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James F. Ross: Together with the Body I Love

Abstract: Philosophical difficulties with Augustine's dualism, and with the scholastic "separated souls" account of the gap between personal death and supernatural resurrection, suggest that we consider two other options, each with its own attractions: (i) that the General Resurrection is immediate upon one's death, despite initial awkwardness with common piety, and (ii) that there is a "natural metamorphosis" of bodily continuity after death and before resurrection.

1. Introduction

St. Augustine said, "Take away death, the last enemy, and my own flesh shall be my dear friend throughout eternity" (Serm. 155, 15).†1 But, his neo-Platonic dualism of a soul that is the person, later to be reunited with its body, had philosophical defects, especially according to the medieval Aristotelians and later Thomists. Still, dualism persisted in the discourse used to explain Scripture, in liturgical prayer, "pro animabis illis, defunctorum," and in the Church calendar ("all Souls day"), as it had from earliest Christian times. Moreover, dualism vigorously and variously readapted in early modern philosophy, and even shows up in some readings of Aquinas.†2

But, how can I have material continuity so as to survive death?†3 For, I AM a living body. I am an animal—not part of one—but really one; and so is Jesus, an animal. And my soul is part of my body, even though it is on its own (not dependent on matter). St. Thomas expressed it: "anima, autem, cum sit pars corporis hominis, non est totus homo"†4 and he also said, if my soul had a life separated, that would not be mine, nor any man's. Indeed, I AM this body, the animal I can pinch.†5 This animal will die, so how can I survive?

St. Thomas says the soul (as formal cause, like a design in ink) makes suitable matter into my living body (human matter is made flesh by the soul), and thereby makes the substance, the animal, me, to be. But the matter makes the body to be this body and the soul to be this soul by individuation, just as the drops of ink used make the picture to be this picture.†6 Nevertheless, which [portion of] stuff (e.g., bread, water) gets turned into my body (into my growing flesh) by nutrition, and originally by gestation (embryonic development), is determined by the soul, using natural chemical and biological processes and micro-matter.*

Now my question is not whether Augustine's or Aquinas's way of explaining survival is compatible with Christian faith, for both are religiously approved discourses of explanation, as opposed to other incompatible or less happy accommodations of the Scripture (say, idealism or phenomenalism). Rather, I inquire whether there is another option that might be preferable to those, philosophically, though still within the generally realist, even hylomorphic, tradition.

2. The Problem Is the Death-Gap

The options about survival of death before the General Resurrection are limited, each with difficulties. (i) You can deny the gap by asserting dualism, uninterrupted personal survival unembodied, until a miraculous bodily restoration to the very parts you were once made of;†7 (ii) you can bridge the gap with "separated souls" to be restored to their original matter, say, at an ideal age, 30; (iii) you can say that the gap is real, but belongs to objective appearances only, like sunrises and sunsets, but only consequentially to the scientific reality of things; or (iv) you can say that the person persists bodily by metamorphosis until the universal Resurrection of the Dead.

There are some less plausible and less orthodox hypotheses, like Christian materialism, that suppose humans once in being can be destroyed and later come back into existence (like a reassembled radio), or that humans can be holographically replicated forever.†8 I skip those.

(i) Dualism denies the gap. Despite resurgences in the seventeenth and later centuries, and becoming phenomenalism, dualism is unsatisfactory. The main religious reason is that it makes Jesus's resurrection unnecessary, just a startling miracle, a stunt, that some Greeks laughed at when St. Paul taught it (Acts 17.32)†9 because they thought that a body is unnecessary and an impediment to personal perfection. Dualism makes the Eucharist merely symbolic or a spiritual presence only. The main philosophical objection is that it yields a false definition of human beings as an immortal soul using a mortal body.†10

(ii) The second option is bridging the gap between death and Resurrection with "separated souls." That was the favored choice of scholastic Aristotelians, like Aquinas, Scotus, and modern Thomists. The "separated souls" idea does explain how the interrupted, resurrected body is indeed the same body of the one who died, because the

soul is the cause of bodily sameness; but "separated souls" conflicts with the religious requirements for particular judgment upon death, with the personal intercession of the Saints, with the personal purgation of others saved, and with the Communion of Saints that used to be in the Creed. There is no person or agent when the substance does not exist. Some understand "separated souls" to be the persons imperfectly subsisting because the subsistent soul, upon its original union with matter, is the very person.†11 But that makes matter, after conception, not essential to the occurrent being of a human substance and conflicts with the general definition of a human as a rational animal. It also gives the impression that the divine person, Jesus, is the soul of the man, Jesus. It also conflicts with other claims of St. Thomas.

(iii) The third option is to say that the death-gap is an objectively apparent consequence, like sunrises, the way reality has to appear to us, but not the scientific reality of things. The night sky is that way because what appears as the simultaneous heavens is really a complex of temporally distant objects, some of which do not exist anymore. This is an option that I will explain here, but it is not explicitly adopted by any major theologian or philosopher that I know of.

(iv) The fourth option is to say that the person survives, bodily throughout the death gap, by metamorphosis that is natural. This, too, is not adopted by major thinkers, though I think it plausible and nicely concordant with hylomorphic realism that needs renewal for even more basic reasons.

So, with some further comments about "separated souls," I will consider the latter two options: (iii) "saying the death-gap is an objective appearance, only consequentially real," and (iv) "bridging the gap by metamorphosis." On neither account is there unqualifiedly†12 an "anima separata," as Aquinas and Scotus postulated.

Of course the phrase, "together with the body I love," is romantic and redundant, as if I said, "I am here together with my foot, and my neck."†13 Yet, maybe I might continue to exist without gross organs and specific external causation, say, touch and perception, in a very latent animal condition, for an interim—if I were changed enough, just as I actually was at my earliest beginnings. But that supposes that I, unlike a bird, die but do not cease to be.†14 Yet, on a hylomorphic theory of substances, it is not only naturally impossible for an animal to exist disembodied, it is conceptually inconsistent besides.†15

3. About Separated Souls

Common piety regards surviving persons as disembodied immortal souls. But taking that discourse without qualification conflicts with Aquinas's and Scotus's arguments that there is no personal survival or everlasting life disembodied, because we ARE living bodies and we can't turn into something else at death.

Aquinas and Scotus could explain how the same soul forms the same body again without being blocked by the general limitation that nothing of a real nature that ceases to be, comes to be again (because there could be no sufficient reason distinguishing it from an otherwise exact replica†16). For they reasoned that in this case, there is an indexed, individuated,†17 essential part— the soul—that formally causes sameness of being with the later conscious person, because such a part could not be a constituent of a different being. That is analogous to the soul's forming our same body as we grow from infancy to age, with constant changes of bodily components.

There can be radical changes of materialization. Bodily resurrection—and any bodily continuation after death as well—has to be intelligibly of the same body,†18 but not by sameness of common parts, not even of some central parts, like the brain.†19 Nor does the bodily behavior have to be from the same physical laws (e.g., in the renewal of all creation at The General Resurrection). Any material, either originally informed or later informed by the soul, that is sufficient for one's being, is one's body.†20 For religious reasons, such materialization needs to be sufficient for your phenomenal continuity.†21 Otherwise, there would be no subject present-to-itself, as is logically required for divine judgment and reward, and no saintly character and care, as is supposed for intercession. Nevertheless, the material base could be a proton cloud (as perhaps it is now), if that is otherwise possible to preserve animality.

4. The Limitation

One cannot stretch the subsistence of the rational soul into sufficiency by itself for the person. Aquinas, too, says of the separated soul, "neither the definition nor the name of person belongs to it" (I, 29, 1,ad 5). He is definite, both in theory and in utterance, that there can't be a human person (suppositum, or agent) without a body.

So that puts the "separated souls" idea into conflict with the additional religious requirement of personhood immediately upon death, continuing to and through the future Resurrection.†22 Denzinger's Enchiridion

Symbolorum indicates that future resurrection is of common faith. (But that could, in principle, be according to objective cosmic appearances to us—just as the "now" of visual appearance can physically extend variously over millions of years, and all sight is "into the past" because of the light constant.) Because personal being cannot be interrupted, its necessary condition, bodily being, cannot be interrupted either. Thus, Aquinas and Scotus faced an anomaly: complete personal survival during the death-gap is required by the Faith,†23 and yet is apparently impossible, philosophically.

5. Saving Orthodoxy by Distinguishing Science from Appearance

One way to resolve the anomaly is to say that the common religious understanding describes the true, objective, but consequential appearances of things (like the night sky to us), but that the explanatory scientific reality is that the general resurrection follows one's death immediately (as one's next experience), and explains the appearance. So too, it looks as if the stars are "there" all at once when we look up, and in a way that is true; it is the consequential reality, but what is "there," explanatorily, is temporally diverse, with some parts millions of years "behind" others, like voices heard together but coming from diverse distances, or rearward instruments in a large orchestra.

That would apply Aquinas's explicit principle that there are some truths according to the objective appearances of things to us, which are not the truths according to the scientific reality of things, but which are explained by such scientific realities. Thus the stars appeared to be the ornaments of the heavens to Moses's Israelites. That is a consequence of their being the "substance of the heavens," as Aquinas reasoned (I, 68,3, and 70,ad 3; also De.Pot. 4,2 ad 34). Our accounts of sunrises and sunsets, and of the movements of the constellations, are like that, where, by appearances, it ought to look as if the sun and stars move, but by scientific reality they do not, but rather, the earth turns in the sun's light and moves on its elliptical path.†24

I leave undetailed the differences between objective illusions caused by underlying realities that are thought misleading, like the stick in water (though they look as they should), and consequential appearances that are real, like the apparent motion in a "moving picture" ("movie") caused by changing still exposures, or the apparent motion of television images caused by repeated electron beam-sweeps across a sensitive surface, or the apparent forward movement of the water in ocean waves (when it is the wave, a form, that moves through the water!), and even the consequential being of surfaces, say, from components that individually lack the features of color and solidity, or from the micro-particles that lack the primary qualities altogether, and so on. So it may not be so surprising that the temporal appearances of some things are consequences of realities not themselves in time! Indeed, Aquinas (I,89,8) considered that there is no direct knowledge by the deceased of events on earth, though he thinks it "more probable" that "the souls of the blessed who see God do know what passes here," but are not troubled by it, being "united to divine justice."

Judgments according to objective appearances are true, but the judgments according to reality are explanatory and true. Similarly, piety talks as if God foreknows my acts, which from my standpoint in the cosmos is true, but is not so in God's timeless present. To speak of divine foreknowledge is to speak of timeless knowledge indexed, as it were parceled, according to our vantage within events. Yet it would not be correct to deny without qualification that God knows whatever I will do. Nor would it be correct to deny that many people at great distances saw Ruby shoot Oswald (many, without realizing it).

A great deal of Aquinas's metaphysical theology (e.g., S.T.I, 2–26) of the immutable ipsum esse subsistens is explanatory, but requires that the common sense belief in God's moment to moment interactions, providence, grace, and miracles should belong to the appearance of things on account of God's temporal effects in nature (De Pot, 7,9). Such descriptions of God are correct if presumed to be based (vantaged) in our relatedness to God, but not in any relatedness of God to us.

So, the scientific and explanatory reality might be that the saint's intercession, or the remission of the deceased's temporal punishment and even the suffering itself, happens at the General Resurrection, which is immediately the next experience upon the saint's dying, though the prayers, sacrifices, alms of the living, and the miracles interceded for, are later—even centuries later than the saint's death— "in time."†25 Aquinas's speculations about the cessation of time†26 and about the difference of time inhabited by the saved and the damned indicate that such extensions of his ideas would not have to conflict with scientia divina. But neither Aquinas nor Scotus adopted such a "relativity" account.

6. Interim Metamorphosis

The remaining option—metamorphosis upon death—has an intelligible basis in a general hylomorphic science

of nature.†27 By "metamorphosis" I do not mean a change of substantial form (as Aquinas and Aristotle did), but rather the actualization of latent powers of the substantial form, as the soul develops the matter, as happens in gestation and maturation, and reverses in advanced aging. Maybe it continues at death?

Geach on "Subtle Bodies"

Peter Geach discarded a popular British version of interim bodily survival, "subtle bodies," because it is duplicative and without empirical basis. The idea supposed a parallel or coincident ghostly matter for the self that is released, like a cloudy sprite, upon death. Geach said the idea is not impossible for philosophical reasons, but is unnecessary and empirically without any basis because such bodies are undetectable, whereas real bodies causally interact detectably. Now I don't think that's what is wrong. Undetectability is transient. Throughout most of history, physical interactions at 106cm, never mind 10-19-cm and 1010+ m were entirely undetectable, as is ninety percent of the theoretical cosmic mass now. Besides, Jesus has a complete glorified body we cannot detect; and we cannot detect the body that is real in the Eucharist either. Such criticism of the "subtle body" idea is more an aspersion than a persuasion. The duplication makes the idea implausible; you do not need two bodies at once.

Geach said Aquinas thought that if there is to be personal survival of death, there has to be bodily resurrection.†28 Geach†29 took that to mean that personal survival is not possible unless bodily resurrection is possible. But that detours around the question as to whether an interim radical metamorphosis such as I am considering, is possible, and whether, apart the supernatural order of human creation,†30 there might have been humans with a natural bodily survival that would be as unpleasant as the ancient myths of Sheol and Tartarus and the Underworld suggest.

Why, then, didn't Aquinas, or perhaps Scotus, advocate or explore some interim metamorphosis? Basically, it was unreasonable then. It was more unreasonable than the anomaly of talking about "separated souls"†31 as subjects of particular judgment†32 (even given conflict with "actiones sunt suppositorum"), and with Aquinas's explicit assertion that the separated soul, which has "unitibility" with matter, fits "neither the name nor the definition of a person."†33

First, they understood "metamorphosis" as "succession of substantial forms"†34—a notion quite opposed to that employed here and in science nowadays. Secondly, such a hypothesis, even if understood as intended here, would have been impiously fanciful. Suppose someone had proposed that the tip of a pin has trillions of particles, the violent separating of any two of which would release enough energy to pulverize Notre Dame Cathedral and poison all of Paris. It would have been a fairy tale, unreasonable to believe. Similarly, there was no foundation on which to take the idea of radical change of materialization (metamorphosis) into consideration in the thirteenth century.

Metamorphosis is the transformation of a living thing, internally caused by its form's developing suitable material into further active ability (e.g., to fly), previously impossible, in one single life and being (as tadpoles become frogs, and caterpillars become butterflies).†35 It cannot be succession of substantial forms, for that will not preserve the unity of being required for a single life.†36 The change in appearance and behavior in one living thing will seem as radical as a change to a successor-substance, but there is an ordered, formally driven fulfillment of a single life. That is the sense in which I say there can be a natural metamorphosis of humans upon death.

Humans, like other animals, come to be with their definitive powers actual but latent. Such powers, like reasoning and free choice, emerge by the soul's developing its matter suitably, and eventually go latent again from the unsuitable matter of senescent or comatose persons, but are not lost to the form or from the substance.

Aristotle remarked that an old person with a new eye would see as well as a youth. Senile people can't reason well; infants can't reason at all. Yet the difference of abilities, including the loss of abilities (even by the blind or the comatose) are not changes of substance, nor are they loss of personhood. Metamorphosis at death may be even more radical, with the person departed from terrestrial life, but still retaining its whole being, including its characteristic memories and proclivities of choice and judgment, for which an animal basis is required, but not external animal organs. Still, traces won't do. The person has to be present for survival.†37

Analogous to our preserving, transmitting, downloading, and reactivating forms (for instance, software that makes a word-processor rather than a tax-calculator),†38 so a subsistent and incorruptible form, can unfold in suitable matter with personal continuity of consciousness, but without the ability for mid-range external causation (until miraculously restored with suitable and incorruptible matter). Animality is not suspended as basis for experience, but externality via operative organs is.†39 This is the way an animal starts out its life as well.

Three considerations support such a hypothesis. First, it fits with traditional religious teaching about

particular judgment and the Communion of Saints. Secondly, it fits with hylomorphic theory of the human as essentially an animal. And, thirdly, it coheres with the role of forms generally in the explanation of the foundations of natural science. The latter needs comment.

7. Coherence with Hylomorphic Theory in General

Metamorphosis at biotic death relies upon hylomorphic theory in general on these key points: (1) that forms, like the rational soul, are active constitutive principles of things; (2) that a form, say a song, structure, or a shape, can typically be received in many kinds of matter; and (3) that forms can be transmitted and stored physically without exercising their definitive causal powers (e.g., mailed recordings of songs), and sometimes without informing the medium at all (as when color is naturally transmitted through the atmosphere, or software on the internet).

We need the theory of forms, for independent reasons, again, now,†40 to ground key features of science and technology, and to escape certain dead ends in philosophy.†41 The most general utility of forms is: (a) to account for the replication of animals by univocal generation (offspring); (b) to account for the law-like behavior of things (e.g., concrete "cures," steel compresses under its own weight and can separate like pastry under strains [e.g. the Mackinac Bridge collapse]); and (c) to account for the replication of structures not realized during their transmission (i.e., software packages).

In fact, we need to suppose there is software everywhere†42 in nature. We need to suppose that there are inherent, intelligible, and repeatable structures that ARE active intrinsic programs for the distinctive behavior of things everywhere in nature,†43 from hardening epoxy to manufacturing and computation.†44 The success of science and technology shows that. It is as if there are scripts that things follow in what they do by nature. Things don't just happen coincidentally; things are done. Of course, such packages of explanation do exhibit general laws and necessities that it is the business of sciences to discover. However, the active principles of nature are ordered to one another. And the "input-output regularity" models of causation are not explanatory, but are, at most, logical shadows of the active reality, like finger shadows on a wall.

For example, aqueducts, bays in cathedrals and skyscrapers, triplets in music, and cells in biology are all instances of repeated dynamic physical structures that are definitionally and causally independent of their particular materializations (because any suitable matter will do). Yet the structures (mathematizable realities), not the discrete materials, account differentially and causally for distinctive macro-behavior of the things. The thrust of Roman arches really explains why the load does not crush them. The same principles apply to brick arches and concrete blocks. The DNA structure in cells explains why the offspring cells are as they are. Such structures in chemicals, cells, electronics, medicines, buildings, and machines are active intrinsic physical constitutions of things—they are immanent physical principles of restricted activity that, with appropriate material, constitute things.†45 That's what Aristotle meant by forms—active principles in nature.

Form,†46 in general, is any (i) real structure of something that differentially explains its behavior, given its material (e.g., procaine vs. Novocain and cocaine with the same carbon molecules); (ii) that constitutes the thing formally to be— that is, a constant cause-of-being for the thing; (iii) that is intelligible and conceivable; (iv) that is repeatable physically; (v) is often synthesizable or otherwise imitable with similarity of resultant behavior, and (vi) that is typically mathematizable or otherwise susceptible of formal scientific definition/description.†47 When those features are satisfied by the form and a stable material base, the result is a natural kind, an essence, like gold or lead.

So, too, with the molecular structures of the millions of gasses, dyes, metals, paints, fabrics, and other synthetics that we can and do make, along with the millions of computer programs that are designed, tested, and employed. They are all forms, all entirely physical realities. Every copy of a program is an Aristotelian form; every song is a form; every message is a form; and every book is a form.

This is one explanatory feature that philosophy, after Descartes, does not provide for, not even after Newton. "Causation in nature" from Descartes onward, except for Leibniz, has no "insides"; it is just patterns of "first this… and then that," encompassed either in probabilities or in a priori necessities. The Humean account of regular conjunction of earlier with later impressions along with association of ideas, and the Kantian pattern of a priori connections among successive phenomena are both patterns of succession, not principles of activity. They are just sophisticated occasionalisms, like covariances on a graph. Yet those analyses have dominated all the later accounts of causation, of the foundations for laws of nature, of induction, and of abstract knowledge.†48

Among the consequences of omitting active principles from nature are: (i) the denial of "all at once" causation (e.g., of a shape);†49 (ii) reducing the connection of cause and effect to modal relations among

propositions;†50 and (iii) understanding such connections to be probabilistic†51 among propositions. There is an outmoded early twentieth-century assumption that the truth conditions for assertions are the same as the explanatory conditions for the realities. (That plagues theology, too; see option 3 again, and below.) Furthermore, there is no philosophically defensible analysis of the non-epistemic probability of single cases, although causation must hold among single events and things.†52

If one isn't an ostrich nominalist,†53 one encounters forms wherever realities are replicable, both in nature and in human construction; they are needed for causation, as a basis for laws of nature, for the possibility of our natural scientific and ordinary knowledge, and for animal perception.†54 Besides, we can store, transport, and rematerialize forms and do so regularly. That satisfies the second Aristotelian condition mentioned above.

We can empirically apply Aristotle's principle that the same form can be received in many kinds of matter, not only with software, but by realizing the same colors variously in pigments, in lights, in fluorescence, and in electronic displays (LED), and by the distributing and reproducing of live musical performances. And we can transmit structures/forms without informing the medium, as when we transmit visual appearances electronically without making them appear on the way.

8. Conclusion

Still, we can't show that humans metamorphose after death, or even that it is possible. For, consistency-to-us, and even a neat fit with our philosophy of science, will not assure real possibility.†55 As I said, the notion of metamorphic survival fits with a general hylomorphic account of nature, and it fits well with common religious belief. But militating against the idea is the fact that it requires elements of physical science we know very little about. Now, that might improve, as did the plausibility of such an idea within the last few centuries. Besides, many civilizations have been convinced that the dead do survive in a kind of material existence as ancient burial customs show, and even some Old Testament passages (Sheol) and pagan myths of Hades and Tartarus (cf. Dies Irae) indicate; and there is lots of folklore about the spirits of the dead hanging around for a while, about visions of the dead, and about near-death experiences. Even offsetting that, because of the enveloping ancient anthropomorphism and animism, genuine insights can be embedded in superstitions, projections, and irrationalities, as important dietary, coming-of-age, and marriage customs indicate.

The third option, of treating the death-gap as an objective appearance, a consequent reality, explained by a quite different a-temporal reality, has untested but inviting resources. It has the advantage that we can interpret the discourse of traditional belief so as to preserve its truth, even though the explanatory reality is an a-temporal and immediate presence of the person at the General Resurrection. To fill out the details to accord with common faith requires some considerable, but interesting, gymnastics of relativity thinking.†56 But, like other parts of theology, that raises a general and interesting hermeneutical question. How revisionist can theology be? How distantly can the ordinary meaning of religious truth, like the belief that prayer benefits the dead, be related to the ontological conditions that make such a belief true, without amounting to a substantive revision of the religious belief?

That kind of question often arises in philosophy, challenging philosophers who tell us that what makes our beliefs true is not at all what we thought did so, but some theoretical account of theirs, e.g., that there is a coach approaching, consists in the succession of ideas (cf. Berkeley's Dialogues), or a physicalist's accounts of mental states. Usually such questions are decided by the merits of the proposed analysis taken on its own. (I skip cases where the philosopher attempts to tell the speaker that what the speaker means is not what he intended, as with D. Lewis's revisions of my utterances that I might have done otherwise.) But physicists are often telling such stories, and astrophysicists tell such stories about the visible heavens as well. We accept some and reject others. So the systematic question is, "How far a revision of expected truth conditions is too far to preserve the meaning of what is said?"†57

Aquinas seemed cautious about explicit reassignment of the truth conditions for the teachings of the faith, even to the point of withholding such claims where they otherwise seemed quite fitting, as with divine foreknowledge. Still, his explicit account of the unchanging divine being that stands in no real relation to creatures is quite far from the untutored understanding of the faith and places considerable strain upon the common understanding of the Incarnation and Redemption. Aquinas does not systematically replace the ordinary believer's truth assumptions about what makes his beliefs true with his scientific account of the divine being. He simply provides the scientific account on its own terms. That would do for both of the options considered in this paper.

The problem with the "immediate Last Judgment" option is not basic. It is more that the almost total unfamiliarity of believers with cosmic temporal relativity might block the plausibility for them, of such analyses of their common faith. But that is temporary, too. A society constantly told that looking out at the stars is looking

backward millions of years in time, would not eventually be revolted by being told that the Resurrection of the dead, that is future to any person's life, is strictly, "out of time" and so the next experience of each person after death is the presence of the "Last Judgment." They might even find that congenial.†58
It turns out, under either of the two latter options, that I cannot survive without the body I love, and right away upon death. And so, Augustine is rightly confident that I will be healed and live forever together with my friend, the body I love.†59

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Notes

1. Serm.30. "Nolo ut a me caro mea, tamquam extranea, in aeternum separetur, sed ut mecum tota sanetur; and at 30.6 he says "Pars tua,, caro tua," and goes on, "the concupiscence of your flesh rebels against you because it is sick," not because it is a different thing; and, "I want to be healed completely for I am a complete whole" (Serm.30.4; and 30.6). He clearly understood Scripture to say humans are a complete bodily whole, but had not the philosophical resources to make the matter clearer about survival and resurrection because of his repeated principles of the form "I am a rational soul using a mortal body" (see note 10, below).

2. Brian Leftow's "Souls Dipped in Dust," cited below.

3. St. Augustine commenting on Ephesians 5.29, "no one ever hates his own flesh," says "for thus shall you be delivered from the body of this death, not by not having a body, or by having another body, but by not dying any more" (Sermo 155, n.15). So there was no problem as to what was meant by the Faith, but only one at providing a theoretically adequate philosophical account of the Faith.

4. St. Thomas Aquinas, In I Ad Corinthios, XV,1.11, ed. Cai,924. The passage continues: "et anima mea non est ego."

5. Brian Leftow explains Aquinas's view with ample references (see Leftow, "Souls Dipped in Dust" in Soul, Body and Resurrection," ed. K. Corcoran [Cornell University Press, 2001], 120–138). I think the governing metaphor of the paper's title is unhappy. The relationship is much more like "an ink-sketch," where we are speaking of a Renoir original, say, "Lisette Reclining," that subsists in the ink. The unique feature of the human soul is that it can subsist on its own, but not ab initio. The ink is arranged in a certain way to be the scene; and neither design nor ink exists apart from the other. The body is made to be by the soul that is part of it. See, chapter 7 of Hidden Necessities at < www.sas.upenn.edu/~ jross> . Leftow's view reads Aquinas too neo-Platonically, as do the other readings that suggest that during the death-gap the soul is the person existing imperfectly because lacking its matter.

6. For Scotus, both are individuated by the haecceity of the substance.

7. Descartes, Berkeley, Leibniz, Popper, and Eccles. (I count phenomenalisms like Berkeley's and Leibniz's as dualisms for this purpose.) Also see the Taliafero, Olson, and Geoetz essays in the collection Soul, Body and Resurrection, edited by K. Corcoran, and see Corcoran's essay, "Physical Persons and Postmortem Survival without Temporal Gaps," pp. 201–217, that presents a view looking somewhat like one espoused here, except that his non-hylomorphic proposal does not postulate that the soul makes matter into one's body, and so has to account for personal sameness by the connected order of physical transformations (fission).

8. Cf. F. Tippler's Physics of Immortality (New York: Doubleday, 1994).

9. The ridicule of some Greeks at the news of resurrection is reported in Acts 17.32. Plotinus and other neo-Platonists considered the idea of restoration to one's body as inconsistent with perfected life.

10. Augustine, De Mor. Ecc. I,27.52 (PL 32,1332). "A substance endowed with reason and fitted to rule a body" De Quantitate Animae, 12.22. (PL 32.1048). "[T]hough united in one man, my flesh is another substance than my soul," De Trinitate, I,10.20.2, and City of God, Book XXII, ch. 5–7. But in City of God, Book XVI, 8, on "monsters" Augustine says, "whoever is anywhere born a man, that is a rational mortal animal… springs from that one protoplast." So I conjecture that Augustine is a dualist by philosophical default, since there was no other option available to him that was concordant with the Faith, yet he insisted that "incorporeal souls, which are of higher rank than heavenly bodies, are bound to earthly bodies" (XIII, 4). But where his faith required it, he amended the dualism ad hoc to meet the faith. Such ad hoc amendment of what is strictly inconsistent continues until this day.

11. However, that conflicts with the Incarnation in that the divine Person is not the rational soul of Jesus, but is the suppositum, the person that is a human being (a rational animal). It also conflicts with Aquinas's explicit denial that the soul is the suppositum of human action or is, when separated, a suppositum at all (I, 29.1 ad 5).

12. For it will be separated from "this-as it is now" body at death, but not from my body, which is essential to me.

13. Yet it wouldn't be as a Stoic thought (Chrysippus reported by Philo, "On the Eternity of the World," 48.SVF 2.397) that if I lost my foot, my person would shrink back into what was left of my body. Instead, there'd be less of me, just as when I get fat, there is more of me. The appropriate "de quantiate animae" is the how-much of my body, which grows like an apple, then, like one on a window-sill, withers and dries out or rots.

14. Trenton Merricks premises that if you are a physical thing, not a substantial soul, then when you die, you cease to be at all. (Merricks, "How to Live Forever Without Saving Your Soul" in Soul, Body and Resurrection, ed. K. Corcoran [Cornell University Press, 2001], 184.) And if there is resurrection, you are reconstituted. That is just the opposite of the premise here. Merrick, reasons that there are no (qualitative) criteria of personal identity (191–2) over time. Mavrodes similarly had reasoned that there are no criteria of bodily identity over time ("The Life Everlasting and the Bodily Criteria of Identity," Nous, 1977), but I hold, with Aquinas and Scotus, that it is not by satisfying some qualitative conditions of sameness, that one continues to exist materially, but by the continuous formal causation of the soul. And for that, there are not extrinsic or even psychological marks of continuity beyond the uninterrupted causation of being.

15. Anthony Kenny (Aquinas Lecture, Marquette University Press) phrased it: "For in the sense in which it is undoubtedly true to say I have a soul, the soul appears to be my soul simply and solely because it is the soul of this body."

16. In such a way, say, that as a result, what seemed to be conscious continuity— including memories—might be an illusion. That argument is analogous to one S. Kripke used in Wittgenstein on Rules and Private Language as to why qualitative sameness alone is not sufficient for sameness of natural kind, and to one I use in arguing for the inaccessibility, outside reference, of the hidden necessities of things. See "Hidden Necessities" at < www.sas.upenn.edu/~ jross> . Hugo Meynell canvasses related hypotheses in "People and Life After Death," ch. 10, Philosophy of Religion: A Guide to the Subject, ed. Brian Davies, O.P. (Cassell, 1998).

17. On Aquinas's view, my individuation is supplied by my three-dimensional quantitative features (each by itself accidental), but such that were there no other material thing, my being a different individual would be in potentiality. Whereas Scotus thought that there is an individuating actuality, a haecceity, a mark (somewhat as the Stoics thought, but not a quality as they thought) that my substance has, which travels along with my soul in the manner of a completing actuality.

18. III.Suppl. 79,1, "For we cannot call it resurrection unless the soul return to the same body....wherefore resurrection regards the body which after death falls, rather than the soul which after death lives." Aquinas takes the "return" element of "resurrection" narrowly to include return to the very features of the deceased. It seems that the body I love is the one I have at any given time, and that that changes. So I do not emphasize the "return" feature, but rather the having a fleshly body "again" aspect, that includes senses and feelings.

19. Some Rabbis thought (probably from noticing what lasted longest in the desert) that there was an essential bodily part (part of the spine) that was collected by angels from the dead. Aquinas said "all the members that are now in a man's body must needs be restored at the resurrection" (III.Supp. 80c. and Supp. 79,2), and Scotus as well. Instead, "sameness," as recognizable by others, has to be functional, determined by what the soul utilizes to perform natural acts of the person, for example, as reported in Luke.24, 28-42, and John.20 and 21.

20. That, of course, conflicts with Aquinas who says, "Thus the matter that will be brought back to restore the human body will be the same as that body's previous matter" (IIII.Suppl. 79, 1 ad 3). But I take Thomas to be more emphatically asserting on religious grounds the resurrection of the very person who dies, body and soul, than constructing the physical science of "same body" in such passages. For that is not necessary for "the selfsame man to rise again... by the selfsame soul's being reunited to the selfsame body" (III.Supp.79,2 c.) as I speculated.

21. Augustine, Aquinas, and Scotus all held the direct, immediate awareness of one's own being, and not by any psychological marks or qualities apprehended.

22. Aquinas attacks the calculators who try to tell "when" (III.Supp.77.2).

23. See the repeated assertion of such requirements in Denzinger, Enchyridion Symbolorum, "immediate judgment," sections 457, 464, 530, 570, 693; "purgatory," sections 520f, 693, 840, 983, 998, 2147; "help by prayer and alms," sections 427, 456, 464, 535, 693, 780, 983, and 998; and "help especially by the Holy Mass," sections 427, 693, 983, 1469. However, all that can belong to our world of consequential realities whose explanation is timeless; see below.

24. The Constellations, like neighborhoods in cities, seem to be conceptual constructions out of objective

realities, rather than real appearances, whereas the pinkness of a distant house might be the consequence of its polka-dot surface. The Crab Nebula is said to be blue, but of course, that is in our color photography, not any color of it absolutely.

25. Aquinas has an initial treatment of the relativity of time in D.P. 5,5,ad 13, and in his discussion of the difference of time between the saved and the damned.

26. In D.P. 5,5, he speculated that after time stops and the world is renewed, after the cessation of all movement, no other animal or plant will remain but only the human body (D.P. 5,9).

27. At least of mid-level macro- and micro-nature. When we get to mini-micro-nature, like super-strings, we may find forms but not matter, or may find an infinite regression of forms, without final fundamental substances. How the explanatory chain grounds out need not be part of the general theory at the moment.

28. Geach says, "so far as I can see this view is open to no philosophical objection, but is likewise devoid of philosophical interest.... There could clearly be no philosophical reason for belief in such subtle bodies, but only empirical ones," God and the Soul (Saint Augustine Press, 2001). I think the metamorphosis idea has only a philosophical and theological motivation: there are no humans without bodies. So there is no particular judgment without bodies. Therefore, the dead do have bodies. But they cannot be of the visible detectable sort we experience. So they must indeed be "subtle," ethereal, and perhaps even energy fields that preserve the conscious states of humans. If human persons do not survive naturally, without resurrection, then the incorruptibility of their souls/spirits that is supposed to be natural, for Aquinas and Aristotle, would have no point in nature at all. But nothing (of species) is entirely without point in nature. So Geach's claim that personal survival of death is not possible unless resurrection is possible seems in conflict with Aquinas's philosophy of nature.

29. Peter Geach, "Immortality," God and the Soul.

30. I use the term "supernatural" in this paper in its restricted sense of "something obtaining on account of divine activity in the distinction of the Trinity of Divine Persons," as Redemption is, or Generation is, as distinct from merely contrasting a miraculous divine action with something happening in the order of nature.

31. E.g., ST I, 89.

32. A separated soul is not a person (I, 29,1 ad 5; and III.Supp, 79. I, 75).

33. I,29,1,ad 5: "[G]iven that it is separated, because it retains its condition of unitibility, it cannot be said to be an individual substance which is an hypostasis, or a primary substance, as neither a hand nor any other part of a human can be. And so, neither the name nor the definition of a person fits it." Basically, personhood is by unimpeded natural completion of an incommunicable individual rational substance, or by superceding, supernatural completion by the divine Person.

A suppositum is the completion of a rational nature, its being perfected "Hypostasis signifies a particular substance, not in every way, but as it is in its complement (completion)" (III,2,3,ad 2). "The individual substance, which is included in the definition of a person, implies a complete substance, subsisting in itself " (III, 16, 12, ad 2). See Mary A. Warther, The Transcendental Notion of Supposit (CUA Press,1954). A suppositum is a perfected substantial unity. Thus the completion can be natural (the human person) or supernatural (the divine person), while the nature/essence is natural and created. Scotus analyzed the presence of the divine suppositum in Jesus as by preemption of the natural completion of the human by the supernatural divine Person.

34. Aquinas, following Aristotle, thought that there was succession of substantial forms (Ia.118 and 119; III, 33 and 34; II–II, 64 1c; and Ia–118, 2 ad 2) "We conclude that the intellectual soul is created by God at the end of the process of generation, and the soul is at the same time, nutrative and sensitive, the pre-existing forms being corrupted."

And II–II 64c: "[J]ust as in the generation of a man. there is first a living thing, and then an animal, and lastly a man... so too...," and in III,33,2 ad 3: "But according to the philosopher (de Gen An. ii) in the generation of man, there must be a before and after, because there is first a living thing, afterward an animal, and after that, a man. Therefore, the animation of Christ could not be effected in the first instant of his conception." He relies upon Aristotle, and thinks there are successive forms. He reiterated that in III,33, 3 ad 2: "Therefore Christ's body was not animated in the first instant of its conception."

35. Some people think that those are examples of "ontogeny recapitulates phylogeny": repeating stages of evolution.

36. It is not, as Aquinas supposed in III, 33–34 and elsewhere, a succession of substances, a living thing, then an animal, and lastly a human (II–II 64). That caused him to say mistaken things about human generation and conflicting things about the human soul of Jesus (III, 33, 3). The mix-up was caused by the idea that the quantitative state of things has to be appropriate at the very time for the substantial form, rather than that powers

of the form can be latent. (That even conflicted with the idea of plant growth.) The amendment required is that forms can be time-staged as to activity of constant abilities—something all living things require and display both positively and privatively.

37. You can't be beatified, or condemned, without knowing it. So the metamorphosis has to be far more fitting to the rational animal than to the bodily condition of a genuinely unconscious, but still alive and dying person. But any materialization sufficient for those purposes would do.

38. The medieval philosophers also employed the idea of the transmission of form without its informing matter ("spiritual" information was Aquinas's term for sensible forms of sight that do not inform the medium or the sense organ, e.g., the eye-ball does not turn blue), and the transmission of the visual appearance of things through the atmosphere (in contrast to the informing transmission of smell and touch).

39. But not as Frank Tippler proposed as information preservation amounting to replication. See The Physics of Immortality, cited above.

40. Hylomorphic natural philosophy was displaced for good reasons at the time by the quantitative sciences of the seventeenth century, which had no particular utility for it, and nothing had to be explained by it (as we do now with software). And the hylomorphic theory of nature, and of humans, even when ascendant in the Universities was unstable because of the persistent neo-Platonism, the internal disputes among Aristotelians, rumblings in mid-and late thirteenth century (Bacon, c.1250, and Nicholas of Autrecourt, c.1300), and revisions and rejections by Ockham, c. 1330, Cusa, c. 1400, and many others, as well as the resurgence of Platonism, c. 1450.

41. In Descartes's Letter to Regius (January 1642) at AT 506, about substantial forms he says: "[T]hese forms are not to be introduced to explain the causes of natural things," Cottingham et al., The Philosophical Writings of Descartes, Vol. III, The Correspondence (Cambridge University Press, 1991). He was confident that there was no need for such things as substantial and accidental forms in the new science (AT 492, AT 500, and AT 505). The opposite has happened, especially with the invention of software, and forms are paradigmatically mathematizable (formally definable). We can even say the "pure" laws of physics apply to abstracted forms and that the phenomenological laws apply to observed phenomena (cf. N. Cartwright, How the Laws of Physics Lie [Cambridge Univ. Press]).

42. I urged this in 1990. See, "The Fate of the Analysts: Aristotle's Revenge," ACPA Proceedings, also available at < www.sas.upenn.edu/~ jross> .

43. We can make a new application of the fifth way: the intelligibility of nature in its software cannot be explained except by origin from intelligence, just as our made-up software is intelligently invented. For nothing comes from nothing. The idea that the organization of Word-Perfect, or Word, happened by chance is silly. So too, the inexhaustible intelligibility of the cosmos is explicable only as originating from intelligence, and as being caused as a whole. If nature is a recursive structure of interested forms or laws, it could only be caused from "the top down."

44. It is true that hylomorphic theories have no account of the order of emergence of forms in nature. The problem is the same for any general theory.

45. See Ross, Hidden Necessities, Chapter 7, "Real Natures," available at < www.sas.upenn.edu/~ jross> .

46. Now, "form/matter" is a contrast-dependent conception. Matter is what is suitable (or, made unsuitable) for form, and form is that which structures matter.

47. Each of those features applies analogically, not univocally, throughout nature, though within a particular physical science, the central uses of the notions are univocal for the entire subject matter, otherwise the science would lack unity of subject. So, although "living thing" might be in general analogical in biology, it has to be anchored by behavioral features of the paradigm cases, say cells, and animals that make "life" univocal. So, not just the quantities of things are mathematizeable, even the qualities and relationships of things (brightness, whiteness, solidity, surface tension, fluidity, even comfort, and luxuriance) can be quantified, scaled, and made measurable either in continuous or discrete quantities. But the underlying explanatory structures are forms; the active structures, and the quantitative relationships are resultants, not explanations, except locally.

48. That is further supported by the failure of the both patterns of explanation of natural causation: the "a-priori connection" line (from Kant, through D. Armstrong and J. Mackie) and the "constant conjunction" line from Hume on through probability theories, like H. Reichenbach and W. Salmon. See the essays in Causation, edited by Sosa and Tooley (Oxford University Press, 1997). Both lines of analysis meet counterexamples and fail to explain the causality of single cases. See also Robert Brandom's Articulating Reasons (Harvard University

Press, 2000) for another viewpoint on conceptions and thought that will still leave causation as a relation with "no insides."

49. "Event causation is the only real causation" from Hume to Davidson, alas. "All at once" causation seems to be considered contradictory, when it is in fact a necessary condition of any transactional causation at all. For if the cause does not act on account of what-it-is, it must act from something that does. It would be contradictory to say all causes act on account of other causes. But that is assumed to be true.

50. Mackie, Armstrong, and others mentioned.

51. For instance, Salmon, Reichenbach, and N. Goodman.

52. For a contemporary explanation of probability theories, see Ian Hacking, An Introduction to Probability and Inductive Logic (Cambridge University Press, 2001).

53. See David Armstrong, Universals and Scientific Realism, Vol. 1 (Cambridge University Press, 1978), where he defined the notion and attributed the view to Quine; and see later discussions by Michael Devitt, and related papers in Properties, ed. Mellor and Oliver (Oxford University Press, 1997). There is a zany humor in imagining an ostrich nominalist using a computer to draft a refutation of the theory of real forms.

54. There are fundamental questions about forms that are analogous to those about laws of nature: How do they bottom out? Why are the forms emergent in the order that they are? What explains the necessities among forms? So it is not as if a hylomorphic theory is a magic answer to problems in philosophy of science, but only that it helps with some of them. Also, there is the paradox of prime matter (either as pure potentiality or as universal substratum): there couldn't be a first form that alone fits prime matter, so the order of forms relative to the universal substratum, whether it is pure potentiality or not, is still unexplained.

55. Still, if one thinks the rational soul is subsistent of itself, but not naturally fitted to be on its own because requiring matter for its base of operations, then by applying the rule "nihil fit inane in natura" a natural metamorphosis must be possible. But the principle that nothing happens pointlessly in nature is not demonstrable, or self-evident. So the reasoning is not conclusive.

56. For instance, "purgatory" may be an "all-at once" painful and repentant awareness of one's whole life from the standpoint of God's evaluation of every part of it, with the acuteness of that agony divinely relieved through the prayers of others, and with the effective intercession of the saints in behalf of the living realized in the relativity of our time, which ends with our deaths. Appearances of the Saints may explicable as well as miracles. The dizzying aspect is to "realize" that a person you see today may be entirely out of time, but not out of awareness of you, tomorrow. St. Thomas was not hesitant to say "the souls departed... are ignorant of what goes on among us"—by natural knowledge, though the blessed "do know all that passes here." So on his account, the departed are "out of time" as well, despite the problem of reconciling that with saintly appearances, interceded miracles, and protections.

57. That also seems to be historically conditioned: so that if you set out the philosophical "replacement analysis" about foreknowledge at the wrong time, a person will think you are denying what his faith tells him, but at a different time he will regard that as the explanation for what his faith tells him.

58. There are also cases, to the dismay of many analysts, where the truth-conditions for what is said are NOT what is meant by the speakers, but what else has to be so for what the speakers mean to turn out to be so. Cf. my "Eschatological Pragmatism," Philosophy and the Christian Faith, ed. Thomas V. Morris (University of Notre Dame Press, 1988), 279–300. I say that while eschewing the substitution analyses characteristic of David Lewis's metaphysics, which I called "linguistic imperialism" because he tells speakers they do not mean what they clearly think they do mean. See my "The Crash of Modal Metaphysics," Review of Metaphysics, December, 1989.

59. When Jesus came to the disciples (Luke 24.39–43) and said "touch me and see" and went onto eat a piece of boiled fish, we have no information as to the micro-constitution of His body; whatever the change, the physical presence of the same person is real and recognizable (but not always immediately—see Luke 24.13–32, and John 20, and 21). Physical actions have to be real—eating, walking, talking, touching, seeing, hearing—not just subjective psychological states, but such states materialized. So whatever the micro-matter, the mediate matter of resurrection has to be like flesh and bones. Spectral or phenomenally projected bodies won't do; they have to be real.