# The Indispensability of the Soul

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To the memory of my father

One cannot speak about the indispensability of the soul without prefacing some clarifications regarding the relevant notion of *dispensability*. First, obviously, something is dispensable if, and only if, it is not needed. Second, equally obviously, *being needed* always means *being needed for some purpose or other*. It follows that the notion of dispensability is a relative notion, a notion relative to purposes. For something, X, may not be needed for certain purposes, but it may be needed for others; accordingly, X may be dispensable relative to some purposes, and indispensable relative to others.

The purposes to which I am limiting myself in this paper are *theoretical purposes*, that is: purposes of description and explanation in the widest sense, and my notion of dispensability is relative to these purposes. Thus, when the phrase "X is *indispensable* (respectively: *dispensable*)" occurs in this paper, then, in the last analysis, it should be taken to mean that X is needed (respectively: not needed) for purposes of description and explanation (broadly conceived). It is important to keep in mind that I take theoretical purposes to include not only scientific purposes but also philosophical and theological ones. It is obvious to me that purposes of description and explanation can be found not only in science but also in philosophy and theology.

The thesis I would like to defend in this paper is the indispensability of the soul; that is, speaking precisely, I am asserting that the existence of souls is needed for purposes of description and explanation. In support of this assertion, I am going to adduce several arguments. There is an important caveat: even if it is shown that the existence of souls is needed for purposes of description and explanation, it does not follow logically that souls do in fact exist. This conclusion is merely made highly probable, for

epistemological optimists, by the fact – if it is a fact – that the existence of souls is needed for purposes of description and explanation.

The following analogy is meant to illustrate this point. Everybody knowledgeable in physics these days accepts that the existence of *quarks* is needed for purposes of description and explanation. But this indispensability of the existence of quarks does not logically entail the existence of quarks. Most people will, indeed, take the step from asserting the former to asserting the latter. They are epistemological optimists. If they are philosophers of science or familiar with this area of philosophy, such people call themselves "realists." Regarding their attitude towards the existence of quarks, realists can certainly not be considered irrational.

But *empiricists*, too, cannot be considered irrational regarding their *own* attitude towards this matter. Empiricists, being epistemological pessimists, will remain agnostics about the existence of quarks, even if they agree that the existence of such things is needed for purposes of description and explanation. In adopting this attitude, empiricists are not committing a logical mistake or other lapse of rationality. They are merely acting on stricter standards of rationality. They are refusing to take what, *in their eyes*, is a blind and entirely unnecessary leap of faith.

In my view, the old dispute between realists and empiricists whether or not to accept the existence of so-called "theoretical entities" on the grounds of indispensability cannot be rationally decided. The reason for this is that it is not a rationally decidable question whether we, when inferring existence, should accept stricter or less strict standards of rationality. *This* question concerning standards of rationality is not itself rationally decidable; it is a question of basic stance.

I, for my part, am a realist not only regarding quarks but also regarding those other, rather different theoretical entities: *souls*. I do think that the indispensability of the existence of souls is good reason for accepting the existence of souls. The only trouble is that hardly any philosopher or scientist these days believes that the existence of souls *is* indispensable, that is: really needed for theoretical purposes, the purposes of description and explanation. This is not fair, I believe – worse: it is not rational.

#### 1. What Is a Soul?

Before defining the concept of a soul, it is necessary to define the concept of a substance. For *soul* is a certain type of *substance*. Here is my definition of substance:

A *substance* is an individual that (1) exists at several moments of time, and (2) is wholly present – that is, present with all the parts it has at the moment<sup>1</sup> – at each moment at which it exists, and that (3) is capable (*simpliciter*: at least at some time) of consciousness or agency.

It is necessary to add several comments to this definition of substance:

- According to it, substances are individuals. But not all individuals are substances. Individuals with merely a momentary existence, or individuals that are not wholly present at some moment at which they exist, or individuals which are neither capable of consciousness nor of agency, are not substances.
- In the given definition of substance, the element of *independent exist-ence* is lacking, in spite of the fact that this element has traditionally been included in the definition of substance. The reason for omitting it is that independent existence is a relative notion a notion which is obscure as long as it has not been clearly said *of what* an independently existing thing is to be independent. *Everything* is ontologically dependent on something, and independent of other things. It turns out to be surprisingly difficult to determine what it is that a substance exists independently of, and to determine it in such a manner that it is *neither* the case that entities *are* counted as substances that one would definitely not regard as such, *nor* the case that entities *are not* counted as substances that one would definitely regard as such.
- The given definition of substance does not include the element of bearer of properties, in spite of the fact that this element has traditionally

If it has certain parts in a *non-temporal* way: in a way that is not dependent on time, then these parts are counted as parts that it has *at all moments*.

been included in the definition of substance. But it would have been pointless to include it, because *everything* has properties and is, therefore, a bearer of properties.

- The given definition of substance excludes everything that is *essentially lifeless* from being a substance. For everything that is essentially lifeless is (at all times) incapable of consciousness and incapable of agency, and therefore, according to definition, it is not a substance.
- The given definition of substance excludes from being a substance everything that exists only at isolated moments. Something that exists, first, at the moment t, and after t does not exist until moment t', at which it exists again, and after t' does not exist until moment t'', at which it exists again, and so on, exclusively in this manner, is not a substance, since, because of its manner of existence, it is (at all times) incapable of consciousness and agency. For the capability of consciousness (at any time) requires that its subject exist *uninterruptedly* (at that time),<sup>2</sup> and it is the same with the capability of agency. (In consequence, condition (3) of the definition of substance can be seen to imply condition (1).)

Given the concept of substance, as defined above, we can define the following subsidiary concepts:

A potential subject of action at t is a substance which is at t capable of agency.

An actual subject of action at t is a substance which acts at t.

A potential subject of consciousness at t is a substance that is at t capable of consciousness.

An actual subject of consciousness at t is a substance which is conscious at t.

At this point, it should be noted that not only "x acts at t" and "x is conscious at t" but also "x is at t capable of agency" and "x is at t capable of consciousness" entail "x exists at t." Continuing the sequence of definitions, we finally have:

Something, x, exists *uninterruptedly* at a time t if, and only if, there is a time t' before or after t such that at all times between t and t' (including t and t') x exists.

A *subject of action at* t (*simpliciter*) is a substance which is either a potential or an actual subject of action at t, in other words (since *actual* entails *potential*): being a subject of action at t amounts to being a potential subject of action at t. (Note that *potential* is understood in such a way as not to preclude *actual*.)

A *subject of consciousness at* t (*simpliciter*) is a substance which is either a potential or an actual subject of consciousness at t, in other words: being a subject of consciousness at t amounts to being a potential subject of consciousness at t.

After these preparations we are ready to move on to the definition of *soul*. The primary concept of soul is a relational, and time-dependent, concept. It is captured by the following definition:

x is a *soul of* y *at* t iff (1) y is a *body*, (2) x is at t a subject of action or a subject of consciousness, and (3) x is *united* to y at t.

Given the relational and time-dependent concept of soul, it is easy to define the non-relational and time-independent concept:

x is a *soul* iff x is a soul of something at some time.

## 2. Questions Surrounding the Concept of Soul

Obviously, it is the relational and time-dependent concept of soul that needs further attention. Its definition contains three elements, each of which raises more or less far-reaching questions:

- What is a body? — One might answer this question very generally and unspecifically by saying simply: a body is a material object. But we can also answer it in the light of taking into account the minimal condition that a material object must fulfill if a subject of action or subject of consciousness is to be *united* to it. In this light, it is fitting to define a body as a material object whose time of existence is neither momentary nor interrupted, and which is wholly present at each moment at which it exists. It should be

noted that this definition of body does not quite subsume the concept of body under the concept of substance: although ingredients (1) and (2) of the definition of substance are present, ingredient (3) is not. Thus the suggested definition of body leaves it open whether a body is a substance or not.

- What is the relationship between being a subject of action and being a subject of consciousness? - Purely from the logical or conceptual point of view, a substance, it seems, may well be a subject of action at a time without being a subject of consciousness at that time, and also a subject of consciousness at a time without being a subject of action at that time. However, subjects of action incapable of consciousness and subjects of consciousness incapable of action do not seem to be normal cases of substances, and in fact it is rather doubtful whether there are any such cases at any time. One could even make a case for holding that, contrary to first impression, every subject of action must, for purely conceptual reasons, be a subject of consciousness. It is, therefore, very useful to distinguish a richer concept of soul from the basic concept defined above:

x is a sentient soul of y at t iff (1) y is a body, (2) x is at t a subject of action and a subject of consciousness, and (3) x is united to y at t.

x is a *sentient soul* iff x is a sentient soul of something at some time.

- What is the basic ontological character of being a subject of action, respectively a subject of consciousness? — In part, this question is answered by the definitions presented above, but only in part. There is, of course, much more to say. Mainly, it must be clarified what is the nature of action and the nature of consciousness. I cannot go into this here, but I have treated the nature of action and of consciousness at considerable length in my book *The Two Sides of Being*. One result, however, must be stated here: due to the nature of consciousness, only nonphysical substances can be subjects of consciousness; a fortiori, only nonphysical substances can be subjects of action and consciousness together. Hence: if something is a sentient soul of anything at any time, then it is nonphysical.

<sup>&</sup>lt;sup>3</sup> Meixner (2004).

- What is the nature of the unification of x to y if x is at t a soul of y? – This, of course, is an absolutely crucial question. Many philosophers regard the presumed impossibility of answering it – in particular, if a soul is to be a *nonphysical* individual – as the main obstacle to taking the concept of soul seriously. My own position is that a soul that is united to a body at a time is united to that body in virtue of arising from it at that time due to psychophysical natural laws, because that body fulfills certain physical conditions at that time. Thus the ensouledness of a body is law-induced, given specific physical conditions the body fulfills; in other words, certain physical conditions, when fulfilled by a body, are nomologically sufficient for bringing forth a soul from that body. The unification of a soul to a body at a time consists precisely in its being brought forth from the body at that time due to natural laws. Moreover, the soul-inducing natural laws are of such a kind that no more than one soul can arise from a body that fulfills the fitting physical conditions: a soul of a body is always its (single) soul. Since natural laws – laws of nature – are metaphysically contingent, the unification of a soul to a body is itself metaphysically contingent; there is no metaphysical necessity for it, but only a nomological one. There is no metaphysical absurdity in the proposition that a body suited for having a soul has none, just as there is no metaphysical absurdity in the proposition that a body exerts no gravitational force. Indeed, the unification of a soul to a body is metaphysically contingent in a way that is strictly analogous to the way in which the unification of the gravitational force of a body to that body is metaphysically contingent: the metaphysically contingent connection between the two is just as close, and it is in the same degree comprehensible and explicable. And, in both cases, asking for more comprehensibility and greater explicability than can be provided on the basis of natural laws is asking for the impossible. Apart from the fact that the soul of a body is a substance while the body's gravitational force is not, the element of difference in this analogy is, of course, that the connection between body and soul is constituted by psychophysical laws, while for constituting the connection between body and gravitational force purely physical laws suffice. But the existence of psychophysical natural laws is no absurdity – quite on the contrary. Hence the existence of the body-soul connection, as described, is no absurdity either – quite on the contrary.

There are two important follow-up questions to the question just treated, which questions also relate to the above definition of soul, though only indirectly:

- How did the body-soul connection come into the world? This question, too, is often regarded as an embarrassment for body-soul theories. It isn't. The body-soul connection is widespread throughout the kingdom of living beings; it came about as the result of evolution. This means three things: (1) the natural laws are such that the body-soul connection is nomologically possible; (2) in the course of natural history, physical conditions turned out to be such that the body-soul connection was initially produced, i.e., nomologically necessitated; (3) physical conditions having been, for millions of years, the way they have as a matter of fact been, the body-soul connection has been biologically advantageous for millions of years, and therefore it could not only maintain itself, but also become quite common and develop, in the course of time, from primitive beginnings to higher forms. Today, certainly all animals with a brain have a more or less highly developed sentient soul: a nonphysical subject of action and consciousness united to their respective bodies. It is a safe guess that the evolution of the sentient soul is nomologically parallel to, and therefore coeval with, the evolution of the brain.
- What is the biological advantage of having a sentient soul? It is hard to say what would be the biological advantage of having a soul if it were not sentient. I, therefore, merely address the question of what is the biological advantage of having a sentient soul. Having a sentient soul is a distinctive biological advantage a survival asset only if there is considerable room for other responses of a living organism to its environment than mechanical reactions and chance movements; in other words, only if there is considerable room for decision-based physical action. There is considerable room for decision-based physical action only if there is considerable indetermination in the physical macro-world. Thus, the existence of considerable indetermination in the physical macro-world is a condition that must be fulfilled if having a sentient soul is to be a survival asset. I cannot go into this here, but I do not believe that there are any good reasons against this condition being fulfilled; indeed, I take the obviousness of the fact that the having of a sentient soul is a survival asset as evidence for its

being fulfilled.<sup>4</sup> But what, precisely, is the nature of the biological advantage of having a sentient soul? Mechanical reactions are necessitated by the antecedent physical state of the world (mainly, by the antecedent physical state of the organism and its immediate environment), whereas chance movements happen strictly by chance. Decision-based physical actions, however, are neither necessitated by the antecedent physical state of the world nor do they happen by chance. Like the ontological (not merely epistemic) chanciness of the physical events that happen by chance, a decision-based physical action requires physical indetermination. But unlike ontological chance, which is blind and uncaused (i.e., without sufficient cause), a decision-based action is caused and guided by information. A decision-based physical action of a living organism with a sentient soul is, at least in part, non-redundantly caused by the organism's subject of action and consciousness: precisely by the organism's sentient soul. In doing so, the organism's sentient soul fills a lacuna of physical indeterminacy that is left open by mechanical determination, and it does so, on the whole, with much greater advantage to the organism than could be reached by any mere chance generator (which, prima facie, might be thought to serve the same purpose). For the sentient soul of an organism acts informed by the consciousness of which it is the subject (but not determined by that consciousness), and with a naturally given very strong overall intention of securing the survival, and promoting the welfare, of the organism of which it is the sentient soul. It acts, moreover, with at least rudimentary rationality in matching action to information and intention. In a nutshell: given considerable indetermination in the physical macro-world, it is clearly to the advantage of a living organism to be equipped with a decision-maker in the proper sense of the word: a subject of action and consciousness which makes, in the light of consciousness, decisions that lead to physical actions intended to be of service to the organism (which often enough they are in fact, certainly more so than would be the "actions" originating from a mere chance generator). It is not unimportant to add (1) that the actions of a sentient soul neither replace the mechanical reactions of its organism, nor occur independently of them (rather, the former occur on top of the latter and interwoven with them); and (2) that the connection between living organ-

<sup>&</sup>lt;sup>4</sup> See Meixner (2004); (2005).

ism and sentient soul displays many degrees of development, from the very primitive that can be found, say, in insects, to the very sophisticated that can be found in human beings.

#### 3. The Indispensability of the Soul for Science

Most philosophers today hold that the assumption of the existence of physically active sentient souls is so far from being indispensable for science as to be scientifically impossible – that is, impossible given what science tells us is true about the world. (And if we had to scratch physically active sentient souls, then it certainly seems we might as well forget about the entire notion of soul.) On closer inspection, it turns out that the existence of physically active sentient souls is not so much incompatible with science, specifically with physics, but with physicalism, which is not physics but a certain kind of metaphysics: the modern form of materialism. One of the tenets of physicalism is this: what causes something physical must itself be physical. It is this tenet which alone truly deserves to be called "the Principle of Causal Closure (of the Physical World)." If it were true, then a subject of action and consciousness that brings about physical effects couldn't exist, whether it be united to a body or not. For, as has been said above, a subject of action and consciousness is bound to be a nonphysical entity. But is there any unconditional rational obligation to believe that the Principle of Causal Closure just stated is true? It is neither conceptually true nor in any way self-evident, nor is it a logical consequence of the accepted laws of physics,<sup>5</sup> nor is it a postulate that we must believe in if physical science is to flourish. It is what it is: a metaphysical principle that we are under no rational obligation to believe in – unless, of course, we have already committed ourselves to the metaphysical position of physicalism.

But even from the purely scientific point of view (let alone from the metaphysical), to commit oneself to physicalism is not a recommendable step to take. Experience is the indispensable basis of scientific knowledge, and there is not only experience of the outer, physical world: *straight experience*, but also experience of the inner world: *reflective experience*. But

<sup>&</sup>lt;sup>5</sup> Regarding this latter point, see Meixner (2002).

reflective experience reveals, as its intentional objects (that is, as its objects of intentionality), entities that are very different from the intentional objects of straight experience. Sensations, emotions, perceptions, and thoughts, for example, are very much unlike physical entities: the intentional objects of straight experience. If we take the intentional objects of reflective experience broadly at face value – that is, if we do not deny their existence, nor believe that they exist all right, but are totally different from the way they appear to be in reflective experience –, then the conclusion is unavoidable that the intentional objects of reflective experience are nonphysical entities. Take a physical illusion: a perception belonging to straight experience but with a *nonexistent* intentional object, say, a perception of a continuously moving dot of light, whereas in reality there are only very brief single flashes of light arranged in a line, following very quickly one upon the other. Where in the physical world would this perception fit in – itself, taken as it is, and not replaced by something it is not? Of what could it be a spatiotemporal part? - Evidently, of nothing. Or take my dream-experience, while lying motionless in bed in dark night, eyes shut, of being a child again and running over a sunny meadow. Of what could that experience – itself, taken as it is, and not replaced by something it is not – be a spatiotemporal part? Evidently, of nothing. But it must be a spatiotemporal part of the physical world if it is to belong to the physical world at all.

Physicalists, of course, refuse to accept the teachings of reflective experience. Physicalists either deny that its intentional objects exist (this is done by the so-called eliminative materialists), or they believe that these objects are totally different from the way they appear to be (this is done by those who believe in the so-called identity theories, or in the various forms of materialist reductionism). But is this the proper scientific spirit: turning away from the phenomena, closing one's eyes to them and their nature in order to maintain a metaphysical tenet, namely, that everything existing is physical? How very different is the attitude of the philosopher Edmund Husserl, who proposed a science of the *phenomena* (meaning by this precisely the intentional objects of reflective experience), a science as different from all physical sciences as the *phenomena* are different from all physical entities.

Husserl very clearly recognized that the *phenomena* – the intentional objects of reflective experience, from the most complex to the simplest – all have something in common,<sup>6</sup> something that is intrinsic to them, and that all the intentional objects of straight experience lack entirely. This is the directedness of the *phenomena* to the (appropriate) self, or their *forness*, as I call it. All of them are for a self, which, in each case, is itself a constituent of the respective phenomenon, and as nonphysical as the phenomenon, but not literally a part of it. This forness, it is important to note, is not the intentional relation that is present in reflective experience, but a relation that is present in the intentional objects of reflective experience. All of these objects have, as it were, an address written on them: they are information, information that is in each case intrinsically directed to someone: to the subject of consciousness. An intense bodily pain, for example, is intrinsically directed to a certain subject of consciousness, appealing urgently to this same subject to bring about, as the subject of agency it also is, effects in the physical world that lead to withdrawal from, or removal of, a certain damaging influence on the organism (namely, on the organism to which the subject of consciousness and agency belongs), in the only way it can do so: by effecting organismic change.

There is, therefore, empirical evidence — evidence from reflective experience, and it is intersubjective and universal evidence — for the existence of nonphysical entities which are at once subjects of action *and* consciousness, which are, moreover, each united to a particular body and causally effective in the physical world. In short, there is empirical evidence for the existence of nonphysical but physically effective sentient souls. In the previous section, it has, moreover, already been said which is the *biological function* for sentient souls that connects naturally with this empirical evidence: we have seen that physically effective sentient souls have a job to do in the economy of the evolution of organisms — if only there is considerable indetermination in the physical macro-world. In the light of these considerations, *the indispensability of the soul* — that is, the indispensability of the existence of souls for theoretical purposes, in particular for purposes of scientific description and explanation — looms large.

<sup>7</sup> Meixner (2005).

<sup>&</sup>lt;sup>6</sup> Husserl, Erste Philosophie, part I, p. 120.

Physicalists, of course, deny the evidence on the basis of which a scientific role for sentient souls can be established. But they do so, as we have also seen, on grounds that prove to be of a nonscientific sort when submitted to an impartial scrutiny.

### 4. The Indispensability of the Soul for the Christian Faith

There is not only a substantial scientific role for the existence of souls, there is also a religious one. I will now address this religious role. The religious perspective can certainly not lead to the same degree of intersubjective assent as the scientific one, but whoever find themselves believing in what is stated in the Apostolic Creed, had better also take the religious perspective into account, in addition to the scientific one.

The resurrection of the dead is one of the central Christian doctrines. But what exactly does *resurrection* consist in, and *how* could it occur?, leaving quite aside the question whether it does in fact occur. An occurrence of resurrection would, of course, be absolutely miraculous. But *that* need not ail the believing Christian, who, after all, believes in the Father Almighty, Creator of Heaven and Earth, and therefore also creator of all the laws of nature, which, in consequence, will be bound to hold precisely to the extent that He has eternally decreed them to hold. What a believing Christian needs to worry about is whether resurrection is even in the broadest sense possible, and in particular resurrection according to *the classical account*. The classical account of resurrection, which has been accepted for two thousand years, can be stated as follows:

An entity which was at one time the sentient soul of a human body X, forming together with it a complete living human being, and which has existed all the time since then, but has not been the soul of anything for some time, is united to a human body Y (of superior quality, and in many respects similar to X), forming together with it that same complete human being who once lived, and who is now, on the Last Day, living again.

Clearly, the existence of sentient souls is essential if the classical account of resurrection is to be true. Materialists, who do not believe in the existence of sentient souls (since sentient souls are bound to be nonphysical entities), are, therefore, not able to accept the classical account of resurrection as true. Some *restricted* materialists – who are materialists only with regard to *created* entities, or even only with regard to *human beings and other animals* – believe themselves to be Christians nonetheless. A prominent example is the American philosopher Peter van Inwagen. Obviously, a Christian materialist must believe in the truth of an account of resurrection which is different from the classical account. Here is this account:

A human body which was at one time a complete living human being, and which has existed all the time since then, but has not been alive for some time<sup>8</sup> (and – likely enough – has existed for some time only in a rudimentary form: as a skeleton, say), is reconstituted (in a superior form) to be that same complete human being who once lived, and who is now, on the Last Day, living again.

Note that both the classical and the materialist account of resurrection have a crucial structural element in common: an entity that exists continuously in the time-interval between the first life of the human being and his or her second life acquired at the resurrection, whose function it is to guarantee that the resurrected human being is numerically the same human being as the human being that once lived. Call this entity *the continuous link*. In the classical account, *the continuous link* is the entity which was once the soul of a certain human body, constituting together with it a certain living human being; in the materialist account, *the continuous link* is that human body itself, the human body which was once a certain living human being.

Note that the existence of a *human body* does not entail its being alive: a human body can exist without being alive. But the existence of a *human being* does indeed entail his or her being alive. This fact, however, does not entail *dualism* regarding human beings (according to which human beings *are something else* than human bodies), since also *materialists* (according to whom all human beings *are* human bodies) can allow, in consistency with the described conceptual fact, that not all human bodies are human beings, but only those human bodies that fulfill some extra conditions (physical conditions, of course): if a human body exists *and* fulfills these extra conditions, *then* it is alive.

Before we come to the main question – the one that is suggested by this juxtaposition of two conceptions of *the continuous link* – two other questions must be addressed:

(1) Wouldn't the sum of all atoms in a human body, at some time when it was alive, do as well as the continuous link for the materialist account of resurrection? - No. There is the well-known problem that any sum of atoms that were at a certain time part of a living human body may, in the course of time, be partly or even entirely identical with the sum of atoms in another living human body at another time. The deeper trouble is that a living human body does not consist of the same atoms at all times. It is not even the case that at least some atoms are part of it at all times. In fact, it is entirely accidental which individual atoms a body consists of at any time. Then, which sum of atoms in that body at what time of its life is to be the relevant sum of atoms, that is, the one constituting the continuous link? Every answer to this question seems more or less arbitrary and accidental, whereas the identity of a human being at one time with a human being at another time is *not* in any way arbitrary and accidental. The difficulty can be effectively dramatized. In doing so, I let a thought-experiment of Peter van Inwagen's prefer to the author of the present paper (instead of having it refer, as it originally does, to Peter van Inwagen). The atoms in the body of ten-year-old Uwe Meixner are not the atoms in the body of forty-year-old Uwe Meixner. Thus, if the materialist account of resurrection were correct and the continuous link required by it were just a sum of atoms that once constituted the living body of the human being who is to be resurrected, then, unless God made a more or less arbitrary choice, He would have to resurrect two Uwe Meixners by putting the atoms together again in the way they once were, one Uwe Meixner corresponding to the ten-year-old, and another corresponding to the forty-year-old. Imagine the two at the resurrection, standing opposite to each other, each claiming with equal justification that he is Uwe Meixner. Under the presuppositions made, there is no possibility whatever to resolve their conflict.

<sup>&</sup>lt;sup>9</sup> See van Inwagen (1997), 245.

(2) Can we not do without *any* continuous link in an account of resurrection? – The answer is brief: it may perhaps be logically possible that, after an interval of nonexistence, the same human being that was once alive is alive again *without* there being any continuous link between the earlier existence and the subsequent one; but if this *is* a logical possibility, then it certainly seems to be a logical possibility we cannot well understand. Thus, no philosophically satisfactory account of resurrection can do without *the continuous link*.

Which of the two previously stated accounts of resurrection, then, has the more acceptable conception regarding the continuous link? – It is easily seen that the materialist account is in deep trouble. This account requires that a human body which was once a complete living human being exist the entire time until the resurrection of that same human being. Therefore: if the materialist account of resurrection is maintained, then - given plausible assumptions about the time that still remains until the resurrection, and about the continuation, during that time, of the processes universally at work in the physical world – the conclusion appears to be inescapable that no human being who once lived will ever be resurrected. If the materialist account of resurrection is maintained, then - even independently of the mentioned plausible assumptions - it seems certain that some human beings who once lived will never be resurrected. Consider a woman of Hiroshima standing on August 6, 1945, at 8:15 a.m. local time on ground zero of the nuclear blast occurring on August 6, 1945. It seems undeniable that the body of this woman was annihilated and that it does no longer exist, not even in a rudimentary form. Hence, according to the materialist account of resurrection, she cannot be resurrected; for, from the materialist point of view, there is no continuous link from her former life to her resurrected life. Her resurrection is, therefore, excluded.

The only way out for Christian materialists is this: they must take refuge to the assumption that, *contrary to all appearances and contrary to all human knowledge*, the body of that woman (or at least a part of it that allows unique reconstruction) *is* preserved and *does* continue to exist. <sup>10</sup> The assumption is desperate, and has nothing to recommend it, except, of course,

<sup>&</sup>lt;sup>10</sup> Cf. van Inwagen (1997), 246.

that it allows the Christian materialists' account of resurrection to escape refutation – refutation by what they, like all Christians, take to be a fact of the future: the resurrection of the dead, that is, the resurrection of *all* the dead.

In contrast: the continued existence of a subject of action and consciousness that was once the sentient soul of a human body and constituted, together with that body, a living human being – this continued existence even after the death of that human being is, unquestionably, a miracle (that is, an exception to the laws of nature<sup>11</sup>), a miracle of a similar order as, say, the presence of a gravitational force without the presence of matter. But the classical scenario of how it is possible that the hand of God fulfill His promise of resurrection is, in spite of its miraculous nature, far more likely than the scenario advocated by Christian materialists. According to Christian materialists, there must be a place where God keeps those human bodies, or uniquely reconstructible parts of them, continuously in existence until the time of the resurrection which, to all appearances, were annihilated, that is, subjected to forces that reduced them to completely disconnected collections of atoms and molecules, be it in an instant or in the course of millions of years. 12 But how do those human parts get to that place, to that space beyond space? How do they get there, in particular, without a violation of the law of the preservation of matter-energy? Apparently, the only way how is this: God, miraculously and in an instant, replaces the human part which is to be preserved by an exact copy of it. The original is

A miracle cannot be defined as a *counter-instance* to the laws of nature. Otherwise, there could not be any miracles – *for conceptual reasons*: since laws of nature are, by definition, *obtaining* general facts, they cannot have any counter-instances. But they *can* have *exceptions*: there can be real events which the laws of nature in an entirely natural, but counterfactual, extension of their scope would have excluded from happening, but which are, in fact, themselves excluded from the factual scope of the laws of nature.

And He must eventually keep there the body of every human being that ever existed. For what will be the fate of a human body if it remains here on earth? The dying sun will eventually expand and make a glowing furnace out of the earth once again. In that furnace, each and every stable structure, if significantly above the atomic level, will be obliterated.

spirited away – another utterly miraculous transaction –, whereas the copy that replaces it, and the rest of the body, is given to complete destruction.<sup>13</sup>

In view of this scenario, which is not only miraculous but also smacks of absurdity, one may well ask: what could make one prefer the materialist account of resurrection to the classical account? It is very clear, I believe, that the human body just isn't the right candidate for being the continuous link between the former life of a human being and his or her resurrected life. The classical account has a far better candidate for that role. But the classical account also has the misfortune of being a *dualistic* account, and dualism makes modern thinkers recoil in horror – even many who are Christians.

This frightened reaction is unwarranted. There are no good scientific reasons against dualism (see Section 3<sup>14</sup>), nor are their good theological reasons against dualism if dualism is correctly understood. Dualism, as here understood, is obviously psychophysical dualism. Dualism of that kind does no require one to accept a dualistic religion, like Zoroastrianism or Manichaeism. It does not require one to adopt a disdainful attitude towards the physical creation, and it does not require one to adopt such an attitude towards one's own body. Psychophysical dualism, moreover, must not be confused with the peculiar monism of the Platonistic tradition, according to which human beings are identified with their souls. Quite on the contrary, according to psychophysical dualism, human beings are neither mere subjects of action and consciousness, nor mere bodies; they are composites that have two sides to them, a physical side and a nonphysical one. And of course psychophysical dualism does not require one to believe that the connection between the two sides is an accidental or even unnatural connection, that it is anything like, say, the connection between two more or less incompatible horses hitched together. The bodysoul connection, though metaphysically contingent, obtains naturally by natural necessity, and only a supernatural act of God can uphold, once a human being has died, the existence of the subject of action and experience

<sup>&</sup>lt;sup>13</sup> Cf. again van Inwagen (1997), 246.

<sup>&</sup>lt;sup>14</sup> For more, see Meixner (2004); (2005).

which together with a certain human body constituted that human being when alive. 15

This said, it must not go unmentioned that there is, nevertheless, a certain impediment confronting the classical, dualistic account of resurrection. This impediment is located in the theological tradition. When describing the classical account of resurrection, I deliberately left it open whether the human body Y is or is not (numerically) identical with the human body X -X being the body of which the relevant subject of action and consciousness was once the soul, Y being the body of which it becomes the soul at the resurrection. Obviously, if it is asserted that Y is identical with X, then all the advantages that the classical, dualistic account of resurrection has over the materialistic account are nullified; for all the difficulties that confront the materialist account will then also confront the classical account. So, in order to hold on to the advantages of the classical, dualistic account, one ought to complete that account by asserting that Y is not identical with X, that Y is a truly *new* body, which assertion does, of course, not preclude that Y is in many respects very similar to X (say, like the body of Jesus after his resurrection was similar to his body before the resurrection). But the trouble is that by asserting the numerical difference of Y and X one is contradicting ecclesiastical authorities, for example Thomas Aquinas, who explicitly asserts that the body a human being is resurrected with is numerically identical to the body the human being has now (and will die with):

Ad hoc quod homo idem numero resurgat, necessarium est quod partes eius essentiales sint eaedem numero. Si igitur corpus hominis resurgentis non erit ex his carnibus et his ossibus ex quibus nunc componitur, non erit homo resurgens idem numero. (S. c. G., IV, 84.)

Note that, according to the present account, the manner of the constitution (or composition) of a human being from body and soul is not *hylemorphic*, since, according to it, a soul cannot well be regarded as *the form* of a body or of a quantity of matter. However, since according to *Christian hylemorphism* (as developed by Thomas Aquinas) the rational soul of a human being is an immaterial individual substance that can exist without the body, Christian hylemorphism, too, is a form of psychophysical dualism. Note, moreover, that the present account is not per se *Cartesian* (in the full sense), since it is left open whether the human body is a substance (see Section 2). Descartes himself, though, required decidedly less for being a substance than is *here* required (see Section 1).

How should one position oneself in this matter? I have argued that, on the basis of the Christian faith, it is not reasonable to identify *the continuous link* between the human being that died and the human being that is resurrected entirely or even only in part with his or her body, existing continuously from death to resurrection. Adopting such a position is not reasonable because it is likely to make resurrection impossible for many human beings, perhaps for all human beings, since it simply does not seem to be the case that their bodies exist continuously from death to resurrection. Now, Thomas Aquinas, for one, was very well aware that the bodies of some human beings do not continuously exist from death to resurrection, but, instead, believed that unequivocally the same human being – and with that same human being the same human body – can be reconstituted by God from the still existing identical *individual matter* that was once in the human body during the time it was first alive, by reuniting that matter – or rather, part of it – to the still existing identical soul:

[A]nima rationalis, quae est hominis forma, manet post mortem ...; materia etiam manet, quae tali formae fuit subiecta, sub dimensionibus eisdem ex quibus habebat ut esset individualis materia. Ex coniunctione igitur eiusdem animae numero ad eandem materiam numero, homo reparabitur. (S. c. G., IV, 81.)

Suppose, however, what is not unlikely at all: that even all this matter is destroyed, that it is transformed into energy in the nuclear cauldron of a new sun that swallows the earth. What then of resurrection?<sup>17</sup>

Peter Geach makes appeal to the heroism of faith "against strong empirical objections": "The traditional faith of Christianity, inherited from Judaism, is that at the end of this age Messiah will come and men rise from their graves to die no more. That faith is not going to be shaken by inquiries about bodies burned to ashes or eaten by beasts." See: Geach (1997), 234. Indeed, the faith of, say, Peter van Inwagen in resurrection is not shaken, even though he, as a Christian materialist, believes, and must believe, "that it is absolutely impossible, even as an accomplishment of God, that a man who has been burned to ashes or been eaten by worms should ever live again." See: van Inwagen (1997), 245. Van Inwagen's faith is heroic: we have seen what it costs him. But, to me, his heroism seems misplaced. A lot less of heroism, and a little more of fairness to dualism, is what I would recommend (if asked).

Note, however, that Thomas is *not* in the difficulty that is posed by Peter van Inwagen's thought experiment (described above), since for Thomas – being a Christian dualist, and not a Christian materialist – there is, besides the ingredient of *identical matter and its identical disposition in space*, a second – and *entirely non-arbitrary* – ingredient to the identity of a human being (*and* the identity of a human

I therefore conclude that Thomas Aquinas is in error regarding resurrection: the body of the resurrected human being is not numerically the same body as the body it died with. And this conclusion is corroborated by the Gospel: While the resurrected Jesus is undoubtedly the same human being as the Jesus who died – the Gospel is entirely clear on this – the body of the resurrected Jesus does certainly not seem to be numerically the same body as the body of the Jesus who died, though indeed the former body is in many respects – regarding outward appearance – very similar to the latter body, and perhaps in fact continuous with it (in the sense that the first body continuously changed into a second body, numerically different from the first). Consider merely the ability of the body of the resurrected Jesus to appear suddenly out of thin air, and to disappear as suddenly into it. It is surprising that Thomas completely disregards this aspect of the body of the resurrected Jesus when discussing the (general) nature of the bodies of the resurrected (see S. c. G., IV, 84), while according great emphasis to the fact that that body could be touched and consisted of flesh and bones. To me, it seems quite clear that the body of the resurrected Jesus has a different nature than the body of the Jesus who died, and what has different natures cannot be numerically identical.

In adopting this position against the authority of Thomas, I am supported by Joseph Ratzinger, alias Benedict XVI, the current Pope. In his *Einführung in das Christentum* he writes (my translation):

Paul [St. Paul] teaches, to repeat, not the resurrection of bodies, but of persons, and this emphatically not in the return of the "flesh-bodies," that is, of the biological structures, which [return] he explicitly calls impossible ("what is mortal cannot become immortal"), but in the otherness of the life of resurrection, as it is paradigmatically modeled in the resurrected Lord. 18

body): the identical soul (which is both forma hominis and forma corporis humani). Thomas was quite aware that there is, due to the flux of matter through a human body, a certain arbitrariness in allowing matter to be an identity-maker for human beings; this awareness comes out quite clearly in the following quotation: "[N]on requiritur ad hoc quod resurgat homo numero idem, quod quicquid fuit materialiter in eo secundum totum tempus vitae suae resumatur: sed tantum ex eo quantum sufficit ad complementum debitae quantitatis; et praecipue illud resumendum videtur quod perfectius fuit sub forma et specie humanitatis consistens." (S. c. G., IV, 81.)

<sup>&</sup>lt;sup>18</sup> Ratzinger (1968), 299.

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