

Surviving Death, *Again*

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Abstract: The paper begins by briefly engaging critically—on theological grounds—with Dean Zimmerman’s defense of Peter van Inwagen’s Christian Materialist idea that we are identical with our bodies, and so survive bodily death by not actually undergoing bodily death. Next, I consider the view of the mind-body relation that Dean himself is tempted by, namely Emergent Substance Dualism, arguing that it is best seen as a fig leaf that at most works to avoid offending contemporary anti-theistic “traducian” sensibilities. In displacing Emergent Substance Dualism, I set out a Neo-Aristotelian account of essence and embodiment that allows for—indeed entails—the possibility of our surviving the death of our bodies. Along the way a characterization of ontological reductionism is given, which avoids the incoherent thought that reduction goes by way of identity. The characterization makes evident why mental events and states are not reducible to physical events. Finally, two non-reductive relations between mental and physical events, namely subserving and implementing, are defined, and then used to characterize the relation of embodiment, and explain how certain mental acts can be “difference-makers” in the physical realm. I only aim to show that given the manifest failure of psycho-physical ontological reduction, this new account of survival adds no further mystery to the mind-body problem.

Keywords: Ur-essence, Afterlife, Personal identity, Personites, Fellow traveler worries

Dean Zimmerman has explored the question of surviving death from various perspectives, including Materialism, Emergentism, and even something like Cartesianism.¹ We can rely on Dean to have something subtle, insightful and closely-argued to offer, even when developing his opponents’ views. That’s delightfully refreshing, and part of why so many of us are grateful to have him as a colleague

¹ “Materialism and Survival (1998), “Two Cartesian Arguments for the Simplicity of the Soul,” (1991), “Should a Christian Be a Mind-Body Dualist?” (2004).

and a friend. Dean has also taken up and developed a view of our cross-time embodiment as partly response dependent, a view first presented in Johnston (1989)² and then developed in a different way in Johnston (2010).³

Here, I begin by engaging critically—on theological grounds—with Dean’s alternative elaboration of Peter van Inwagen’s Christian Materialist idea that we are identical with our living bodies, and so survive “bodily death” by not actually *undergoing* bodily death. Next, I consider the view of the mind-body relation that Dean himself is tempted by, namely Emergent Substance Dualism, arguing that it is best seen as a fig leaf that at most works to avoid offending contemporary anti-theistic “traducian”⁴ sensibilities.

After sidelining Emergent Substance Dualism, I set out a Neo-Aristotelian account of essence and embodiment that allows for—indeed entails—the *possibility* of our surviving the death of our bodies. (Whether that possibility is *actualized* is a further question.) Along the way, a characterization of ontological reduction is provided, one which avoids the incoherent thought that ontological reduction goes by way of identity. The characterization makes immediately evident why mental events and states are not ontologically reducible to physical events. Finally, two non-reductive relations of dependence between mental and physical events—subserving and implementing—are defined. (A third relation, interdependence, is also defined.)

² “Relativism and the Self” (1989). There followed a small cottage industry of “self-making” views in the theory of personal identity, which I hope to address elsewhere. See Denis Robinson “Four Dimensionalism, Relativism and the Self” (MS) (1996); Kristie Miller “How to be a Conventional Person” (2004). Dean Zimmerman “Personal Identity and the Survival of Death,” (2012). “Conativism about personal identity”; “Diachronic Self-Making” (2020); “Self-Making and Sub-people” (2022); “Community Made Selves” (2022); Irem Kurstal “Self-Determination and Plenitude” (2022).

³ *Surviving Death* (2010), chapter 4. On Zimmerman’s variant of my (1989), God can make a later stage that has backward-looking concerns for an earlier person, the very concerns typical of taking that person to be oneself, so that the post-mortem stage is then properly classed as a stage of that person. One objection is that since on Zimmerman’s variant the determinative attitudes are not exclusively future-directed, the account makes the number of people in the past partly grounded in what self-making attitudes might arise in the future. That is, if what a person comes to believe about her previous life can determine whether she survived some past event that was at odds with her earlier survival-related beliefs, then it seems that the number of persons sharing some embodiment at *t* can depend on what happens at times later than *t*. In the case at hand, we have at *t* the person with more restrictive belief and the person with the less restrictive belief—two people, thanks to something that happened after *t*, but might not have. I take it that how many people there are at *t* should be grounded in facts up to and including *t*. That provides one reason to reject Lewis’s account of fission in his classic “Survival and Identity” appearing in A. O. Rorty (1976). The same objection appears to arise on the recent self-making views of David Mark Kovacs. See his “Diachronic Self-Making” (2020).

⁴ On traducianism, see footnote 34.

These relations are employed to characterize the relation of embodiment, and to explain how certain mental acts can be difference-makers in the physical realm—though not by way of downward productive or “oomphy” causation, but instead via the non-causal relation of implementation and its implications for counterfactual dependence.

In all this, I only aim to show that given the failure, glimpsed below, of the neural ontological reduction of the mental, this new account of embodiment and personal survival adds no *further* mystery to the mind-body problem.

The mysterious nexus between mental events and physical events is not illuminated by identity, nor by reduction. My hope is just that it is properly *located* via the relations of subserving, implementing, and interdependence.

A Change in View

In *Surviving Death* (2010) I argued that the Christian hope for the resurrection of the dead and their participation in “the life of the world to come” is dashed by (i) a close examination of the conditions of personal survival, and—in the case of reductionist, purely psychological continuity accounts of survival—by (ii) what justice would require for those innocent “personites” which are psychologically connected to later stages that perform acts that do merit punishment.⁵ (On the latter, see the discussion of “Lewisian” resurrection below.)

In place of that standard Christian hope, I there offered a this-worldly analogue or surrogate, a way of living on in the onward rush of humankind—a surrogate developed out of the idea that we are the “higher-order” kind of thing whose deepest future-directed attitudes determine which *this-worldly* future embodiments will be ours.

I have been led to a change of view about the conditions of personal survival, as a result of dwelling on the various ways in which the familiar reductionist accounts of personal survival undermine the coherence of ethical life. The new proposal is in part motivated as a solution to such “fellow traveler” problems, of which the

⁵ *Surviving Death* (2010, 65–68). The book is an expansion of my 2006 Hempel Lectures. The first development of “personite” or “sub-person” worries, though not under those names, appears in that section. In his (2010) Eric Olson independently outlined some of the prudential difficulties that attach to psychological reductionist accounts of personal identity. The prudential worries are just the beginning of the personite problems, morality also emerges as unworkable if there are personites.

personite problem, which arises for Lewis-like “worm” theories of personal identity, is but one example.⁶

Here, I will not only reject reductionism about personal identity, i.e., the view that our continued existence wholly consists in—in newer terminology, is wholly grounded in—the holding of bodily and/or psychological connections over time. I shall also highlight the “further fact” that secures our continued existence over time and allows for the possibility of re-embodiment in an afterlife.

Despite arguing for that possibility, I do not think we are “*separately existing* entities, distinct from our brains and bodies” to use Derek Parfit’s second—and as we shall see, crucially non-equivalent—formulation of non-reductionism concerning personal identity. (Parfit 1984) I am not a substance dualist. Instead, I take the unitary substances that we are—embodied wills—to have two distinguishable aspects: namely the will in question, and its embodiment. Although an embodied will is not numerically identical with its embodiment, an embodied will is not something naturally existing separately from that embodiment.

We are essentially embodied wills. The argument for that in part depends on the way it deals with fellow traveler worries, and in part on it being the best account of the ground of our moral status. My further claim is that our being essentially embodied wills—given a certain Neo-Aristotelian “ur-essence” account of what it takes to have an essence—implies that our present embodiments are not essential to us, because those specific embodiments are not derivable from the ur-essence of being an embodied will. Only being somehow appropriately embodied follows.

Coming to see that our present embodiments are not essential still leaves us with the fact that each one of our deaths will be a catastrophic loss of the dense tissue of attachment to those others, who in our present embodiments, are our beloveds, or children, our friends and familiars, those we have learned from, yearned for, worked with, cared for, hurt and so on. Even so, the possibility remains that not all is lost in death, and that we will find ourselves united again, perhaps in ways that extend beyond the present limits of our imagination, in embodiments other than these. (Of course, this is dangerous territory, which religious mountebanks throughout human history have sought to claim and debase, for their own spiritually materialistic ends.)

Recently, in his “Jewels in the Ontological Trash-Heap: Mark Johnston’s Metaphysics of Persons”⁷ Zimmerman has responded in detail to my change in

⁶ An exercise: find a fellow traveler problem for the self-making view in Johnston (1989) and for the higher-order view in Johnston (2010).

⁷ In *Contemporary Controversies in Philosophy of Religion* (2019).

view, as set out in Johnston (2016, 2017, 2019).⁸ First, I take up one of Zimmerman’s two urgent questions from “Jewels”. Namely: Just how the fellow traveler worries differ in kind from the familiar problem of the many? Then I develop my new account of survival by way of contrast with what I take to be Zimmerman’s favored position on the mind-body problem, namely Emergent Substance Dualism. Finally, I respond to Zimmerman’s second question, namely: How exactly does this account of what we essentially are deliver a unified solution to the variety of fellow traveler worries?

The pivotal notion will be that of embodiment, characterized below. In the ordinary range of everyday cases our offhand observation of bodily and/or psychological continuity gives us easy knowledge of personal identity because we are essentially *embodied wills*. By “embodied wills” I mean embodied agential subjects, i.e., embodied conscious valuers of value, that can act to secure the values consciously presented to them via valenced modes of presentation. Elsewhere, I argue that this is also the ground of our having moral status, i.e., of our being such that our legitimate interests ought to figure in any morally acceptable deliberation concerning just how we should be treated.⁹ Since the fellow traveler worries, as I present them, all turn on questions of moral status, a unified solution to those worries should (i) identify the very thing which a reductionist about personal identity leaves out, namely the further fact of the persistence of an individual embodied will, and (ii) explain why *that* should be the ground of moral status, a ground not also non-derivatively had by our fellow travelers.

That’s the proper standard for dealing with the fellow traveler worries, one not yet met by the burgeoning piecemeal solutions now appearing in print.¹⁰ The various fellow traveler worries—I describe four below—arise from the various ways in which reductionism about personal identity occludes the proper bearers of moral status, namely enduring agential subjects, or “wills”, that have, but are not identical with, their perduring embodiments.

⁸ “The Personite Problem: Should Practical Reason be Tabled?” (2016). “Personites, Continuity and Maximality” (2017). “Is Hope for Another Life Irrational?” (2019). See also “On the Importance of Being Singular” (MS).

⁹ “On the Basis of Morality: Will in a World of Species-Relative Value” (MS).

¹⁰ For a sampling, see Crummett (2022), Dietz (2020), Eklund (2020), Fairchild (forthcoming). Plenitude, Coincidence, and Humility. *Philosophical Perspectives*. Javier-Castellanos, A. Arturo (2021). Javier-Castellanos, A. Arturo (2023) Kaiserman, Alex (2019). Karhu, Todd N. (2019) Kovacs, David M. (2020) Kowalczyk, Kacper (2022). Longenecker, Michael Tze-Sung (2020a). Longenecker, Michael Tze-Sung (2020b). Moran, Alex (2018a). Moran, Alex (2018b). Moran, Alex (2021) Roelofs, Luke (forthcoming). Russo, Andrew (2022) Skrzypek, Jeremy W. (forthcoming). Priority Perdurantism. *Erkenntnis*:1–26. Whaley, Kristin Seemuth (2017).

For reductionism concerning personal identity is, *inter alia*, the denial of any “further fact of persistence”-makers such as enduring wills or equivalently, enduring agential subjects.

Embodiment is Not Identity with a Body

On the view of embodiment as identity with a body, as advanced by Peter van Inwagen¹¹, the life to come is only available to us if our bodies never actually die! Both Zimmerman and before him van Inwagen, describe scenarios in which our present bodies never actually die, but only seem to die, with a “corpse” supernaturally produced either by direct creation by God (van Inwagen) or by divinely initiated fission (Zimmerman).

My own ontological reservations about the van Inwagen view of embodiment as identity with an animal body are set out in Johnston (2006) and (2015) under the heading of the “remnant person problem”. Here, let me mention some theological and ethical reservations that arise within a Christian, and more specifically a Pauline, view of things.

First, That human bodies never actually undergo death is hard to square with the *death of Jesus on the cross*, at least if the human being Jesus stood to his own living body in the relation which we stand to ours, namely identity—as van Inwagen proposes.¹² That Jesus did not *undergo* body death has an unnerving affinity with the *Scheintod* or “swoon hypothesis” of the rationalist theologian Heinrich Gottlob Paulus (1761-1851), according to which Jesus only *seemed to die* on the cross.¹³

Secondly, there is Jesus’s miraculous revivification of the *stone-cold* corpse of Lazarus, *four days* after his death. (John 11: 1-44). As Martha, the sister of Lazarus warns Jesus, “by this time there is a bad odor, for he has been there four days.” *Miraculous* revivification of a stone-cold corpse is not a moment in the natural organic life of a living body—the very thing van Inwagen would require for there to be numerically the same body before and after revivification. Jesus’s own conception of what he was doing, shared by Lazarus’s sisters Martha and Mary, does not square with van Inwagen’s view of embodiment as identity with a body.

Thirdly, both van Inwagen’s and Zimmerman’s imagined scenarios make the death of our loved ones too much like their being whisked away on a secret deep space mission, with a misleading corpse deceptively provided in their place. The

¹¹ Peter van Inwagen, *Material Beings* (1990).

¹² For a well-reasoned exploration of the case of Christ’s body, see Alejandro Pérez (2021), “An Embodied Existence in Heaven and the Non-Cartesian Substance Dualism (Revisited)”.

¹³ See Douglas Groothuis (2011). *Christian Apologetics*. IVP Academic.

deceptive corpses insert a macabre element into our recovering our dead from the battlefield, into our corpse-focused mourning at the burials of our loved ones, and into much else surrounding our attitudes to corpses.

There is something more fundamental than these three skeptical jabs. My own understanding of the Christian doctrine of the afterlife follows the famous passage in 1 Corinthians 35-50:

³⁵ But some man will say, how are the dead raised up? and with what body do they come? ³⁶ Thou fool, that which thou sowest is not quickened, except it die.³⁷ And that which thou sowest, thou sowest not that body that shall be, but bare grain, it may chance of wheat, or of some other grain . . . ⁴² So also is the resurrection of the dead. It [the body] is sown in corruption; it is raised in incorruption. It is sown in dishonour; it is raised in glory: it is sown in weakness; it is raised in power: It is sown a natural body; it is raised a spiritual body . . . ⁵⁰ Now this I say, brethren, that flesh and blood cannot inherit the kingdom of God; neither doth corruption inherit incorruption.

I take it that our present embodiments—evolved animal bodies—are essentially, i.e., by their very nature, corruptible. Our animal bodies by their natures can sicken and die, as other animal bodies do. So, the promise of the life to come is *inter alia* a promise that we embodied wills shall have new embodiments, numerically distinct from our present embodiments.

If our present embodiments were essential to us, then we would not be able to be *re-embodied* in the life to come. Given what we essentially are, *this would be our only life*. Yet as we shall see, our essence only requires being appropriately embodied. Our present embodiments are contingent determinations of that determinable but essential condition.

Are such ontological niceties of any practical theological significance? I believe they are. The waning of genuine Christianity in the West, its accelerating replacement by the likes of Moralistic Therapeutic Deism—according to which Christianity’s respectable aim was to produce moral decent and well-adjusted people who “believe in a higher power”—and more and more by its replacement by a God-free commitment to the supposed betterment of humanity, is a commonplace theme in the theory of secularization. The causes of secularization are widely hypothesized.¹⁴ The corrosive effects of liquid modernity are variously catalogued.¹⁵

¹⁴ See, for example, Charles Taylor *A Secular Age* (2007).

¹⁵ See, for example, Rod Dreher *The Benedict Option: A Strategy for Christians in a Post-Christian Age* (2017).

There is a simpler and more direct account of why Christianity *does not compute* for many conventionally educated Westerners. What they regard themselves as knowing, what they take to be part of settled science—or more viscerally, what they experience as the only thinkable view—is that *this is our only life*.

In thus rejecting Christianity out of hand, they therefore agree, albeit most of them unwittingly, with Paul's statement in 1 Corinthians 15:19: "If our hope in Christ is for *this life alone*, we Christians are the most pathetic of all."

My main thesis is that the widespread conviction that this is our only life is blind to a way in which we may survive death, one wholly compatible with settled science, i.e., settled science *sans* a scientistic metaphysics in which there are only processes, as opposed to the doings of embodied wills, equivalently embodied agential subjects.

Looking for a reduction is one hallmark of good science. Reducing one thing to another, such as reducing chemistry to physics, is great work if you pull it off. For it eliminates any further need to explain why there is the reduced (chemistry) as well as the reducing (physics). But when ontological reduction is clarified, ontological reductionism concerning embodied wills, persons among them, can be seen to be both false, and a harbinger of ethical disaster.

What is it that We Essentially Are?

I understand survival—in the sense in which it is rational to care about survival *as such*, and not just because of its usual bodily and psychological continuities—as continued existence.¹⁶ You exist at some future time if and only if there exists some

¹⁶ In retrospect, perhaps both Derek Parfit and David Lewis were wrong to frame the debate around whether it is psychological continuity (hereafter "R") or personal identity that it is rational to non-derivatively care about in caring about one's survival—the question to which Parfit answered "R", while Lewis answered that on a four-dimensional framework they come to the same thing.

As against that now familiar, perhaps even canonical, way of framing the debate, when considering my own survival, a certain package deal seems to be the appropriate object of rational concern. I want to exist in the future—hence numerical identity with some being in the future—and I want to have, in that future, a life that is an intelligible and worthy development of my present life.

The package deal is not to be understood as numerical identity, i.e., continued existence, plus the holding of R. For the holding of R only very roughly tracks the second part of the package deal. Indeed, there can be intelligible and worthy developments of a life that depend on sudden, potentially R-violating events, as with the apparently utterly immediate transformative experience had by Saul of Tarsus on the road to Damascus, which of was such intensity that it led him to cease persecuting his religious enemies, convert to their then small sect, and become its greatest missionary, thereby establishing a world-historical religion.

being at that time that is numerically identical with you.¹⁷ Both the type of changes you can live through, along with the type of events that would cause you to cease to be, are fixed by your essence; by what it is to be you, in whatever possibility you might inhabit. So, questions of survival, among them the question of whether we could survive death—all turn on what we essentially are, in the just specified ontological sense.

Notoriously, our essence is elusive, making it seem to many that inquiring after it is idle.

First, and contrary to Descartes' conviction in the *Meditations*, we have no direct rational insight into our essence. Simply from the occurrent insight, at the moment of thinking, that one is *then* a thinking thing there is no sound route to the conclusion that one is essentially a thinking thing. For that is a conclusion with robust implications that go far beyond the observation that one is now thinking. It implies that one came into being late in the womb, perhaps around the fifth month, and also that one will never exist in dreamless, or truly unconscious, sleep, or in a persistent vegetative condition. On the other side of the ledger, that we are essentially thinkers is a curiously thin account of our essence. It fails to illuminate the bodily conditions, if any, of the continued existence of a thinking thing. The fact that those conditions can be imagined away, say by imagining my watching via a mirror my body slowly disappear from the head downwards, tells us little about what is really possible. So, the view that we are essentially thinkers fails to pronounce on the question of the possibility of life after death.

Secondly, though empirical science, as part of the search for basic exceptionless law-like generalities, cares deeply about the distinction between what happens merely locally and what always holds globally, the essence/accident distinction is an empirically idle distinction, at least at the middle-sized level which we inhabit. Further additional philosophical hypotheses that discern, within the exceptionless, distinctions between what is accidental and what essential, have no further empirical consequences. Except, that is, those that bear on the possibility of life after death, and thereby allow space for the prospect of "eschatological verification" in an afterlife.

Thirdly, our intuitions about what we might survive are not suited to deliver an account of our *essential* natures; an account that would pronounce on something like survival after death. Those intuitions, driven as they are by *generic* ways of telling whether, for example, someone has survived ordinary events like this afternoon's

¹⁷ So, the stage view of Katherine Hawley and Ted Sider is not strictly an account of persistence, but of the having of past and future counterpart stages, none of which is identical with one's present stage.

tennis game, are highly reliable in the massive range of quotidian cases, where we arrive knowledge of personal identity in easy and offhand ways. However, their epistemic authority gives out when we leave the everyday cases of tracking ourselves and others by means of observed psychological and bodily continuity. If that's right the method of trying to extract universal ontologically necessary and sufficient conditions for continued existence from our intuitions about outré cases is simply mistaken. There is no neat counterpart of Gettierology when it comes to survival.

Furthermore, the accounts of personal identity that propose a reduction of the continued existence of a human being to the holding of biological, or neuro-psychological, continuities over time, over-ambitiously promote those features of our everyday ways of telling whether we have a case of a persisting person to the status of *ontological necessary and sufficient conditions of persistence*. On its face, this is confounding epistemology — our ways of telling — with ontology.

A better approach would involve asking what kind of thing human beings would have to be, such that we can have knowledge of their persistence in easy and offhand ways by relying on bodily and psychological continuity.¹⁸ That alternative method might be augmented by asking what our essence would have to be like for ethical life to be viable.

To open up that question, there is a striking indication that something has been left out by reductionist accounts of what we essentially are. For characteristically they depict us as *ontological trash* in the following sense.

Within each person's total spatiotemporal envelope—that part of spacetime that most closely bounds the person's bodily and internal psychological life—there are “fellow travelers”—there are beings (i) with reductively definable persistence conditions different from that of the person, (ii) yet, very like that person, and (iii) not ontologically derivative from that person.

Sources of trashiness on reductionist views of personal identity include (a) very person-like longish temporal segments of four-dimensional persons (Lewis), along with longish lived sub-processes of the maximal or all-inclusive psychophysical processes that wholly ground the persistence of a person (Parfit 1984), (b) R-variant very person-like unity conditions holding among the states of persons considered at different times, where R—be it bodily continuity, psychological continuity, or some combination of both—is the reductionist's unity condition for persons, (c) The

¹⁸ Cf. the “alternative method” of my “Human Beings” (1987).

“Dion, and all the Massively Overlapping Theons” —plurality of bundles that are equally good candidates to be subjects in pain, with the absurd upshot that the heaviest human beings are the real human utility monsters, since they have many more “Theons” than we less weighty people do.¹⁹ (d) consistent pluralities of *de re* modal profiles, where the essential features of a person are understood as just one among many variant consistent profiles of *de re* necessary properties, thereby reproducing many, many morally significant fellow travelers, outside of either a four-dimensionalist or a process-based framework.

Zimmerman, noting that ontological trashiness of the (i)-(iii) variety is reminiscent of the familiar “problem of the many”²⁰, extended to the temporal case, naturally asks why there should be a special worry when it comes to persons rather than mere material objects.

Suppose a friend kindly lends me one of his many record players for a few days, during which time some atoms are worn off the edge of the stylus. As a result, there are many fewer record-player shaped sums of particles in the nearest vicinity of the record player I return to him a few days later. Yet there need be no loss of use-value or exchange value—so long as the stylus is not damaged, or significantly worn down. It would be absurd to charge me the value of the record player multiplied by the difference in the number of record-player shaped sums of particles that are no longer there due to the loss of atoms on the edge of the stylus. Importantly, such values, indeed even including aesthetic value, are not intrinsic, they are not shared between intrinsic duplicates. If they were we would find within any given record-player or statue or painting, a host of things very, very like the record player, statue or painting that very also the bearers of aesthetic, use or exchange value. The bigger the record player, statue or painting the better it would be. An absurdity.

That serves to highlight the fact that the fellow traveler worry for persons is quite different from the general problem of the many F-like things in the nearest vicinity of any wholly material F. Persons, unlike record players, have a moral status, i.e., their interests properly figure in any morally acceptable deliberative process concerning how they should be treated. What is hard to deny is that other longish-

¹⁹ For Dion and the Theons, Chrysippus’s original “problem of the many” involved human beings, or more generally, conscious subjects. That’s lost in Peter Unger’s original problem of the many table-like things in the nearest vicinity of any table, but it comes back to life in his “The Mental Problems of the Many” (2004). The moral problem arising from Dion/Theon cases with which I am concerned arises for the reductionist about personal identity, because he is badly placed to provide a singular subject of pain, when any given person is in pain. See my “Reductionism and Hedonic Value” (MS)

²⁰ Peter Unger “The Problem of the Many” (1980).

lived persisting things that moment by moment intrinsically duplicate a given person also have a moral status, and so have interests that count morally. In effect, the crucial premise that introduces something not found in the familiar problem of the many is:

(Moral Status is Intrinsic) Where a being's having a moral status is its being such its interests count morally, if two persisting²¹ beings are moment by moment duplicates over the entire period that one of them has a moral status, then the other has a moral status across that period as well.

It follows that if we are ontological trash then we are not ethically singular in the following sense:

(Ethical Singularity) *x* is ethically singular iff *x* is the only being within *x*'s spatiotemporal envelope which has a moral status, i.e., the only being such that its interests ought to figure in any reasonable accounting of what is morally right/wrong/permissible in the available ways of treating that being.

And because our fellow travelling trashy things have either a different temporal extent, or different conditions of future persistence, then if they have a moral status there will arise a host of conflicting interests, which can find no satisfactory ethical resolution. Ethical life will have a "damned if you do/damned if you don't" character.²²

As a result of examining in detail the threat to the coherence of ethical life presented by various fellow traveler worries, one or another of which arise on all reductionist accounts of personal identity, I now take the viability of ethical life to require that we be *embodied enduring wills*, where a will is a conscious valuer of a range of values which that will can act to secure.

We are wills of a kind which necessitates that we have some embodiment that provides (a) a *subserving* material basis for the sensory, emotional, imaginative and memory-based valenced presentations of value that our wills can act upon, in response to their reason-giving force, along with (b) a way for us to act to secure the values in question, i.e. a way to *implement* our acts of will in our material environment. Again, this leaves open the question of whether our present embodiments are essential to us, or whether it is essential only that we have some embodiment or other that provides for (a) and (b).

²¹ Again, persistence is here understood as continued existence.

²² For the details see Johnston (2016), (2017), (2019) and (2020).

The open question is addressed by a denial that we are identical with our embodiment, and an account of our essential features being united in an ur-essence from which all and only those features flow. Our having some or other appropriate embodiment or other follows from our ur-essence, but our having our present embodiments does not.

On the view to be defended, whereas individual wills *endure*, in the sense of having their token essences present at each time at which they exist, our embodiments are *successive entities*; as they presently are, they take the form of extended complex biological processes laid out in time, existing at a period of time by having a segment of the process in question existing just over that period. In the sense of the original (1984) pre-Lewisian (1986) distinction between perduring and enduring, our wills *endure* and our embodiments *perdure*.²³ Our bodies are not enduring substances, but complex, temporally extended, self-maintaining processes.²⁴

We are then, in the terminology of my “Is there a Problem about Persistence?”, *partial endurers*.²⁵ One aspect, our wills, which we can abstract from our nature as an embodied will, endures, and the other, our embodiments, perdure. It raises the question, answered below, of how the two aspects then could be difference-makers each to the other, influencing how each changes in reciprocal ways.

As we shall see, simple interactionist models of this are inadequate. There are no psycho-neural or neuro-psychological mechanisms, in a sense of mechanism to be explained. For as we shall see, a will and its embodiment are “too close” ontologically for the one to cause a change in the other.

On the to be argued for, the primary agential subject of conscious valuing of value, the bearer of the capacity to act to secure consciously presented values—and

²³ “Endurance” was introduced in *Particulars and Persistence* (1984) in an explicitly essentialist context, within a theory of basic and non-basic cases—where the basic cases were substances, and the non-basic cases were trope-like. Endurance was an account of individual persisting essences, wholly present in the sense of having the individual essence in question *all there* at each time at which the persisting thing exists. Contrast processes or *entia successiva* such as sequences of temporal parts. David Lewis (1986) reparsed that original distinction as three dimensionalism versus four dimensionalism because he was, as he described himself, an “anti-essentialist in sheep’s clothing”. In Lewis (1986) there was then no obvious sense of “being wholly present” left for things whose parts changed over time. Four-dimensionalism, just one version of “perduring” originally so-called, was then left as the default. For a response to Lewis’s own argument for four-dimensionalism—the argument from temporary intrinsics—see my ‘Is There a Problem About Persistence?’ *Proceedings of the Aristotelian Society* (1987).

²⁴ For the argument for this from extant biology, see John Dupré, “Animalism and the Persistence of Human Organisms” (2014).

²⁵ Johnston (1987).

therefore the bearer of moral status—is not an embodied will *thus embodied*, but an embodied will *however it's embodied*. It's me, not me qua-embodied-in-the H.M.S. Johnston. That's so, even if that aged and overworked vessel is *in fact* my only embodiment. If "Johnston" names me qua-embodied-in-the H.M.S. Johnston, then "I am Johnston" expresses a contingent truth.

As against what I take to be an implication of Emergent Substance Dualism, it now seems clear to me that ontologically speaking someone else *could* have had my initial embodiment, while I had an entirely different embodiment. Pascal famously asks, concerning himself: why here, and not there; why now and not then? On the view to be defended, Pascal could well have added: "and why *this* Pascalian embodiment?" Did he, in fact? ²⁶

What is to be said for our present embodiments being contingent, rather than the alternative that counts our present embodiments as essential? A good deal, but here is a brief summary.

On the modal conception of essence, on which any consistent collection of *de re* necessary features constitutes an available essence for something to have, we are left with the problem of plurality of essence—there are too many partly overlapping conjunctions of *de re* necessary features that then count as the essences of ordinarily unnoticed persisting things.

Let a neutral property be one capable of being had contingently by one thing and necessarily by another. Being musical is typically a contingent feature; yet prompted by Aristotle's discussion of "accidental unities" we might ask why there couldn't be something just like the musical human being Corsicus yet differing from him in that this coincident being—call him Musical Corsicus—is musical *as a matter of de re necessity*. Aristotle demurred, holding that Musical Corsicus was a derivative entity, being nothing other than Corsicus *qua* musical, and so not itself having the essential unity of a substance like Corsicus himself. (The only thing with an essence in the vicinity of Musical Corsicus, is Corsicus, a substance like every "individual man and horse" as Aristotle puts it.)

²⁶ "When I consider the short duration of my life, swallowed up in the eternity before and after, the little space which I fill, and even can see, engulfed in the infinite immensity of spaces of which I am ignorant, and which know me not, I am frightened, and am astonished at being here rather than there; for there is no reason why here rather than there, why now rather than then. Who has put me here? By whose order and direction have this place and time been allotted to me? . . ." Blaise Pascal (2004, translation) *Pensées*, 205.

However, the plenitudinous account of an essence as any consistent conjunction of *de re* necessary properties allows for no such crucial distinction. The friend of plenitude will ask: Why isn't Corsicus the derivative thing, being nothing other than Musical Corsicus *ex* musicality, i.e., with that essential feature of Musical Corsicus not being part of the essence of Corsicus?

Should Corsicus then regard his neglecting and then losing his musical ability as the moral equivalent of letting someone near and dear to him die? What of his being a habitué of the temple, or a special friend to handsome young men, or any of his other accidental features? Are they had necessarily by the ontologically more fragile fellow travelers of Corsicus, who cease to exist when he leaves all of that behind? Is Corsicus's reaching out to save a drowning child the moral equivalent of (transfinite?) mass murder in causing to cease to exist the essentialized positional variants of the contingently positioned body of Corsicus at any time?

Without elaborating further, we may already see the way to ethically problematic ontological trash, here generated by the *purely* modal conception of essence, as any consistent collection of *de re* necessities. The problem simply ramifies on a Lewisian account of quasi-essence, where any set of otherworldly counterparts of a thing specify an essence for that thing, an essence which one or another conversational context could make salient. On such a view, when it comes to essence, there is no unique "there", there.

I take it that in cases that fall outside the range of the legitimate epistemic authority of our evolved ways of telling *in everyday circumstances*, whether we have numerically one and the same person—outré cases such as teletransportation—there remains an important ontological question of whether *that* very person, the one that comes out of the machine, would be numerically one and the same as me, and so actually is me living on. Would that be *me* surveying with awe and terror the Martian landscape outside of the teletransportation receiving station, or a mere xeroxed duplicate? The question is not answered by equivocal compromises to the effect that *qua* psychological continuer that is me living on, but *qua* biological continuer that is not me. (Where the "qua"-locution privileges different generic ways of telling who in the future is me.)

The equivocal response is not an answer to the question that really cannot be suppressed. Will *I* exist after that event? Is that person's pain, dislocation, loneliness and despair on the alien planet where he emerges from the teletransportation receiving station, *my* pain, *my* dislocation, *my* loneliness, *my* despair?

The sense that this is a question with an unequivocal answer, is one source of validation for essentialism, for it suggests that there is some determinate objective basis for what changes I can survive and what changes would cause me to cease to

be. For it looks as though there is an objective difference between my suffering such things as opposed to someone else suffering them. Likewise, self-directed guilt, shame and pride are practical attitudes whose intelligibility turns on what I *sans phrase* have done, not on what I *qua* body or what I have done *qua* mind, as if some conversational context which emphasizes tracing by bodily continuity might excuse my Teletransportation product from deserved guilt or pride.

Accordingly, I take a broadly Aristotelian response to the problem of modal fellow travelers and its ethical implications. I begin with an essentialist account of the ground of our possessing de re necessary features (as in Johnston 1984), then take up a hint from Aristotle in supposing that essences are rare, because to have an essence is to have an ur-essence, i.e., an individual characteristic (for Aristotle it was an individual form), which is the ground of one's having *all and only* one's essential properties.

Compare an individual tone, that arguably has its specific loudness, pitch, timbre and subserving disturbance of the air essentially, but not merely *conjunctively*—as if it were possible to have a pitch and timbre and subserving disturbance but no degree of loudness whatsoever. The individual tone is its own ur-essence, grounding the truth of the four de re necessary predications.

In our case, as embodied wills, our essential features include our capacity to consciously entertain valenced modes of presentation—including those of potential acts made appealing by sensing, memory, imagination and affective experience—and then act to secure the values so presented. The conscious processes in question require some embodiment or other to subserve those conscious processes, and some or other embodiment is required to implement the will's actions. So, we are not all-essence. Our essence requires an embodiment, but there is no deriving from the ur-essence of being an embodied will our present embodiments, as opposed to having some embodiment or other that plays the subserving and implementing role. That is what leaves open the ontological possibility of our having embodiments other than these. The absence of a derivation of one's present embodiment from one's ur-essence is itself the guarantee of the contingency of that embodiment.

What then of the threat of plurality of essence, and the resultant fellow travelers, whose moral status and different persistence conditions would make ethical life unviable? From the fact that Corsicus has an ur-essence it does not follow that there is an ur-essence which grounds all and only Musical Corsicus's essential properties, including being musical. The ontological task is then to arrive at a minimal class of items with the ur-essences required to provide basic subjects of predication figuring in the explananda of all the explanations that our best science and ontological theorizing delivers.

My thesis is that embodied wills are properly placed in that minimal class.

In effect, Aristotle's thought was that the minimal class would include Corsicus, and not Musical Corsicus. The so-called "accidental unity", Musical Corsicus, then would be no more than a misleading reification of Corsicus, when he is in the contingent condition of possessing musical ability. Compare Philip on Mondays. Use of that perfectly fine phrase, say in asserting that Philip on Mondays is typically down in the dumps, does not entail that there is an intermittently existing Philip-like thing. Likewise, even though Corsicus is musical there is no such further thing as Musical Corsicus there to be a second non-derivative bearer of moral status. The only non-derivative bearer of moral status is Corsicus himself. Corsicus when musical is Corsicus period.

It's natural to explicate the idea of ur-essence within the context of a discriminating version of Hylomorphism.²⁷ Corsicus is an individual form-embodied-in-some-matter. His individual form is a particular ur-essence. It is to be that very embodied will. From this, flows all and only his essential features, i.e., (i) his capacity for conscious experience (ii) his capacity to act in the light of conscious disclosures of value, (iii) his having some embodiment which implements such action, and subserves the content-bearing sensory, imaginative and memory inputs to his will's deliberation. Corsicus's present embodiment plays that required role. However, that his present embodiment is the only thing that could play that role does not follow from this account of what it is to be Corsicus. It's consistent with his ur-essence that he should come to have another embodiment. Therefore, for Corsicus it is possible to have another embodiment. (A *de re* possibility, one consistent with his essence.)

Now to the crucial question: why can't we immediately secure an ur-essence for Musical Corsicus, given that Corsicus has an ur-essence? It is because there is no implication from there being an ur-essence for Corsicus, one from which all his essential properties flow, that there is an ur-essence for Musical Corsicus, one from which all the essential features of Corsicus *along with musicality* flow. The same for Initial-Seven-Year-Long-Corsicus, and all the similar accidental unities which would reproduce "the damned if you do, damned if you don't"-disabling of the viability of ethical life.

Instead, the interests of such accidental unities are just those of Corsicus at those times, for the accidental unities are ontologically dependent on Corsicus. (Contrast persons and personites, which as sums of stages are ontologically on a par.)

²⁷ In contrast to the plenitudinous framework of my "Hylomorphism" (2006).

On such an account, the real securer of personal identity over time is the persistence of an individual will, understood as a non-derivative bearer of mental features, a will which is numerically one and the same subject/thinker/agent that is present throughout the extended biological process of self-maintaining matter-exchange that makes up its living body. An individual will's identity over time is thus not reducible to impersonal physical processes. Nor to "impersonal" psychological processes, i.e., sequences of mental events, which are understood as not already incorporating the persisting subject/thinker/agent as part of their intrinsic structure.

That doesn't sit well with reductive accounts of personal identity, which wholly ground persistence in terms of physical and/or psychological continuity among events or states, impersonally considered, i.e., prescinding from the initial question of just *whose* events or states they are.

When it comes to wills like ours, a will's persistence over time requires an embodiment, but its persistence conditions are not that of its embodiment understood merely as a complex physiological process laid out in spacetime. The persistence of an individual embodied will involves the further, i.e., non-reducible, fact of that will being numerically one and the same over time.

This does not mean that a persisting human being is a composite of two substances, a body and a will. A living body is not a substance but a process, and the particular changes that make it up do not aggregate into anything substance-like. The only substance in the vicinity, the only subject, thinker, and agent, is the embodied will.

To dramatize this conception of a will's embodiment, suppose that we are compositional nihilists when it comes to the aggregation of basic physical objects and changes. We say that they do not aggregate to *anything*, they are a mere plurality of basic objects and changes working together. Or, given that mereological sums are trivial wholes, requiring no more than that their elements exist at some time or other, we could say that basic physical changes aggregate into a mere sum, and maintain that no mere sum is a substance.²⁸

We then specify an individual will's embodiment in terms of how pluralities of events, in our case neural events and the other bodily events that sustain them, play successive roles in *implementing* that will to act, along with *sub-serving* the sensory, emotional, imaginative and memory-based valenced presentations of value that the will can act on in the light of their reason-giving force. Even though an embodied

²⁸ For this idea of sums as the least demanding wholes, whose existence is a thin reed relative to their replacement by mere pluralities, once the contrast between such utterly undemanding wholes and wholes with further significant conditions of existing is made, see my "Hylomorphism" op. cit.

will is essentially embodied, what constitutes a will's embodiment over time is a variable and contingent matter, depending in part on how that agential subject engages with its environment. (More on the crucial implementing/subserving distinction below.)

Though this is anti-reductionist picture of the human being, it is not a dualism of mental and bodily substances. The only substance in question is the embodied will. When I use the first-person pronoun, what I pick out is *this very embodied will*. I am aware of myself as an active embodied will or embodied "agent cause" when I act, or form an intention to act, or think first-personal thoughts. That's how I have the non-semantic knowledge, or know how, to appropriate the semantic rule:

*A token of "I" on an occasion of use refers to the one who authored that token in order to use "I" to refer to myself.*²⁹

I am aware of myself as embodied through bodily sensational states such as the feeling pain, where expanses of "painy" quality seem to pervade parts of my body; proprioception, which gives me knowledge the position of my limbs as *my* limbs; visual-tactile exploration of my body with the double sensation of feeling a body and feeling its being felt, and motor intentionality, i.e. my moving my body in accord with my intentions.

These different ways in which an embodied will is presented to itself, may mistakenly if naturally encourage the idea of what has come to be called "Cartesian" dualism of *causally interacting* mental and physical units making up a person. That's a picture often associated with Emergent Substance Dualism.

Dean Zimmerman on the Nature of Persons

As I understand Dean Zimmerman's work on surviving death, his ambition has been to vindicate the possibility of survival on various competing accounts of the mind-body or person-body relation including Materialism, Emergentism, Cartesianism and something like my (1989) "self-making" view.

²⁹ That immediate non-semantic knowledge of myself as an active thinker provides the answer to the puzzle Saul Kripke extracts from G.E.M. Anscombe in his paper "The First Person" published in his *Philosophical Troubles* (2010). Without that immediate non-semantic knowledge of being an author or active thinker, I could understand the semantic rule for "I" while being at a loss as to how to employ that rule to immediately ascribe my present thoughts to myself.

What is Dean's own view? I believe he inclines toward Emergent Substance Dualism, where a non-Humean and fundamental neuropsychological law nomically grounds the coming into being of a soul or mental substance. Compare the Emergentism of William Hasker and Timothy O'Connor.³⁰

At the very least, in his (2011) Zimmerman argues that Emergent Property Dualism—something that many have accepted because of the familiar failures of reductive materialism in accounting for the qualitative aspect of experience and for the internal intentional structure of mental states and events—is puzzling unless it is accompanied by Emergent Substance Dualism.³¹

Myself, I find Emergent Substance Dualism puzzling as well, at least if emergence is understood in terms of a basic nomological connection between a certain kind of (say) neural complexity and the coming into being of a particular mental substance or soul.

Upon reflection, I think we should see that account of the appearance of the soul as a prudish philosophical “fig leaf” covering over something quite shocking to modern “traducian” sensibilities, namely the direct creation and embodiment of the individual soul, or as I would put it, of the individual will.

Why think that?

A law of emergence, when offered as a genuinely non-reductive account of the source of the emergent, is a fundamental law, one that it is not derivable from other laws of nature. Otherwise, it is a mere nomic “theorem” derivable from the statement of the fundamental laws; one that may be discharged in favor of them,

³⁰ See Timothy O'Connor's discussion of “nomic” strong emergence in his *Stanford Encyclopedia of Philosophy* article “Emergence”, and most notably William Hasker's *The Emergence of the Self* (1999). Hasker reiterates that account in his review of Richard Swinburne's *Are We Bodies or Souls?* (2021) in *ROCZNIKI FILOZOFICZNE* (2021). There Hasker writes “there is a law of nature (one whose detailed formulation still escapes us) to the effect that the development of the brain and nervous system produces at a certain point a soul” (2021, 82).

³¹ “Property Dualism and Substance Dualism” (2011). There Zimmerman argues that that the vagueness of “garden variety” physical objects renders them unsuitable to figure as the subjects of experience—as mere property dualists would have us believe. I believe that the focus on vagueness in the case of physical objects often masks an ontological rather than a semantic or epistemic phenomenon, namely that of ontological trashiness. Accordingly, one might recast Zimmerman's argument as follows. Ontologically trashy items are unsuited to be subjects of experience. Garden variety physical objects are ontologically trashy, so they are not subjects of experience. So we need mental subjects which come by way of basic laws of emergence. However, there is still a problem. Those laws would have in their antecedents states of garden variety brains or their thinking parts. The brains and their states are themselves trashy. And no basic law has one trashy item selected from a trash heap in its antecedent.

when it comes to the ground of how the so-called “emergent” appeared. In that case, the “emergent” is in fact ontologically reduced, i.e., its existence is wholly grounded in the material base of the “emergent” and the (non-emergent) fundamental laws.

A *fundamental* law of emergence is not just odd in itself. It is an odd man out among the other fundamental laws governing what naturally happens in the material universe.

To begin to see the first oddity, suppose a particular brain over a few microseconds oscillates in and out of the crucial state that is nomically sufficient to generate a soul. Would there then be several nomically guaranteed souls embodied in a single body? An unhappy result.

Is the law of emergence then “non-Markovian”, in that the past emergence of a soul from neural tissue of sufficient complexity has effects—in particular, powers of prevention that block another soul emerging from the same body—which influence the future, though not through the future’s immediately previous state. Compare a magical spell uttered on Tuesday directly working against someone on Thursday without intermediate effects.

Unless the law is like that, we indeed may be left with the nomic possibility of too many emergent souls in a given brain and body. These are the individual souls or wills that come to be embodied in the same brain and body, as that body’s nervous system oscillates into and out of the crucial state, whatever it is, that is nomically sufficient for a soul or will to emerge.

Or instead, is it that the first soul that emerges from a particular neural complex then provides causal resistance to the emergence of a second soul from the return to the crucial state? Once the citadel of the brain is occupied by a given soul, does that soul then somehow causally defend itself against the emergence of all pretenders to the throne?

That’s Markovian, in that the past does not operate like a magical spell uttered on Tuesday directly working against someone on Thursday, without intermediate effects. But it’s decidedly odd. What would it be like for a soul to causally fend off a potential co-occupant of its body? What is the causal mechanism?

Or is there, as a matter of law, some non-co-occupancy principle that always applies? A kind of non-causal Pauli exclusion principle for souls? If we now conjoin that with the original law of emergence, we have joint law to the effect that when a state of a certain kind of neural complexity arises in a body a soul will come into existence, unless there is already a soul inhabiting that body. But again, that joint law seems to be non-Markovian. The past constrains the present consequences of a law, without there being a causal connection between the relevant aspect of the past and the present.

I suppose the Emergentist might say that the nomic emergence of the soul changes its brain in such a way that the brain just cannot return to the crucial state, *not even in a couple of Planck moments, i.e., $2 \times 5.39 \times 10^{-44}$ seconds later!* That's a rather adventurous prediction to make about the underlying neural processes.

The other oddity attending Emergent Substance Dualism is that under it, the realm of natural law, i.e., the realm of fundamental laws governing the whole material universe, appears to have a certain kind of "tacked-on" *neurocentric* character.³²

Emergent Substance Dualism suggests that from the very beginning of the universe, a fundamental neuropsychological law lay in wait for the appearance of neural tissue of sufficient complexity somewhere and sometime in the unimaginably gargantuan material universe. Then sometime after the planets cool down and evolution has been long underway, a neurally-based soul first appears. It comes to exist by being nomically generated by the first clump of neural tissue with sufficient complexity! The law responsible is not reducible to the fundamental laws of nature. It is just another fundamental law of nature.

Yet when we look at the other fundamental laws governing the material universe, we find that they are merely quantitative, and have to do with relations among matter understood as eddies in quantum fields, charge, spin, gravity, electromagnetism, the strong and weak nuclear forces, so-called dark matter, and perhaps dark energy. How does a fundamental law for the emergence of souls "fit" with those fundamental laws, *laws with respect to which neural tissue is an utter sideshow, not in need of mention?*

Indeed, given that the fundamental laws as physics reveals them are not inherently friendly to the kind of complexity, be it neural or otherwise, required for the subserving and implementing of willing, how is it that there is another fundamental law, there in place waiting all along, to make something of such complexity should it arise?

Compare the idea of a fundamental law involving what otherwise unpredictably happens at the physical level upon the appearance of a very heavy element, "Extremelyrarium", an element at the very bottom of the yet-to-be-completed Periodic Table, and one which is incredibly rare in the universe. That law would be odd in that it would have a "tacked on" character. How is it that Extremelyrarium is fundamentally so different from other compound elements, different in a way not

³² Assuming the law is neuropsychological. But as the example below of Extremelyrarium shows, the same point arises if the fundamental law governs the upshot of any kind of rare and adventitiously appearing material complexity.

wholly captured by quantum field theory? *Mutatis mutandis*, when it comes to complex neural tissue.

The supposed fundamental law of soul emergence looks even more out of place than the imagined fundamental law of *Extremelyrarium*. For it privileges not only neural complexity but the appearance of mentality, something which the other fundamental laws remain silent about, and something which looks like an utterly adventitious, and late-in-the-day occurrence in the material universe.³³

It's *just as if* God had decreed: "Let it be that complex neural systems subserve and implement souls". In that sense, the law of emergence is akin to a supernatural addition to the rest of the realm of natural law.

Recognizing that the supposed law of emergence looks superadded, why not simply drop the prudish fig leaf? That is, why not drop the supposed law of emergence in favor of God's particular creative interventions on the occasions when God finds neural tissue of sufficient complexity to subserve some soul, which he then creates? It's God intention to create and then embody a will in a specific body — one will per body — that prevents adventitious co-embodiment of souls.

It's not as if God is somehow overburdened by doing all that. He can form what is in effect a general intention that it be so. God's general intention — his standing "to do" list, as it were — then does the work of the superadded law. But the individuality of the created will arises from God's creative act, not from the mere particular material complexity that activated a supposed law of emergence.

³³ Of late I have come around to the view that what we call causal laws are "Humean" i.e., simple and strong, summaries of patterns of productive or "oomphy" event to event causation. That view may seem to obviate "the odd man out" worry about laws of emergence. But it simply relocates the worry. There then have to be singular causal transactions between events of a certain neural complexity arising and events of wills coming to be. That looks like an utterly unprecedented kind of singular causal connection, and again for the Theist it looks suspiciously like a mere fig leaf for God creating-and-embodimenting a will. And the same cause same effect principle would reinstate worries about Emergentism requiring an emergent will to defend its territory. That principle is still plausible on the "singularist" view of productive causation combined with "Humeanism". That combination is a view about the ground of nomic generality.

Along with singular causation, I take it that there is singular grounding, where for example, the occurrence of a token physical event with a particular intrinsic nature can wholly ground the occurrence of a token mental event. That would amount to the mental event being reduced to the physical event. Whether such ontological reduction obtains is a further question; all we have is a "singularist" account of what it would take for ontological reduction. See the discussion of subserving and implementing below.

Locke says, against Descartes, that it is not beyond God's power "to make matter think". In the present case, the idea is that it is not beyond God's power to create-and-embodiment individual wills.

That suggests an alternative origin for the soul (or will); an origin that does not involve either non-Markovian laws, or the oddity of an emergent soul defending its embodiment against potentially new emergent inhabitants. It turns on Divine creation-and-(opportunistic) embodiment of a will, rather than emergence from below.³⁴ As was taught of old, God separately creates and embodies the soul at some stage during embryonic or fetal development.³⁵ ³⁶ We shall later consider just what such a view might look like, and its bearing on the mind-body problem.

³⁴ In emphasizing Divine creation-and-embodiment of individual wills, rather than emergence from below, I am also at odds with Timothy O'Connor and Jonathan D. Jacobs. "Emergent Individuals and the Resurrection" (2010).

³⁵ As Hasker op. cit. makes clear, Nomic Emergence is a form of Traducianism (from *tradux*, Latin for a root or sprout) namely the view that successful procreative sex and the natural regularities governing fetal development wholly generate the human person. It is just that the Emergentist takes the relevant regularities to include laws of emergence, generating the soul from certain sorts of neural complexity arising in the developing fetus.

The Catholic Encyclopedia tells us that Traducianism was advocated by "Tertullian, Apollinaris, and a few other heretics". Charles Dubray "Traducianism" (1912). Pius XII's encyclical *Humani Generis* (1950) is clear on the matter: "the Catholic faith obliges us to hold that souls are immediately created by God" [*Humani Generis* 36.] God creates-and-embodies the soul; the soul does not emerge from its developing fetal embodiment.

³⁶ Aquinas believed that the rational soul appeared in males eighty days after conception, i.e., near the end of the first trimester. This was a substantial change, *a coming into existence of the human being*. On the issue of late quickening, Aquinas's idea that human beings come into being some months after conception, the thing you often hear is that Aquinas was the victim of the primitive embryology of his time. It is said that "There is no embryological sign of a substantial change after . . . ?" One thing one can't insert in the gap is "conception"; for during the pluripotent period, any cell in the blastocyst can develop into a human being. Twinning, tripling, etc. is still possible. Moreover, it's to *neuroembryology* that one should look to find markers of a substantial change. And the relevant fact about neurology is that incremental neural changes along various dimensions can serve to bring something neurologically new into being all at once. First there is no functioning visual system, or motor neurons, or pain center, and then there is. It's hard to make sense of an event that is ontologically indeterminate between a subject being presented with an expanse of color and mere unconscious information-processing of retinal information. Likewise with feeling pain, i.e., being presented with an expanse of "painful" quality. It seems to be an all-or-nothing matter.

Both Soul Emergentism and Direct Creation sit happily with the all-or-nothing fact. Not so with Materialism. For a recent attempt to secure a kind of comfort for Materialists, see Michael Tye *Vagueness and the Metaphysics of Consciousness* (2021).

On The Necessary Conditions of Personal Survival

Suppose then—as I have argued elsewhere in the context of accounting for what it is that grounds our moral status, i.e., our being such that our interests properly figure in any account of how morally speaking we should be treated³⁷—that we are *embodied wills*, i.e., embodied conscious valuers of value that can act to secure those values.

That also would explain why we have two reliable routes to easy and offhand knowledge of personal identity over time, at least in the vast range of ordinary cases. One involves simply tracking a particular will's distinctive embodiment, as when one is watching a springboard diver execute a backward flip. The other amounts to tracking a particular will's distinctive psychology, as with a pen pal one has never met.

Our quotidian ways of telling whether we are dealing with numerically the same person rely on characteristic generics of the form:

Persons do not change bodies.

Persons continue on if their distinctive psychology continues on.

These ways of telling are bare plural, not universal, in logical form.³⁸ If these ways of telling were universal in their logical form then they would produce a contradiction in the case of teletransportation. Instead, as characteristic generics that admit of *outré* exceptions, they simply leave open whether, in such an exceptional case, the original person survives.

If one survives teletransportation one survives a kind of re-embodiment in the new body, one created at the receiving point. That is, our ordinary ways of arriving at easy and offhand knowledge of personal identity—the best claimants to be at the core of our psychologically operative concept of personal identity—leave it an *epistemically* open matter whether we are essentially embodied as we presently are.

³⁷ “On the Basis of Morality: Will in a World of Species-Relative Value” (MS)

³⁸ They exhibit what linguists call the tripartite structure of a variable binding operator “Gen x...”, a restrictor “x is a person” and a scope “x does not change bodies”/“x continues on if its mind continues on”. When the generic is characteristic “Gen x...” can be read as “Characteristically”. Thus an albino raven is no counterexample to (Gen x) (x is a raven) (x is black). Nor is coming to have a new embodiment, say via teletransportation, a counterexample to (Gen x) (x is a person) (x has only one embodiment) when what is characteristic is understood as what is typical in the world as we ordinarily know it.

The claim that this may not be our only embodiment finds its coherence within that epistemic space. The claim that our re-embodiment is a genuine ontological possibility may take a reductive or a non-reductive form. I believe that it is ultimately tenable only in its non-reductive form. Accordingly, I reject a Lewisian account of re-embodiment.

Lewisian Re-embodiment

David Lewis in his “Counterparts of Persons and their Bodies” (1971) and “Survival and Identity” (1976) provides the materialist with a way of making sense of surviving in a new body. For he notes that a materialist can endorse a four dimensionalist reductionist account of personal identity according to which person stages of different bodies are united into one persisting person by psychological continuity holding among the stages. Given that a materialist will suppose that we can ultimately reduce the mental to the physical, Lewis’s version of four dimensionalism allows a person to be a purely material thing whose conditions of continued existence are psychological.

On the Lewis view, a person can survive teletransportation, for his pre-teletransportation stages can be psychologically continuous with his post-teletransportation stages. Teletransportation is thus a sci-fi pasquinade of living on after the death of one’s body. Your old body ceases to be and you come to have a new duplicate body. Moreover, on the psychological criterion of personal persistence there could be a form of teletransportation in which you are given a nigh on imperishable new body. It would be your body just because its stages are psychologically continuous with your pre-Teletransportation stages.

Zimmerman, while accepting that on a metaphysics of temporal parts we are ontologically trashy entities writes:

By my lights, a metaphysics of ontological trash is a particularly happy home for the supposition that we could survive death—with a little divine intervention, of course.

But it is not a happy home. Or at least, if it were a home it would be an absurdly over-populated home. The Lewisian four-dimensionalist account of surviving death is not a satisfactory answer to Paul’s rhetorically imagined questioner who asks, “How are the dead raised?” For we are raised to be judged and given our just deserts. There are too many bearers of just deserts within the life of a four-dimensional person.

Many philosophers pressed Lewis for an account of person stages, and he obligingly replied by saying that person stages were short-lived person-like things, things that were as person-like as they could be, consistent with their being so short-lived. Now a person stage is included in a person when that person is a maximal or most inclusive sum of those person stages interrelated with that stage by the relevant gen-identity relation. Persons and person stages thus differ in their temporal length and in the properties that flow from that difference.

Now there is also an enormous multitude of mereological sums of person stages intermediate in length between short-lived person stages and the maximal sums that are persons. Some of these intermediate sums are so long-lived that had things gone otherwise they would have made up a complete person. Call those non-maximal sums personites. There is, for example, me for my first ten years, then me for my first ten years and one-tenth of a second, and so on and so forth.

These long-lived person-like things are, as it were, packed and overlapping together in my life—not spatially packed, but packed along the dimension of time. It is important to note that they are not in any way defective entities on the four-dimensional view. They are all perfectly good mereological sums, no better and no worse as sums than the maximal sum that is the person I am.³⁹ Most of them are physically and psychologically *more* unified than the persisting person they partially make up. And they are not ontologically derivative from persons, any more than the engine and the first three carriages are ontologically derivative from the whole train they partially make up. It is just that each fails to be a person only because of what happened *after* it ceased to be.

The trouble is that these long-lived person-like things are *sufficiently* person-like to deserve the special respect that we extend to persons. It would be arbitrary to deny them that respect because of what happened *after they ceased to exist*.

That opens up a Pandora's box of difficulties.

For one thing, it makes practical nonsense of deliberation involving those future benefits that require sacrifices before they are achieved. As well as the one person deliberating (the *maximal* sum of physiologically continuous and connected person stages), there are a huge number of sums stacked within this maximal sum who are very person-like and whose interests deserve respect. But those interests radically conflict, for these person-like sums cease to be at different times. On Lewis's view,

³⁹ That's important when it comes to attempts to avoid personite worries in the context of a non-trivial ontology of substance sortals which would privilege the four-dimensional person over the personite. In Lewis's ontology the overarching sortal for persisting things is the sortal "sum of stages". Some of these sums deserve the name "person", and others "personites" depending on whether they are maximally inclusive.

within the life of what we call a “single person” a huge number of very person-like things will undergo sacrifices whose positive fruits they in principle, i.e., because of their very natures they can never enjoy.

That is just the first of a host of worries that arise for four dimensionalism under the heading of “the personite problem”. Moral life becomes unworkable, in that respecting the moral status of personites imposes on it a “damned if you do, damned if you don’t” character.

For another thing, it makes for an implausible account of the operation of Divine justice in the afterlife. Many people fall into corruption after having lived relatively innocent and blameless lives. And that means that there have been huge numbers of very person-like things whose blameless existence is not recognized and rewarded in the afterlife, given Lewis-style resurrection.

The principle operative here is that anything intrinsically just like a possible person, even if it is not a person simply because of what happens after it ceases to exist, has a moral status and therefore a consequent moral claim to receive its just deserts.

Why should my innocent first-ten-year-long-self not be a recipient of Divine reward for the quality of its will? It too looks like a fitting subject of resurrection by way of a new embodiment. Imagine I had died then.

On the four-dimensional view, there is nothing ontologically special about the end (or beginning) of a person’s life. It is the end (or beginning) of a maximal sum of interrelated stages; but many, many long lived non-maximal sums which are intrinsically just like possible persons, share the life of that person. And many will have been faithful to the Lord. Why don’t those personites—if time is continuous, there will be an uncountable infinity of them—deserve to be included in the promise of resurrection?

That is not the suggestion that God should resurrect them all; say by a kind of continuous Lewis’s-style fission.⁴⁰ It is rather the observation that four-dimensionalism does not serve up for each person a privileged subject for moral evaluation, and thus for Divine judgment.

A version of the same problem arises on the stage view. On this view, persons are stages, and for a stage to “survive” is for it to have a later stage that is R-related to it. If R is psychological continuity, then why doesn’t God re-embody every stage before the Day of Judgment? Why should the supernatural fate of a stage depend upon the behavior of its future counterparts?

⁴⁰ See his “Survival and Identity” (1976).

That seems utterly unfair.

A Non-Reductionist View of Personal Identity That Allows for Re-embodiment

Unlike the Eliminativist, who denies that there are persisting persons, a reductionist about personal identity allows that there are facts about persisting persons yet denies that these facts of personal identity over time are “further facts” over and above the holding of R, i.e., psychological and/or biological continuities across time.

On the present non-reductionist account, here is the “further fact” of personal identity: You will exist at some later time *t* if your will is numerically identical with a will that is embodied at *t*. We are essentially embodied wills, not cross-time bundles of mental and physical events united by some “trashy” relation R, trashy in that it admits of variants on a par with it.

Moreover, as argued in “The Basis of Morality: Wills in a World of Species Relative Value” we matter morally; we have a moral status, because each one of us is an embodied will, i.e., embodied conscious valuer of value capable of acting to secure the values presented to it in its valenced conscious acts.⁴¹ Embodied wills act in the light of valenced contents presented to them by the senses, by imagination and by memory. Their acts determine the quality of their will, as it develops over an entire lifetime, and other lifetimes *if such there be*.

In accordance with the partial endurance view of “Is there a Problem about Persistence?” (1987), while our embodiments perdure, in that they are no more than complex biological processes extended in time by having stages at various times; our wills are *enduring* agent causes, in that they persist by having *all of their essence present at each time at which they exist*, where that essence includes being appropriately embodied somehow or other.

Our bodies change over time thanks to matter exchange with our environments. My early attempt to defend a novel version of animalism (Johnston 1984) by finding, behind those perduring changes, *purely organic* substances, whose enduring form was a unified multitrack disposition to various life functions, which in its turn maintained the material basis of that very same multitrack disposition through matter-exchange with the environment, now seems to me to be at odds with the empirically more plausible picture of organisms as themselves complex perduring processes, as presented for example by John Dupré (2014).

⁴¹ Johnston “The Basis of Morality: Will in a World of Species-Relative Value” (MS)

How Is the Will Effective?

There is an aspect of the mind-body problem that is, and may always remain, mysterious. We know that the brain is the organ of mentation, indeed we know that specific neural processes somehow undergird sensory experiences, feelings, memories, etc. that would not happen without them, even though the neural process have a neurobiological, and more basically an electrochemical structure which is utterly unlike mentation, i.e., the presentation to an agential subject of an object or a content under a mode of presentation characteristic of the kind of mental event in question. Once we avoid the temptation simply to eliminate the mental in that sense, the token identity theory of mental events and neural events is none other than a *non-reductionist dual aspect theory*, reflecting rather than accounting for the mystery that is the “intimate union” of the mental with the physical. That token event dual aspect theory implausibly implies that neurobiology and neurochemistry will miss out on part of the intrinsic nature of neural processes, i.e., that they inherently involve a presentation to an agential subject of an object or content, under some mode of presentation.

Nor is it intelligible how a complex of neural tissue could itself be, or ground the being of, a subject *to whom* an object or content presents under a distinctive mode of presentation. Nor is it intelligible how a complex of neural tissue could be an *agent deciding* to act this way or that, rather than the site of mere electro-chemical happenings. For the neural structure of the brain looks like that of a purely physical system evolved to be an information receiver, transmitter and transformer; one which maps sensory irritations onto bodily movement in extraordinarily complex ways, without relying on the distinctive features of intentionally structured events, agent causation and choice.

Identification is Not Reduction

Much of the discussion of the mind-body problem has been nobbled by the confused thought that identification of the mental with the physical would be the ontological reduction of the mental to the physical.

Notable here is the old functionalist argument for the type/type identity theory offered by David Armstrong and David Lewis. By examining the folk-psychological platitudes concerning the causes and effects of a type of mental event or state, we arrive at a premise of the form:

- (i) Event or state type M exhibits causal role R

We then anticipate that neuropsychology will deliver an empirical premise of the form:

(ii) Neural event or state type P exhibits causal role R

Occam's razor encourages us to think:

(iii) There aren't two events/states types exhibiting the same causal role causal role, but only one.

So, the conclusion, driven by considerations of simplicity, is

(iv) $M = P$

Yet absent a dual aspect theory, no neural process or state has the intrinsic structure of the presentation of an object or a content to a subject under a mode of presentation. The intrinsic structure of a neural process is that of a dynamic neurochemical process. The identity theory thus wrongly identifies event types whose tokens have different intrinsic structures. The problem of accommodating intentionality, which would be there even if we (mistakenly in my view) followed Dan Dennett in "Quining Qualia", i.e., denying the existence of the qualitative aspect of experience, is enough to scuttle the identity theory, unless it takes the form of a double aspect theory, and so simply locates rather than resolves the core of the mind-body mystery.

Armstrong, Lewis and Smart were looking the other way, i.e., away from the intrinsic structure of token mental events to the mere functional role of types of mental events. Or perhaps, during half the days of the week, they had already "Quined away" the intrinsic structure of conscious mental events. If so, they were in effect, Eliminativists concerning the distinctive intrinsic structure of token mental events.

Hence, the illusory nimbus of *reduction* surrounding the type/type identity theory. Identity, being symmetric, is not itself reduction. Indeed, if the mental is type/type or token/token identical to the physical that in itself *rules out* reduction. *For the reduced is less basic than the reducing and nothing is less basic than itself.*

Whence the almost universal idea that the type-identity theory of Armstrong, Smart and Lewis was reductionist? There was a two-step maneuver, neither itself reductionist, which created the illusion of reduction. The first step was either ignoring—or denying—the distinctive intrinsic structure of token mental events,

and hence of the types they make up. Recall that the functionalist identity theory appeared in the early sixties as an improvement on analytical behaviorism, which had implausibly supposed that mental states were definable in terms of their sensory input/behavioral output profiles. The improvement was to recognize that mental states were inner states which had causal roles which included mental to mental causation. Yet the intrinsic nature of mentality was still not in view.

The second step was to take what was left in view—types of mental states/events understood wholly extrinsically, i.e., solely in terms of their causal role—and identify them with types of brain states/events. The mental *qua mental* was not reduced via the identity theory. It had already been “Quined away”, or merely set aside for the sake of smooth theorizing.

The type/type identity theory implies corresponding token-identities among tokens of the identified types. It's therefore good practice in the philosophy of mind and body to interrogate the tokens. Do these psycho-neural tokens have both a neural event structure and an intentional structure of the presentation to a subject of an object or content under a mode of presentation? If so, we again have the dual aspect theory with its implausible consequence that neural events cannot be fully characterized by neurobiology.

If not, then we have eliminativism—be it implicit or explicit—concerning token mental events, and hence of mental event types. There really aren't any.

Beyond Emergence

Both Emergent Property Dualism and Emergent Substance Dualism, understood as involving neuropsychological emergent laws, are intelligible reactions to the fact that mental events and states have an internal structure very different from electrochemical processes. However, the laws look superadded, and as basic laws, weirdly neurocentric.

Do either go far enough to account for the anomalous but undeniable fact that the brain is the organ of mentation?

I say emergentist theists should remove the emergentist fig leaf. God directly creates and embodies an individual will when fetal development provides for an adequate embodiment. All nature—all successfully procreative sex and subsequent fetal development—does is provide the neural basis to (a) *subserve* the passive sensory, imaginative and memory events which a will enjoys and (b) *implement* the basic mental and bodily acts of the will. Indeed, conditions (a) and (b) can be used to specify which brain and body are the embodiment of a particular soul or will.

Subservience is to be distinguished from ontological reduction. The familiar idiom of ontological reduction has it that the reduced is nothing over and above the reducing. But that can't mean that the reducing is identical with the reduced, for the other obvious constraint on ontological reduction is that the reducing is more basic than the reduced. And nothing is more basic than itself. Whereas ontological reduction is anti-symmetric, identity is a symmetric relation.

Furthermore, ontological reduction is not the epistemic discovery, via learning of some identity, that some item, say Samuel Clemens is "in your ontology" because that item is already listed there under another name, in this case "Mark Twain". That discovery is wholly relative to an adventitious epistemic history. Nor is ontological reduction a matter of there being *extra* physical items beyond those physical items that are identical with mental items. The even natural numbers are not reducible to the natural numbers; they are simply found among them.

What then is the consistent notion of ontological reduction, which remains when we see that identity *drives out* ontological reduction? Since the reducing and reduced are numerically distinct, we have (at least) two items figuring in ontological reduction. We should consider (all) both of their natures just taken together, then characterize the anti-symmetric pattern of complete existential dependence that results, namely that the reduced's obtaining, occurring, coming into being or continuing to exist holds *wholly in virtue of* the reducing. It lies just in the nature of the reducing (fact, event, state, continuant, etc.) that: the reduced obtains, occurs, comes into being or continues to exist wholly in virtue of the reducing obtaining, occurring, coming into being or continuing to exist.

The reduced is thus by its nature an "ontological free lunch", a genuine existent, but something guaranteed to exist wholly by the nature of its reducing base.⁴²

To continue the culinary metaphor, consider a pathetically minimal ham sandwich, which comes in to being when a certain slice of ham is placed between two slices of bread. The event of the coming into being of the minimal ham sandwich is an ontological free lunch. It lies *just in the nature of* the event that is the placement of the slice of ham between two similarly sized pieces of bread that: the event of a minimal ham sandwich coming into being occurs *wholly in virtue of* the occurrence

⁴² David Armstrong's phrase in Armstrong (1997, 12–3). There Armstrong relies on supervenience to explicate free lunches, but supervenience is not inherently anti-symmetric.

of the event that is the placement of the slice of ham between two similarly sized pieces of bread.

That captures the fact that which the event of the coming into being of the minimal ham sandwich is (a) less ontologically basic than, and (b) nothing over and above the occurrence of the placement event, even though the events are not identical.

Likewise, this is what would it be for a token mental event *m* to be reduced to a token physical event *p*:

(Physical Reduction of the Mental) A mental event *m* is *reducible* to a physical event *p*, when it lies just in the nature of *p* that *m* occurs and has the nature it does wholly in virtue of the occurrence and nature of *p*.

Here the relation of happening wholly in virtue of, holds between the two events just thanks the nature of the reducing physical event. It is not mediated by psychophysical laws of nature. That formulation of physical reduction captures the idea that the occurrence of *m* is nothing over and above, and wholly depends on, the occurrence of *p*. The formulation makes ontological reduction anti-symmetric, unlike the mistaken but popular idea of ontological reduction as identification. (The anti-symmetry arises from the fact that if *x* holds wholly in virtue of *y* and *x* is distinct from *y* then it is not the case that *y* holds wholly in virtue of *x*.)

Recall the objection that a mental event cannot be identical to a neural event because the neural event has the internal structure of an electro-chemical process, while the mental event has the internal structure of the presentation to a subject, in some sensory, conative or cognitive manner, of an object or content under a mode of presentation. That is also an objection to the ontological reduction, in the present sense, of the mental event to the physical event. How could a mental event's *nature* be wholly grounded in some electrochemical process, a process with an entirely different nature?

Thanks to clarifying the relation of reduction, we can see clearly that the relation between an intentional event and an electrochemical event is not that of reduced to reducing. It is *nothing like* that between the event of a ham sandwich's coming into being and the event of the placing of a slice of ham between two comparably sized pieces of bread.

Here is the argument. One way of capturing the idea of the ontologically reduced as being an ontological free lunch is to deploy Saul Kripke's idiom of "all God had to do".⁴³

All God had to do to bring about the existence of a ham sandwich was to place a slice of ham between two comparably sized pieces of bread. The flip-side of that thought, is that if *that* is all God had to do, having done *that* he could not have prevented the ham sandwich from coming into being. God's being omnipotent is his being capable of doing anything metaphysically possible. What's metaphysically possible may change overtime. For example, God cannot make it the case that he did not create, even if he could not have created. So having placed a slice of ham between two comparably sized pieces of bread, he could not have suppressed the coming into being of a ham sandwich.

But it seems that God could have made complex neural tissue, or allowed it to evolve as it actually did, while suppressing, or better, doing nothing to promote the arising of mentality. Just as (as Locke said) God has the power to make matter think, i.e., subserve and implement thinking, God had the power not to, and leave matter well-enough alone.

Once we have clarified ontological reduction, the great chasm between genuine ontological reduction in the ham sandwich case, and the purported reduction of the mental to the physical stands clearly before us.

Setting aside ontological reduction of the mental to the physical, what relation does capture the dependence of the mental on the physical? Subserving is a relation of dependence between a mental event and a physical event that is not reductive.

(Subserving) A token mental event *m* is *subserv*ed by a token physical event *p*, when it lies in the natures of *p* and *m* taken together and not in either taken separately, that *m* occurs and has the nature it does in virtue of *p* occurring and having the nature it does.

Here we have the familiar inscrutability of the mind-body relation. We can't see by inspecting the nature of a given mental event and its subserving physical event just how non-reductive subserving works.

The point is not to eliminate the inscrutability, but simply to allow for the subserved mental event to have its own nature as an intentional occurrence, namely as the presentation of an object or content to a subject under a mode of presentation, a nature which is neither had by the subserving physical event, nor reducible to the

⁴³ Saul Kripke (1980, 153–4).

nature of the subserving physical event, i.e. the nature of a token pattern of neural firing—a distributed electrochemical process.

Moreover, the neural event's subserving the mental event is not upwards causation. The subserving event does not cause the subserved event, as if energy somehow leaked from the brain into "the soul". The subserved and the subserving are ontologically too tightly connected for that.

Whereas a token identity theory leaves no room from the anti-symmetric dependence of a token mental event on a token physical event—for they are the same event—the notion of subserving allows for this, without thereby importing the odd idea of productive or "oomphy" token-to-token neuro-psychological causation.

What then of the psycho-neural direction, what is the relation there?

In the spring of 1643, a twenty-four-year-old Scottish-German woman, Elisabeth von der Pfalz, a Princess of Bohemia and the niece of Bonny Prince Charlie no less, wrote to Descartes expressing her concerns about mind-body interaction:

I ask you please to tell me how the soul of a human being (it being only a thinking substance) can determine the bodily spirits, in order to bring about voluntary actions. For it seems that all determination of movement happens through the impulsion of the thing moved, by the manner in which it is pushed by that which moves it, or else by the particular qualities and shape of the surface of the latter. Physical contact is required for the first two conditions, extension for the third. You entirely exclude the one [extension] from the notion you have of the soul, and the other [physical contact] appears to me incompatible with an immaterial thing.

Physical impulsive contact is one model of the mechanism of "oomphy" physical causation, the kind of causation that can ground asymmetric counterfactual dependence but is not reducible to it. We might model oomphy physical causation as matter-energy propagation and exchange. Elizabeth's objection was prescient, for just as we still have no good model of a will being an immediate oomphy cause of "animal spirits" or neural processes, we have no good model of a neural process being an oomphy cause of token mental event. Matter-energy is not propagated into, or exchanged with, the mind.

Talk of subservience is not offered as a solution to the mystery of that important relation holding between those token mental events that merely happen and the mere happenings of token physical events. Instead, it is intended as a way of properly locating that mystery, without out falling into:

- (i) a reduction of the distinctively mental character of token mental events;

- (ii) an elimination of the distinctively mental character of token mental events;
- (iii) a dual aspect theory of some token neural events;

while allowing for

- (iv) the antisymmetric dependence of some mental events on neural events;
- (v) non-mechanistic difference-making of mental acts by their implementing neural events.

Not all mental events are mere happenings, some are mental acts or doings, i.e., outputs of an individual will. Suppose we divide mental events into those that are inputs to the will, for example, passive sensory inputs, passive deliverances of memory and imagination, dreams, daydreams and other maunderings, from those mental acts of the embodied will itself, such things deliberately allowing or directing one's attention to range over the scene, the sound stream, or to one's bodily sensations, trying to remember or imagine, judging that so and so is the case, deciding to act, and initiating an act.

The inputs to the will, along with those sensory, memory and imaginative experiences that are the results of the will's direction are all token mental events subserved by token physical events. If a neuroscientist has intervened in your brain to prevent certain token physical events in the brain from happening, she might thereby have prevented certain token mental events from happening.⁴⁴ But that is not because the prevented mental events would otherwise have been caused by the physical events that were prevented. It rather that by their nature and the nature of the physical events that subserve the mental events, require the subserving physical events in order to occur. There is no "oomphy" causation of the mental by the physical, no transmission of matter/energy from the physical realm to some form of "oomph" in the mental realm. It is just that some physical events subserve mental events in the sense defined, i.e., they are part of what essentially enables a stream of passive mentality to develop as it does.

Nonetheless there is physical to mental difference-making. The physical is directly efficacious in the mental realm, in that were it not for that very token

⁴⁴ That disables the consideration found in *Surviving Death* (p. 57) against substance dualism, the consideration arising from the fact that the phenomenology of waking up from subdural hematoma differs from the phenomenology of recovery from locked-in syndrome.

physical event with that very nature the subserved mental event and its mental effects would not have occurred. That accounts for physical events making a mental difference without token-token identities, and without anything like the brain leaking physical energy into the mind.

Still, we have as yet no model for how physical agents (i.e., embodied wills) and their allowings, directings, tryings, judgments, intendings, and initiatings could make a physical difference.

The subserved mental seems utterly passive, as it is for example in the case of dreaming, mere maundering, or purely passive mental transitions, i.e., those not under the control of the will. Subserved mental events are mere happenings, unfit to be stitched together to constitute a doing on the part of anyone.⁴⁵ So far, the subserving physical basis looks like it could do all the causal, and thereby all the difference-making, work in the physical realm. So far, the agential subject, i.e., the individual will, and its mental processes provide for no difference-making in the physical world.

Those of us who believe that there are doings as well as mental happenings, doings which are not to be understood as stitched together out of mere happenings in a mind, but instead are the actions of an embodied will, will look to find a place for the agential causation of certain mental events. The obvious examples include token decisions, the forming of intentions, explicit judgments involving acts of acceptance of the truth of a proposition, along with subsequent mental to mental causation which is under the control, or veto, of the will even when the will does not agentially cause the subsequent mental events—as when we are led inferentially from one mental event to another by recognizing logical and/or probabilistic relations between their contents. All such events are involved in an individual will itself making a difference to what happens in the physical world.

Accordingly, there is another definable relation that is relevant if we are to recognize the distinctive character of both agent causation and the relevant sort of mental-to-mental event causation due to acceptance by the agent of a transition from one thought to another as being a rational transition.

(Implementation) A token mental event *m* is *implemented* by a token mental event *p*, when it lies in the natures of *p* and *m*, but not in the natures of either taken separately, that *p* occurs of *m* in virtue of *m*.

⁴⁵ For an argument that this is the lesson of the wayward casual chain problem for Davidson's attempt to stitch together believings and desirings and bodily movements into an intentional *action*, see Scott R. Sehon's developed account in *Teleological Realism: Mind, Agency, and Explanation* (2005). See also his *Free Will and Action Explanation* (2016).

Implementation allows that a mental event *type* might be multiply implemented in different ways in different kinds of beings. Indeed, if the event type is of such a merely determinable type as *a deciding to go to the library* then quite different token patterns of neural firing in and around, say, the anterior cingulate gyrus⁴⁶ might implement tokens of that mental type.

Though the occurrence of the implementing neural event is asymmetrically dependent on the implemented mental event, that mental event is not an oomphy cause of the implementing neural event. But it is a difference-maker in the neural and bodily realm, via the effects of its implementing neural event.

Again, I have nothing to offer by way of explaining token-token implementation, I am as much a “mysterian” about that as I am about token-token subservience. The project is instead to properly locate the active aspect of mental life and explain how it can be a difference-maker at the neural level without invoking a *sui generis* form of mental to physical causation.

There is a third relation definable in terms of the upshot of the natures of token mental and physical events, namely interdependence:

(Interdependence) A mental event *m* and a physical event *p* are essentially interdependent, when it lies in the natures of *p* and *m*, and not simply in the nature of *p* or of *m* taken separately, that they co-occur.

There is now an appealing non-reductive token-token thesis for the mental events of which we are the subjects and agents:

(Constitutive Interrelation of the Mental and the Neural) Every token mental event is either subserved, or interdependent with, or implemented by, some token neural event.

This captures the sense in which an embodied agent or will does not float free of a body or brain, even though it is not reducible to a body or brain, and even though its mental operations are not reducible to bodily or neural operations.

The embodied agent or will is not ectoplasmic, i.e., made up of a kind of ethereal matter or immaterial mind stuff, with respect to which we could produce mental

⁴⁶ Francis Crick’s proposed location for what he calls “free will” in his *The Astonishing Hypothesis* (1994).

problems of the many.⁴⁷ There is no “ghost in the machine”, no pseudo-Cartesian boogieman of the sort that Gilbert Ryle employed to gin up support for the dubious credentials of analytic behaviorism.

To turn now to the question of whether embodiments other than our present bodies are consistent with what we essentially, we can characterize what makes some part of reality an agent’s embodiment.

(Embodiment) A will’s embodiment is that part of reality whose constitutive events locally enable and sustain the events that subserve, are interdependent with, or implement the mental events of which that will is the subject and/or agent.

An agential subject or will is *located* where her embodiment—understood as part of reality which locally enables and sustains a network of subserving, interdependent and implementing physical events—is. But the agent herself is not a mere network of events, be they mental or physical. Nor is an agent just her embodiment. As a will, an agent is a causal source of implemented mental events, such as intendings or decidings. Those events are difference-makers in the physical world, via their implementing neural events.

Embodied wills thus make a difference in what happens in the physical world. They are agent causes of such mental events as decisions and deliberate judgments, which are in their turn implemented by neural events. Thus, they have the power to settle things, to close off what were branches in an open future. But there is no oomphy mental to physical causation, or oomphy physical to mental causation.

Is this a double aspect view for events, so that an event that is not purely mental and not purely physical has both aspects intrinsically? The subservings of a mental event by a physical event are indeed doubly-aspected in just this way. Likewise with the physical implementations of volitions, i.e., willed mental and bodily actions. But that is because both implementings and subservings are complex events. Their component events are numerically distinct, and neither is the reducing basis of the other.

Given a natural view of what neurochemistry reveals about neural processes, the subserving/implementing model has an advantage over the double-aspect view. It seems that when neurochemistry is complete, we will know the full intrinsic nature of neural processes. If neural processes themselves were “doubly-aspected” they would have *as part of their intrinsic nature* a mental side, i.e., an intentional mental

⁴⁷ Which would simply lead to further elaborations of the problem of the many, the personite problem, and related “fellow traveler” worries.

structure—directedness of a subject to an object or content—utterly unlike the dynamic chemical processes that the completed neurochemistry reveals. It's one thing to say that neural processes are not the whole story when it comes to the intrinsic nature of mental events; quite another to say that neurochemistry is not the whole story when it comes to the intrinsic nature of neural events.

True, on the present account neural events, or some of them anyway, have extrinsic features not revealed by neurochemistry. They subserve and implement mental events. However, it is no defect in neurochemistry that it omits this extrinsic fact; it is simply not part of its purview. Indeed, as the failure of the reduction of the mental to the neural and the reduction of the neural to the mental implies, there is no way to get a either a purely neurochemical grip on the relation of subserving or a purely mental grip on the relation of implementing. That's just the familiar mystery of the mind-body relation. It is everyone's mystery, which the present account does not resolve, but instead aims to properly locate.

We can now see just how the old functionalist argument for the identity theory, offered by David Armstrong and David Lewis, went wrong by omitting agent causation.

- (i) Event/state type M is a state that exhibits causal profile R (Platitude of folk psychology)
 - (ii) Neural event/state type P is a state that exhibits causal profile R (Neurology)
 - (iii) There aren't two event/state types exhibiting causal profile R, but only one. (Occam's razor)
- So, (iv) $M = P$

What is it for an event/state type to exhibit a causal profile? It is for the tokens of that type to have the sources and consequences characteristic of that profile. Everything then depends on just what forms of sources and consequences are recognized.

It's notable that the platitudes of folk psychology have embedded in them the notion that agents can bring things about, and that is part of the folk psychological causal profile of mental acts such as decidings and judgments, i.e., actively taking a proposition to be true. These are mental events initiated by agents, and for which the agent in question is morally and epistemically responsible. That is just one way in which the materialist account of the mental employed in the argument for the identity theory is an oversimplification.

On the present account, we distinguish different relations of source and consequence. They each deserve to be counted as types of difference-making.

- a. Agent or volitional causation, whereby a mental event is initiated by an agent herself.
- b. Mental/mental event causation, where the causal connection involves a transition in thought that is interpretively intelligible in terms of the respective contents of the mental cause and the mental effect.
- c. Physical/physical event causation, understood as matter/energy propagation and/or exchange.
- d. Difference-making via subserving, where a physical event makes a mental difference by subserving a mental event, which then has mental effects.
- e. Difference-making via implementing, where a mental event makes a physical difference by being implemented by a physical event which then makes a physical difference.
- f. Difference-making via interdependence where each of an essentially interdependent pair of mental and physical events, make a downstream physical or mental difference.

The first three relations involve one or another form of direct bringing about of effects by a powerful particular, be it an individual will, a particular mental event, or a particular physical event.

In the case of subserving, difference-making by the physical on the mental is evidenced by counterfactuals of the form:

If p_1 had not occurred, then p_1 's subserved mental event m_1 and m_1 's immediate effect m_2 would not have occurred.

In the case of implementing, difference-making by the mental on the physical is evidenced by counterfactuals of the form:

If m_1 had not occurred, then m_1 's implementing physical event p_1 and p_1 's immediate effect p_2 would not have occurred.

In the case of interdependence, mental and physical difference-making is evidenced by counterfactuals of the form:

If p_1 had not occurred, then p_1 's interdependent mental event m_1 and m_1 's immediate effect m_2 would not have occurred.

If m_1 had not occurred, then m_1 's interdependent physical event p_1 and p_1 's immediate effect p_2 would not have occurred.

As Elizabeth suggested, and Descartes in effect eventually concurred⁴⁸ here there are no psycho-neural or neuro-psychic *mechanisms*—a contradiction in terms when the terms are properly understood. That is, there is no energy-based transaction across a mental/ physical divide.

The mental and the physical are *too intimately connected* for that, be they related by subservience, or by implementation, or by interdependence.

“Jewels” And Fellow Travelers, Again

In “Jewels in the Ontological Trash-Heap: Mark Johnston’s Metaphysics of Persons” Zimmerman asks how *adding* something to our embodiment could help in avoiding the moral difficulties that fellow traveler worries raise. So far as the present proposal goes, “jewels *in* the trash-heap” is a charming but misplaced simile. As we have seen, the will is not *in* its embodiment. Embodiment, as defined here, is an intimate interconnection, much complicated than locational containment.

There are four quite different fellow traveler worries that should be distinguished, and addressed, ideally, in a single systematic way:

- (i) (a) The now familiar personite problem for four-dimensionalism, and (b) its parallel sub-process variant for the reductionist about persons, like Parfit, who supposes that the facts of personal identity are nothing over and above, but wholly consist in, maximal cross temporal psychophysical processes.
- (ii) The R-variant problem, to the effect that the reductionist’s continuity relation is just one of many relations that could likewise build continuant person-like things out of the same mental and bodily events.⁴⁹
- (iii) The “Dion and all the Massively Overlapping Theons” plurality of bundles that are equally good candidates to be subjects in pain, with the absurd upshot that the heaviest human beings are the real human

⁴⁸ Descartes explicitly says that the soul does not inhabit the body “as a pilot in a ship”. He maintains that mind and body are “most closely joined” and that the mind is “as if intermixed” with the body. René Descartes, *Meditations on First Philosophy*, Sixth Meditation, 81; (1641), in *Descartes: Selected Philosophical Writings* (1988, 56). Hereafter CSM refers to this edition of Descartes’ Work. See also *Discourse on Method* 1637, part 5: 59 Vol. I (p. 141), and *Meditations on First Philosophy*, *Objections and Replies* Vol. II (p. 160). See also, Descartes’ Letter to Regius, in Vol. 2 of the Cottingham collection, (pp. 207–208). And the Letter to Mesland (p. 243).

⁴⁹ Johnston (2017).

utility monsters, since they have many more “Theons” than we less weighty people.

- (iv) The problem of the plurality of co-instantiated but differing natures that arise on plenitudinous modal ontologies.

The third fellow traveler problem, the “Dion and all the Massively Overlapping Theons” problem is addressed by finding an ontologically singular, or “non-trashy” agential subject—namely an individual enduring will—that is the subject of mental life, and of pain in particular. It’s a singular enduring thing that is embodied in a trashy embodiment, or better in a vaguely bounded trash-heap of such trashy embodiments. (Or, if you are a compositional nihilist, in a trash heap of massively overlapping pluralities of particles.) Heavier people are, like their lighter fellows, singular embodied wills. There is one created will, or agential subject, per embodiment—one will, namely Dion’s, had by all his Theons. The pain surrounded by all Dion’s distinct Theons does not add up to *more pain*, because that pain is the presentation of a mosaic of “painy” quality to the singular agential subject that is Dion.

With respect to (iv) we noted that the ground of de re necessity is essence, and that there is a restrictive “Aristotelian” condition on having an essence, namely having an ur-essence, i.e., something from which all and only one’s intrinsic essentials flow.⁵⁰ In the case of an embodied will, those are its (i) agential power, its (ii) capacity for valenced consciousness, and its (iii) needing some embodiment or other to subserve the inputs to its will, and implement the wills acts. These are the essentially *integrated* essential facets of an embodied will understood as an ur-essence, just as a simple tone’s specific loudness, pitch, timbre and some or other subserving disturbance of the air are the essentially *integrated* facets of the individual tone’s ur-essence. Take away the loudness of an individual tone and you have no pitch, timbre or subserving disturbance. Take away the pitch and you have no timbre, loudness. or subserving disturbance. Take away the timbre, and the pitch and so the loudness goes with it. Takes away the subserving disturbance, and you have no loudness, or pitch or timbre.

Likewise, with an individual embodied will. Take away the capacity that is agential power and you have no will (agential subjectivity) to be embodied or to be the subject of valenced consciousness. Take away the embodiment and you have no subserved valenced consciousness to move the will, and no capacity to act because

⁵⁰ See Johnston (2019).

there are no implementing physical events. Take away the capacity for valenced consciousness and you have no experience of ostensible value on which to act, and so no capacity for agential power, so no will to be embodied.

A single tone's specific pitch, timbre, loudness and subserving disturbance are all and only the *de re* necessary features of the tone, and they flow from the essential nature of the individual tone, which is a paradigmatic individual *ur-essence*, as just defined. Likewise for an individual embodied will it is an *ur-essence* for the capacity that is its agential power, its capacity for valenced consciousness, and its being embodied somehow or other.

So, contrary to the friends of a plenitude of available essences for things to have,⁵¹ there is no reason to suppose that Initial-Seven-Year-Long Corsicus has an essence, and so any genuinely different *de re* features from Corsicus. For even though Corsicus has an *ur-essence* as an embodied will, there is no reason to suppose that there is an *ur-essence* from which being an embodied will and being alive for only seven years follows. The resultant view is that Initial-Seven-Year-Long Corsicus is in Aristotelian terms an "accidental unity", whose interests during "his" seven-year life are just those of the embodied will Corsicus during that period. Here we see that it is a reductionist view of essence as any consistent conjunction of *de re* necessary features which generated the ethically disabling ontological trash of the friends of plenitude.

What then of the R-variant problem, introduced in "Personites, Maximality and Ontological Trash" (2017)? That problem arises from the fact that given any precise specification of the relation R that holds between stages when they are stages of the same person, and so given any specific *reductionist* account of personal identity, there will be a host of more, and of less, demanding R-variants which specify very person like things, who are ontologically on a par with persons, coincident with them, and bearers of a moral status, but with different morally considerable interests, because they are capable of surviving less change, or alternatively more change, than their fellow-traveling persons.

Here the answer is straightforward. The unity relation for a person over time is not the reductionist's R—a continuity condition holding among distinct stages, but the numerical identity of a will, embodied at various times. Here again it is a reductionist view of personal identity which generates the ethically disabling

⁵¹ See Stephen Yablo (1987), Mark Johnston (2006) Sarah-Jane Leslie (2011), Maegan Fairchild and John Hawthorne (2018), Mark Jago (2016).

ontological trash that results from taking persons to be nothing over and above processes or sequences of events.

Finally, what of the personite problem? How does emphasizing an embodied will's continued existence avoid the problem of many persisting coincident beings with a moral status, yet with different and conflicting interests just because of their differing temporal extent.

Initial-Seven-Year-Long Corsicus, a segment of the four-dimensional footprint of Corsicus, is being drilled tediously in musical scales for the sake of a musical life which he will never live to see. Isn't that imposing costs on him without adequate compensation? Isn't it then wrong?

No, Initial-Seven-Year-Corsicus is Corsicus, not another distinct bearer of moral status. What makes that so is precisely the further fact of personal identity which reductionist theories of personal identity miss, namely the simple numerical sameness of the same will, and so the numerical sameness of the bearer of moral status that is partly embodied in Initial-Seven-Long Corsicus, i.e., Corsicus up until his eight birthday, and fully embodied in Corsicus.

Imagine Sardinius, who has a life just like Corsicus up until his eighth birthday, but tragically dies on the midnight before that birthday. Let's say there is intrinsic matching between the initial seven years of the life of Sardinius and the life of Corsicus. Even so, our principle concerning moral status:

If two persisting beings are moment by moment duplicates over the entire period that one of them has a moral status, then the other has a moral status during that period as well.

simply tells us that since the life of Sardinius matches that of the first seven years of life of Corsicus, there is a bearer of moral status to be found in that initial seven years of Corsicus's life. That's right, and that's harmless. It is just the single embodied will that is Corsicus himself, who fortunately goes on to live a long life.

Contrast what four dimensionalist and explicit process accounts would have to say about the situation. The four dimensionalist, who identifies Sardinius and Corsicus with their maximal R-interconnected sums of stages, finds another sum of stages, a personite of Corsicus, with a moral status. The process theorist who identifies persons with maximal psychophysical processes, or as in Parfit's case, takes the persistence of persons to be nothing over above such maximal processes, finds a seven-year long subprocess of the maximal process grounding the persistence of Corsicus to have itself a moral status. That seven year long process, overlapping with the larger process that grounds the persistence of Corsicus,

grounds the persistence of Initial-Seven-Year Long Corsicus a thing ontologically on a par with Corsicus.

Such are the absurdities characteristic of reductionism, evident even *before* we get to detailing its impact on the viability of ethical life.

In Conclusion

Wills endure, while their particular embodiments are laid out in time. Embodiment, as we have seen, is not identity. So, in order for me to survive death *this body need not survive*.

Given the theory of embodiment here developed, certain common-sense thoughts may be welcomed back into the discussion of the mind-body relation. The animalist's "too many thinkers"⁵² problem evaporates. When my body is in pain, it doesn't feel the pain, nor does my dorsal anterior cingulate cortex feel pain. I do. My body doesn't remember, think, or act intentionally. I do. My brain doesn't see, smell, hear, feel, think, or act intentionally. I do. My brain is my organ of mentation. It is not an embodied agential subject, or embodied will.

These are reminders that I am not identical with my body, nor with my brain, nor with my thinking neural part. Such neural networks, by the way, are also ontologically trashy items. As such, they harbor new violations of ethical singularity for those, like Derek Parfit (2012)⁵³, who aim to identify persons with them.

My body sustains my brain. Neural events in my brain subserve and implement my experiences, thoughts and actions. Neither my brain, nor crucial parts of it—such as the sensory/executive system located in and around the frontal lobes and the anterior cingulate gyrus—are the subject of my feelings and thoughts, nor the agent of my acts.

Nor am I identical with my will, understood apart from any embodiment.

Perhaps my embodiment can be massively mutilated so that it then consists merely of a brain or cerebrum artificially kept alive and functioning for a little while.⁵⁴ But it's an error based in a lack of understanding of the logic of embodiment

⁵² As developed in Eric Olson, *What Are We?* (2007).

⁵³ "We are Not Human Beings" *Philosophy* 87 (2012, 5–28).

⁵⁴ For an account of just how that puts pressure on "animalism" the view that we have the persistence conditions of animal bodies, see my "Animalism Undone: The Remnant Person Problem" (2015), a problem which first appears in Johnston (2007) "My Body is Not an Animal." In *Oxford Studies in Metaphysics*, edited by Zimmerman, D. Volume 4. Oxford: Oxford University Press

(and mutilation) to suppose that I am identical with some minimal “thinking part” that could come to completely subserve and implement my mental life.⁵⁵

Indeed, there is no empirical guarantee that there is such a thing as *the* minimal part that does this, as opposed to overlapping parts that have, as it were, separate “shifts” in subserving and implementing ongoing aspects of my mental life. I can’t be identical with one neural shift worker and then with another.⁵⁶

Still, we are essentially embodied. Our wills require a subserving and implementing embodiment to be a locus of subjectivity and agential power.

Just as we should drop physical reductionism both for mental events and for wills—agential subjects of experience—we should drop all talk of our “souls” existing purely as souls, and which for a while—thanks to some oomphy psycho-neural mechanism—operate the electro-chemical pulleys and levers of the brain.

Of course, that you are essentially an embodied will, whose present embodiment is not essential to it, leaves open whether that familiar organism that you have always found there when you wake up in bed, or in a chair, is your only actual embodiment. The real possibility of re-embodiment may never be actualized.

Yet, supposing—in opposition to Emergent Substance Dualism—that your embodiment as it appeared in fetal development was *made yours* at the creation of your will helps make it thinkable that we could find ourselves embodied again on the other side of death. Why create-and-embody an individual will in this world of woe, if this is that will’s only life? What was the plan of the creator and embodier of my will?

Still, mere coherence is hardly enough to fix one’s attention on the life of the world to come. Hope for the life of the world to come constitutes a *reasonable* hope only in the context of a reasoned development of the logic of creation and redemption, which I have attempted to articulate elsewhere.⁵⁷

And it becomes a *livable* hope only in a community of grace, where the members of that community in their life together have escaped the bounds of self-involvement in ways that prefigure the life of the world to come.

⁵⁵ For a version of that error, see Derek Parfit’s response to my remnant person problem in “We are not Human Beings” (2012).

⁵⁶ Of great interest here is uni-hemispheric sleep, in which different hemispheres of the same animal sequentially take over the subserving of the animal’s dreamlife. That, it appears, is the way a dolphin sleeps, while also remaining awake, as it must since its breathing is voluntary! What is it like to be a *dolphin*?

⁵⁷ See my “How Did Evil Come Into the World?: A Primordial Free-Will Theodicy” (2023), and for improvements, my upcoming Stanton Lectures at Cambridge University in May 2023.

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