmakers for statements about the past and future. For any predicate P, the statement <x will P> is true when said by x now iff there is some y such that y is a future counterpart of x and y is P. For example, "I will be happy" is true when said by you now iff you have a future counterpart y and y is happy. We can apply Sider's work directly to the resurrection: "I will be resurrected" is true when said by you now iff you have a resurrection counterpart. The tense of a statement makes the difference between truth and falsity. On the one hand, "I *will be* identical with some resurrection body" is true when said by you now iff you have a resurrection counterpart and *it* (not you) is identical to some resurrection body (which it is by definition). So the statement is *true*. On the other hand, "I *am* identical with some resurrection body" is true when said by you now iff *you* are identical to some resurrection body (which you are not). So the statement is *false*. On a counterpart theoretic interpretation, Job 19: 26-27 correctly comes out true.[12]

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We think there is evidence in Scripture for a counterpart theoretic interpretation of the resurrection. We think Romans 4:17 provides explicit support for a counterpart theoretic interpretation of the resurrection. Romans 4:17 says "[God] gives life to the dead and calls into existence the things that do not exist." At the time of your resurrection, after the death of your earthly body, after your earthly body has ceased to exist, God calls your resurrection body into existence. Before your resurrection body is called into being by God, it does not exist. Your resurrection body is a new creation. We interpret the image of the two tents in 2 Corinthians 5:1-4 as explicit support for a counterpart theory. The two tents are two distinct bodies. The old earthly tent is not the same person as the new spiritual tent. When Paul says that he fears to be naked, he does not mean that his soul fears the loss of its body; he means that his body fears the loss of its existence. It would be fun to develop a counterpart-theoretic understanding of resurrection based on a close reading of the whole Bible. Obviously, we can't do that here. And while we think there is further support for counterpart theory in the Church Fathers and in early Christian history – think of the phoenixes! – we can't go into that here either.

A common objection to counterpart theory is that we don't care about our counterparts (Kripke, 1980: 45). You thus have no future concern for your resurrection bodies. Why would you care if somebody else lives after you die? The correct reply to this objection is given by Lewis (1986: ch. 4). The Lewisian reply is brilliantly developed by Miller (1992). We put this reply in the form of an argument: (1) You ought to care right now about your future. Hence you ought to care about the future properties that you have right now. You have exactly one of these future properties right now: either you *will live a better life in a better universe* or else you *will not live a better life in a better universe*. And you ought to care about which of those properties you have. (2) Since you ought to care about having valuable future properties, you ought to care about the things in virtue of which you have those properties. (3) You have many valuable future properties right now iff you have resurrection counterparts. You depend on them for those properties. For if they do not exist, *you* will not be resurrected and *you* will not have any chance to live a better life in a better universe. It follows that (4) you ought to care about your resurrection counterparts. You ought to *want* them to exist and to *hope* that they do exist and to *fear* that they do not. You ought to be *distressed* by arguments that they do not exist and *comforted* by arguments that they do exist. Our goal is to begin to provide such arguments.

3. The Universes

3.1 This Universe and the Universe to Come

According to Hick, the resurrection universe is temporally parallel to ours. However, this temporal parallelism does not appear to be consistent with Scripture. The Bible seems to imply that the resurrection life begins in a new heaven and a new earth (Isaiah 65: 17; Isaiah 66: 22; 2 Peter 3: 13; Revelations 21:1). To say that there will be a *new* heaven and *new* earth implies that there will be a *later* heaven and a *later* earth. Most traditional

writers situate the resurrection in the future. We follow both Scripture and tradition and make the resurrection universe not temporally parallel but temporally later.

Resurrection involves causality. Causal chains run from our universe, through God, and into the resurrection universe. The death of an earthly body causes an effect in God; God then causes its replica to appear in the resurrection universe. This causality is not natural. Our best science says that our universe is causally closed – events in our universe only cause events in our universe. And, since the resurrection universe must be very much like ours in order to sustain replicas, we may infer that events in that universe are caused only by events in that universe. We deny that events in one universe cause events in the other universe. But this denial is not as prohibitive as one might think. We can think of each universe itself as a maximal physical event. As such, it is not an event inside any universe. It does not violate causal closure to say that the actuality of some universe U causes the actuality of another universe U*. For example, the actuality of the earthly universe causes the actuality of the resurrection universe. Divine creativity thus follows this pattern: (1) our universe is actual; (2) if some universe is actual, then at least one later resurrection universe is actual. Divine creativity thus spans a series of universes.

Our picture of the replication theory now looks like this: God actualizes our universe (i.e. God creates a maximal physical event – it is a spatially, temporally, and causally closed system with its own natural laws). Our universe starts with a Big Bang; it goes through the physical development described by our best science; the earth appears around the sun. On earth, biological evolution runs and eventually produces human animals. Humanity flourishes but eventually becomes extinct. The sun explodes and incinerates the earth. The stars run down, protons disintegrate, quarks evaporate, and our universe comes to its end. But the actuality of the earthly universe as a whole causes the actuality of the resurrection universe as a whole. The resurrection universe starts with something like a Big Bang; it goes through a familiar physical evolution; an earthlike planet appears around a sunlike star. This planet is a more biologically friendly habitat for humans. At the appropriate times within the resurrection chronology, replicas of earthly bodies appear. These resurrection replicas are immediately healed and rejuvenated.

3.2 A Series of Resurrections in a Series of Universes

Although traditional Christian theology posits only a single resurrection, Hick posits a series of resurrections. One might argue that the image of Jacob's ladder (Genesis 28:12) justifies a series of steps rising from earthly existence to God. But that is scant justification for a series of resurrections. Hick's reasoning is more abstractly theological. If the purpose of human life is to rise towards divine perfection, Hick says it must rise towards that perfection in stages. He says that the post-mortem existence of every human "occurs in successive sections rather than as one continuous unit. . . . periodic death (like periodic sleep) divides up an existence which, as finite creatures, we can only live in limited phases" (H 413 - 414). Hick posits "a plurality of lives in a plurality of worlds; . . . each stage will have the relative autonomy which makes it a 'real life', with its own exigencies and tasks and its own possibilities of success and failure" (H 419). Hick says

that a human career consists of "a series of lives, each bounded by something analogous to birth and death, lived in other worlds in spaces other than that in which we now live" (H 456). According to Hick's *pareschatology* (H ch. 20), there is a series of increasingly perfected universes containing increasingly perfected persons and societies.

One might object that this picture of a series of ever-better universes is far too speculative. We reply by giving an argument for this picture. It is a version of the Leibnizian creation argument. Leibniz argued that God creates only the best of all possible universes (*Monadology*: 53 – 55). But it is often objected that there is no best of all possible universes. On the contrary, there is an endless series of increasingly better possible universes (Reichenbach, 1979; Fales, 1994). For any universe God can create, God can create a better universe. Hence God cannot create *the* best. But God can create every universe in the series of increasingly better possible universes (Forrest, 1981; Coughlan, 1987). And if God were to avoid creating any universe in that series, then God's creative action would be less than maximally perfect. But it is maximally perfect. Hence God *must* create every universe in the series of ever-better possible universes. The maximal perfection of God entails the actuality of a maximally perfect series of universes.[13] Now suppose some person starts living in some universe in that series. And suppose that person dies before all his or her positive potentials are actualized. One way to perfect that person is to recreate him or her in some later universes in the series. If the person does not live again in the later universes, then the series is less than maximally perfect. But the series is maximally perfect. So for every person P, if P is created in the series, then P must be recreated in the series until every positive potential of P is actualized.

4. The Counterparts

4.1 The Unnaturalness of Replication

According to Hick, the resurrection is supposed to be a lawful and natural process. And yet the creation of the replica in Hick's theory is neither lawful nor natural. On Hick's theory, the replica is not made by a natural combination of atoms. It is not conceived by the sexual union of a human father and mother. It does not gestate in any womb and is not born from any woman. It is not part of any biological process of evolution. The replica appears on the resurrection earth by a kind of spontaneous generation. It does not have any apparent antecedent cause. It appears as if by magic. Its appearance is miraculous. But that is not naturalistic. We want a theory in which the appearance of the resurrection body is natural and lawful. We will have to modify Hick's theory.

A similar problem concerns the healing of the resurrection body. Hick says that the replica will be healed and rejuvenated (H 294). We can easily imagine that God works as a kind of super-doctor. God repairs the replica. But we said that the resurrection universe works entirely according to natural laws. So God cannot miraculously repair the replica. And there are deeper difficulties. Many genetic defects corrupt the whole body at the molecular level (e.g. Williams Syndrome). They produce severe physiological and

cognitive defects. To heal a body with something like Williams Syndrome, it is necessary to rebuild the whole body from the molecular level on up. The most natural way to do this is to correct the genetic defect in the zygote and to regrow the body from scratch. As the new and improved body grows, memories of earthly life can be encoded in its new brain.

4.2 Therapeutic Cloning

We want a resurrection theory in which (1) the resurrection body appears naturally and (2) all the defects of the earthly body are fully healed. It seems like the best way to satisfy these desires is for the resurrection body to grow from a natural start to a mature organism. It starts as a one-celled human animal (a zygote), gestates in a womb, and is born from a woman. And Hick himself affirms that the resurrection life begins with "something analogous to birth" (H 465). Of course, as it grows, any physiological defects are corrected. We might refer to this process as a kind of *therapeutic cloning*.

We are not the first to examine the idea that resurrection is a kind of therapeutic cloning (see Shorter, 1962: 81 – 84; Sutherland, 1964: 386; Forrest, 1995: 58). According to these authors, a copy is made of your earthly zygote and your new resurrection body is grown from that cell. As it grows, its defects are corrected. As an example of resurrection by therapeutic cloning, we can look at Forrest's resurrection theory. 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 [another][14] 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. (Forrest, 1995: 58)

4.3 New and Improved Biographies

Although Forrest's approach to the creation of the resurrection body has many attractive features, it is still not fully naturalistic. The lives of the children of Paradise Earth have two unnatural features. The first unnatural feature is that there is a discrepancy between their experiences and the memories encoded in their brains. The second unnatural feature is that the children of Paradise grow up without consciousness. We want these children to grow up more naturally – more like earthly children. One way to give them more natural lives is to give them lives that are more similar to the lives of their earthly originals.

It is entirely consistent with Forrest's story that the history of Paradise Earth is similar to the history of our Earth. A naive way to achieve this similarity is to make the history of Paradise Earth exactly repeat the history of our Earth. According to this way, your resurrection counterpart in Paradise simply repeats your earthly life from conception to death. Since (following Hick) we postulated an endless series of resurrections, we thus get something like the eternal return of the same (Kirk & Raven, 1957: Frag. 272; Nietzsche, 1978: III: 13/2). The eternal return of the same avoids Hick's spontaneous generation problem. It gives entirely natural lives to the children of Paradise. But it does not avoid the problem of the healing and improvement of the body. Indeed, if the history of Paradise Earth merely repeats the history of our own Earth, then it isn't Paradise at all. All the misfortunes and miseries of our Earth will be repeated. The Church Fathers were aware of the eternal return of the same.[15] They rejected it because, contrary to the New Testament, it entails neither the physiological improvement of the resurrection body nor the moral improvement of resurrection society (for example, see Tatian, *Address of Tatian to the Greeks*, ch. 6). Resurrection is not the eternal return of the same.

We can avoid the problems with the recurrence theory if we reject exact repetition in favor of improvement. Your resurrection counterparts can be improved in many ways. The improvements can be *medical:* a genetic defect is made normal; an injury or infection fails to occur; etc. The improvements can be *physiological:* your counterpart's body becomes stronger; the powers of all your organs are amplified. The improvements can be *personal:* you don't suffer from old misfortunes or make old mistakes. The improvements can be *moral:* vices are weakened and virtues are strengthened. The improvements can be *social:* you are born into a more just society. The improvements can be *environmental:* the earth is a better habitat for human animals. The improvements can be *physical:* the basic physical laws support biological processes that run more perfectly. Perhaps we can say most generally that, in the resurrection universe, your resurrection counterpart has more subtle and powerful strategies for realizing its best goals.

An earthly body has an earthly biography. Given your earthly biography, God can figure out how it can be improved. Given a set of earthly biographies, God can surely figure out how they can all be improved together. And, more naturalistically, it is not unreasonable to think that there is an objective algorithm for computing the improvements to all the biographies in some set. The algorithm takes a set of earthly biographies as input and produces a set of improved resurrection biographies as output. This algorithm is part of the natural law that links the earthly universe to the resurrection universe. It defines the

human content of the resurrection universe. Your resurrection counterpart is thus pre-destined or fated to live out the improved version of your life just as a computer is fated to follow its program. One might object that your resurrection counterpart is therefore not free. However, it is neither more nor less free than its earthly original.[16]

We must describe the generation of resurrection universes in greater detail. At least at first, the resurrection counterparts are very similar to their earthly originals. Hence their universe is very similar to the earthly universe. The first resurrection universe starts with something like a Big Bang. It goes through a physical evolution similar to the evolution of our universe. At some place and time, an earthlike planet appears around a sunlike star. This planet is a more biologically friendly habitat for humans. A process much like earthly biological evolution runs in the new earth. As this evolutionary process runs, animals much like earthly humans emerge. A process much like earthly human history unfolds on the new earth. As this history unfolds, resurrection counterparts of earthly humans appear and live their lives. They do this in something very close to the original order of earthly genealogy. Your counterpart is the offspring of the counterparts of your parents. The counterparts are generated in a natural way and live their entire lives naturally.

We agreed with Hick that there is a series of resurrection universes. They are linked by a natural law with this form: for every body in any universe, there exists a next universe in which the life of that body is slightly improved. The next universe is as similar as possible to the last universe except that the life of every body is made better in some small way. The revisions are small for the sake of continuity. If this is true, then you are followed by a first resurrection counterpart. Your first counterpart lives an improved version of your life. And your first counterpart is followed by a second resurrection counterpart. Your second counterpart lives an improved version of an improved version of your live. Improvements accumulate. All your defects will eventually be corrected. All your shortcomings will eventually be overcome. You will become glorified (1 Corinthians 15).

5. Perfection

5.1 Many Revisions

According to Hick, the purpose of the afterlife is the perfection of every earthly human (H 155 – 156, 408). A thing is *perfected* iff all its positive potentials are actualized. Every earthly human has many positive potentials. Only some of these can be actualized by any single life. So if the purpose of the afterlife is the perfection of every earthly human, then we must posit many resurrection counterparts. Although Hick rejects multiple resurrection (H, 290 – 293), Dilley shows why Hick should affirm multiple resurrection (Dilley, 1983).[17] Multiple (i.e. branching) resurrection is needed to fully realize all the positive potentials of an earthly human. For every way that your earthly life can be improved, you have a resurrection counterpart whose life that is improved in that way. Each resurrection counterpart exists in a full-blown ecosystem that evolved in

some physical context. It inhabits a universe. If this is right, then our universe is followed by a plurality of resurrection universes. Each is a refinement of our universe. One might object that traditional Christianity says that an earthly life is followed by exactly one resurrection life. But there is some scriptural evidence for multiple resurrection.[18]

We can extend our argument for serial resurrection into an argument for multiple serial resurrection. Since there is no best possible universe, God cannot create *the* best. But God can create a good universe. And for every good universe, there are many ways to make it better. Universes are improved by improving the lives of the persons in them. For any universe, and for every person in that universe, improving the life of that person is a way to improve that universe. For every universe, for every way to improve that universe, God can create a later universe that is improved in exactly that way. Every universe can be followed by a plurality of better universes. Hence there is a branching tree of increasingly better possible universes. If God were to avoid creating any universe in that tree, then God's creative action would be less than maximally perfect. But it is maximally perfect. Hence God *must* create every universe in the branching tree of ever-better possible universes. The maximal perfection of God entails the actuality of a maximally perfect branching tree of universes. All persons are perfected in this tree. A person belongs to a set of resurrection counterparts ordered by a perfection relation (the counterparts are organized into a lattice). The maximal perfection of divine creativity entails that for any possible person, if any counterpart of that person is actualized in some universe, then every counterpart above it in the lattice of perfections is actualized in some resurrection universe.

We believe the perfection argument for multiple resurrection is sound. If we accept both a series of resurrections and a multiplicity of resurrections, then we conclude that each universe is followed by a plurality of later resurrection universes. Every universe is like a parent with a plurality of offspring. The result is a branching tree of universes. The more perfect universes are more biologically friendly. Bodies live longer in them with fewer failures and misfortunes. A series of universes increasingly approximates biological paradise. The bodies of resurrection counterparts are progressively more perfect. These are increasingly *glorified* bodies (1 Corinthians 15). Augustine describes the super-powers of resurrection bodies in *The City of God*.[19] Much current literature is devoted to the amplification of the powers of human bodies. There are many discussions of trans-human and super-human bodies. One of the richest and most detailed conceptions of super-human bodies is developed by the roboticist Hans Moravec (1988: 102 - 108; 2000: 150 - 154).[20] For every way to improve the design of the human body, there is a type of resurrection universe in which human bodies are improved in that way. Any progression of resurrection universes includes a progression of super-human bodies.

Following Hick, the RTR says that every earthly body is the root of an infinite tree of increasingly perfect counterpart bodies. Each earthly body is followed by a set of first generation resurrection counterparts (in first generation universes). Each is improved in some way. Each first generation counterpart is followed by a set of second generation resurrection counterparts (in second generation universes). These are improvements of the first generation counterparts. The series of improvements is endless: every n-th

generation counterpart is followed by a set of (n+1)th generation resurrection counterparts (in (n+1)th generation universes). Each earthly body is the root of a branching tree of increasingly glorified resurrection bodies. The successive counterparts rise through all finite degrees of perfection. They become infinitely perfect in the limit.

5.2 An Empirical Argument for the Revision Theory

One might argue that the RTR is far too speculative. It is metaphysical fiction without any empirical support. Our first reply is that the notion of a branching tree of universes is not inconsistent with modern cosmology. Various modern cosmologies support the picture of a branching tree of universes. Perhaps after each Big Crunch the next Big Bang undergoes turbulent inflation in which dense regions split apart to form a plurality of offspring universes (Leslie, 1989: 4.15 - 4.27; Guth & Steinhardt, 1984: Linde, 1986, 1994). Perhaps the formation of every black hole in our universe triggers a Big Bang that makes another universe (Smolin, 1992, 1997). We mention these cosmological theories only to show that the idea of a branching tree of universes is certainly not physically impossible. The RTR does not depend on them. Our arguments for its plausibility are more abstract.

We give an Argument from Fine-Tuning for the RTR. It goes like this: (1) There are many possible universes. Our universe is one of these many possible universes. (2) Our universe appears to be *finely tuned* for life (Barrow & Tipler, 1986; Leslie, 1989). If the basic physical features of our universe were even slightly different, then our universe would contain no life. This fine tuning of our universe is highly improbable. And of course our universe is very complex. It is therefore a complex thing with a highly improbable feature. (3) The actuality of a complex thing with a highly improbable feature requires an explanation. (4) One of these explanations is the *Evolutionary Explanation*.

According to the Evolutionary Explanation, (5) our universe is actualized by a process of super-cosmic evolution. This process starts by actualizing the simplest of all possible universes. Given some simpler universes, it actualizes more and more complex universes. More complex universes thus evolve from simpler universes. The super-cosmic evolutionary process selects for perfection. The perfection of a universe is the sum of the perfections of its contents. The perfection of a thing is the degree to which it actualizes its positive potentials. The evolutionary process thus selects for universes that are increasingly biologically friendly. Hence after many iterations of the super-cosmic evolutionary algorithm, universes that contain complex intelligent life are actualized.

We think this Evolutionary Explanation has at least two advantages over all competing explanations. Its first advantage is that (6) it parallels our best explanation for life on earth. The parallelism is easy to formulate: Just as living things are complex and highly improbable, so the universe is complex and highly improbable. And thus just as the best explanation for life on earth is evolutionary, so the best explanation for the actuality of our universe is evolutionary. The second advantage is more abstractly ontological. (7)

We need some explanation for the actuality of anything. Why is anything actual? Here it seems that the simplest explanation is the best. The simplest explanation is the Leibnizian doctrine of *the radical origination of things* (aka the doctrine of the striving possibles – Leibniz, 1697; Rescher, 1991: 171 – 172, 174 – 175). These Leibnizian doctrines are taken up in Peirce's *Cosmogonic Philosophy*.[21] Following these ideas, the simplest of all possible universes are self-actualizing; and, once started, the process of actualization is self-sustaining and self-amplifying. These two advantages are both naturalistic.

We infer from these two advantages that (8) the Evolutionary Explanation is the best explanation for the actuality of our universe. So, by inference to the best explanation, our universe is actualized by a super-cosmic evolutionary process that selects for perfection. It follows that (9) there is a genealogical tree of universes in which perfection is increasing from generation to generation. And (10) any thing that emerges within any universe is node in a tree of increasingly perfect counterparts. Obviously (11) persons emerge in our universe. Hence finally (12) every persons is a node in a branching tree of increasingly perfect resurrection counterparts in a tree of ever better universes.

6. Conclusion

We have argued for a physicalistic resurrection theory. It is more scientific than theories that involve disembodied immaterial souls. But to be fully scientific, resurrection theories have to be made consistent with natural law. They cannot rely on miracles or special divine interventions. The revision theory of resurrection (the RTR) does not violate any laws of the earthly universe. It allows each successive resurrection universe to have its own natural laws. The process by which the tree of resurrection universes is generated is itself naturalistic. The RTR does not require any miracle to connect an earthly body to a resurrection body. It may seem that the RTR is far from the classical resurrection theories. And yet it is arguable that the RTR preserves the essential insight of the classical theories. The essential insight is rebirth rather than continuation. It is the recreation of an earthly person at a higher level of perfection. The RTR is supported by the notion that God fills out the great chain of being with a tree of increasingly perfect resurrection counterparts in increasingly perfect universes. It can be fitted into a reasonable pareschatology and eschatology (see H chs. 20 & 22). Finally, the RTR is supported both by neo-Leibnizian creation arguments and by the Evolutionary Explanation for the fine-tuning of our universe for life. We have thus arrived at a resurrection theory that satisfies both the demands of natural science and philosophical theology.

Notes

[1]We list several resurrection theories that violate natural laws: (1) the literal revival theory mentioned in the New Testament; (2) the reassembly theory (see Bynum, 1995; Hershenov 2002, 2003); (3) the dualistic theory developed by Aquinas; (4) the body-snatching theory of van Inwagen (1978); and (5) the particle-fission theory proposed by Zimmerman (1999) and adopted by Corcoran (2001) and Hudson (2001: ch. 7).

[2]One might try to argue that (1) current science merely approximates true final science; and (2) some resurrection theory is consistent with the natural laws described by true final science; therefore (3) the resurrection is physically possible. We reply that all resurrection theories violate very deep laws of nature (e.g. the conservation of mass-energy) and there is almost no chance that those laws will be overturned in final science. A faith in the friendliness of future science is a sign of desperation.

[3]Parfit (1971) briefly discusses resurrection by replication. But the theory is most famously associated with Hick (1976: ch. 15). 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 (Reichenbach, 1978; Polkinghorne, 1985: 180-181; Mackay, 1997). This is the old Aristotelian idea of the soul as the form of the body. Accordingly, resurrection is the divine installation of the original earthly body-program on a new bio-computer.

[4]Hick says the replication is natural and lawful. Perhaps this natural law is some version of the Final Anthropic Principle According to Barrow & Tipler (1986:23), the Final Anthropic Principle states: "Intelligent information-processing must come into existence in the Universe, and, once it comes into existence, it will never die out." Of course, for Hick this law has to entail the existence of life in another universe.

[5]Physics tells us that our universe will end with the destruction of all complex material structures. So it is wise to situate the replica in another universe in which complex things like human bodies may fare better.

[6]An extreme possible therapy is *cellular restoration therapy* (Hershenov, 2003: 32 - 33). Cellular restoration therapy repairs the replica by removing unwanted cells (e.g. cancer cells) and replacing defective cells with correct cells. Cellular restoration therapy is likely to involve genetic corrections of defective mutations. One sort of cellular restoration therapy focuses on stem cells. It replaces missing or defective stem cells in the replica with normal stem cells. As cells die in the replica, they are replaced with youthful new cells. Cellular restoration therapy thus causes *age-regression* (Hershenov, 2003: 33).

[7]The body is a living machine running a program. The body-program is the functionality of the body. It is the soul (Aristotle, *De Anima*, 412a5-412b21; Aquinas, *Summa Theologica*, Part 1, Q 78 – 84; Barrow & Tipler, 1986: 659). The body-program is not a substantial form. The body-program is a system of dispositions. Each disposition is a rule with this form: if the body gets an input w while in state x, then it changes to state y and produces output z. You are not identical with your body-program (your soul). It does not live in your body and it does not leave your body on death. Your soul is an abstract mathematical pattern. It is a kind of eternally existing platonic form.

[8]One might raise an objection from the Biblical equation of death with sleep. Death is equated with sleep in many verses (e.g. Psalms 13:3; Daniel 12:2; Matthew 27:52; Mark 5:38-42; John 11; 1 Corinthians 15; Ephesians 5:14; 1 Thessalonians 4:13 – 16). One

might argue that if death is entry into a kind of sleep, then it is not the end of all human biological activity in every part of the body. We reply that the equation of sleep with death is obviously metaphorical. The Bible describes death literally as the extinction of the person (Job 14; Ecclesiastes 3:19-20, 9:10). Persons are made of dust and shall return to dust (Genesis 2:7; Genesis 3:19; Genesis 18:27). And biology tells us that death is the literal destruction of the person. The metaphorical is to be interpreted in terms of the literal. We say that x is metaphorically asleep iff x has literally died and God can recreate x. And x is metaphorically awakened iff x has literally died and God does recreate x. It is thus metaphorically true that death is sleep and resurrection is awakening.

[9]Philosophers have recently developed various theories in which persons persist into the afterlife. But they are not resurrection theories. According to van Inwagen (1978), God takes your earthly body to heaven just before it fully dies. God acts as a kind of *body-snatcher*. As soon as God obtains your body, God heals it and rejuvenates it. Hence the life of your earthly body does continue in your resurrection body. Your resurrection body is the same body as your earthly body; thus personal identity is retained. According to Zimmerman (1999), your body splits into two copies of itself just before the last moment of its life. Although one copy dies here on earth, the other copy is taken by God to heaven and is healed. The theories of van Inwagen and Zimmerman are fairly popular today. They are taken up by Hasker (1999: ch. 8), Corcoran (2001), and Hudson (2001: ch. 7). Since the earthly body does not die in these theories, they are not resurrection theories. Corcoran recognizes this when he says "The account I offered is *not* an account of resurrection. It can't be, as nothing dies and gets resurrected. It is an account of *survival* into an afterlife" (2006: 432). Of course, you cannot survive (live through) death.

[10]Since we are finite things improved by finite increments, the wicked will take longer to reach any finite degree perfection. But all will be perfected in the infinite limit.

[11]An earthly body is like a computer running a program. An earthly body starts in some initial program state and gets its inputs from its environment. Its biography is defined entirely by its program and its inputs. Hence there are two ways to improve an earthly life: by improving its program and by improving its inputs. For every earthly life, the resurrection universe can be (and typically is) improved in both ways.

[12]Job 19:26-27 says "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". According to counterpart theory, Job 19:26-27 is true at the time of its utterance by Job iff there exists a resurrection counterpart of Job and he sees God with his own eyes. We also think Luke 24 (especially verse 39) correctly comes out true on a counterpart-theoretic reading. However, the resurrection of Jesus raises many special issues that we cannot deal with here.

[13]Leibniz says a system of things is *metaphysically perfect* iff it "offers the greatest possible sum total of actual reality"(1697: 90 - 91). A metaphysically perfect system is one that actualizes the greatest number of possibilities of the greatest number of essences or forms. He also says a system of things is *morally perfect* iff it is maximally good (1697: 90 – 91). He says moral perfection is the perfection of minds. We say it is the perfection of bodies. A morally perfect system thus is one in which the bodies "are granted the greatest possible happiness and joy"(1697: 91). A system is metaphysically

and morally perfect iff it actualizes the greatest number of positive possibilities of the greatest number of essences or forms. Hick's theory entails both metaphysical and moral perfection.

[14]Forrest (1995: 58) says that Paradise Earth is located in the future of our universe. It will therefore be destroyed as our universe runs down. We can avoid this unwelcome consequence if, following Hick, we situate Paradise in a later resurrection universe.

[15]The Church Fathers were aware of the Stoic doctrine of eternal recurrence (Wolfson, 1956: 61 – 62). On the one hand, they sometimes argued that the Stoic doctrine of recurrence implies the physical possibility of the Christian doctrine of resurrection. On the other hand, they clearly recognized the differences between the two doctrines.

[16]All lives follow abstract programs. As abstract objects, they are eternal. Every earthly life is the execution of a program. Every resurrection life is the execution of a program. One might argue that these programs are entirely deterministic or else one might argue that they allow some non-determinism. It matters not. Either way, a resurrection life is neither more nor less free than an earthly life.

[17]Dilley (1983) argues for multiple resurrection. He argues, for example, that John Hick has many positive potentialities. The earthly John Hick is a philosopher. So the earthly Hick realizes only some of Hick's positive potentials. But God will "want to fill in the great chain of being with perfected instances of Hick the plumber and Hick the lawyer in addition to a perfected instance of Hick the philosopher" (1983: 472).

[18]One might invoke the seed imagery of the New Testament to justify multiple resurrection. Jesus says: "unless a kernel of wheat falls to the ground and dies, it remains only a single seed. But if it dies, it produces many seeds" (John 12: 24). Paul uses the sowing and dying of the seed as an image of the resurrection (1 Corinthians 15). So if a seed that is sown and dies makes many seeds, then there is multiple resurrection.

[19]Augustine, *The City of God*, bk XI ch 23; bk XIII ch 13, 16-20, 22, 23; bk XIV ch 3, 15-16, 19-26; bk XVI ch 8; bk XX; bk XXI ch 2-3; bk XXII ch 10-21, 29, 30.

[20]Our bodies realize a sticks-on-sticks pattern: your trunk (chest and abdomen) is a thick cylindrical stick; your legs and arms are sticks on that stick; your toes and fingers are sticks on those sticks. But why stop there? Why not keep adding sticks, until your resurrection body is like an animated tree. Moravec discusses robotic bodies with the sticks-on-sticks form iterated many many times (1988: 102 - 108; 2000: 150 - 154). He refers to them as "bush robots". Of course, we need not think of the resurrection bodies as artificial. The sticks-on-sticks pattern is natural. It can be a product of biological evolution.

[21]Peirce's Cosmogonic Philosophy starts with the idea that non-being negates itself (Peirce, 1965: 6.214 – 6.219). The self-negation of non-being is the self-actualization of the simplest structures. The process of self-actualization is self-sustaining and self-actualizing. It is a growing tendency to complexity (Peirce, 1965: 6.33).

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