

# 4

## The Enigma of Death

### The Gift of Life

The goal of this chapter is to consider whether it is possible to formulate a satisfactory philosophical analysis of the concept of death. If there is such an analysis, it seems likely that the concept of life plays a central role in it. Since any obscurity in the concept of life would apparently carry over into the analysis of the concept of death, I have devoted the previous two chapters to a discussion of the analysis of the concept of life. Unfortunately, it appears that life is enigmatic. I have been unable to say precisely what 'x is alive at t' means. Insofar as the concept of life is obscure, it will import obscurity into any analysis of death in which it appears.

Since I have not been able to analyze the concept of life, I propose to make use of the concept of life as an unanalyzed primitive. Thus, for present purposes, I simply give myself the gift of life. That is, I assume that our grasp of the concept of life is sufficiently firm to permit it to be used in the analysis of the concept of death. I recognize that any obscurity in the concept of life may make what follows somewhat less than crystal clear. So be it.

### The Biological Concept of Death

Before turning to a consideration of some proposed analyses of the concept of death, it may be useful to try to be a bit more specific about the target concept. That is, I should try somehow to identify the concept whose analysis is here in question. As I remarked in

Chapter 1, some of the literature on death seems to be based on the assumption that the most interesting concept of death is one applicable only to people. Such analyses mention *brain function*, *consciousness*, or some other concept that has no application to lowly organisms. Thus, some writers seem to be trying to analyze a concept of death that could not possibly apply to any lower animal or plant.<sup>1</sup>

I also mentioned in Chapter 1 that this view seems quite odd to me. I see no reason to suppose that the word 'died' has different meanings in these sentences:

1. JFK died in November of 1963.
2. The last dodo died in April of 1681.
3. My Baldwin apple tree died during January of 1986.

I acknowledge that I cannot *prove* that 'died' is univocal in these sentences. Nor can I *prove* that there is no essentially "personal" sense of 'died'. However, I shall proceed here on the assumption that there is a concept of death that has application throughout the biological realm. As I see it, just as there is a single concept of life that applies to every living plant and animal, so there is a single concept of death that potentially applies to every organism from the lowliest plant all the way up to the most complex mammal. I call this "the biological concept of death." Our topic here is the analysis of this concept.

It may also be important to recall another point I made in Chapter 1. This concerns the distinction between two fundamentally different projects. One project is the attempt to discover a correct *analysis* of the concept of death. The other project is the attempt to formulate a useful *criterion* of human death.

As a sample criterion of death, we might consider:

4. A person, S, dies at a time, t, if and only if S's brain ceases to emit z-waves at t.

As a sample analysis of death, we have this:

- D1: x dies at t =df. x ceases to be alive at t.

A *criterion* is something that is proposed for acceptance; that might be adopted if enough people think it would be useful; that might later be rejected if it proves inadequate or becomes obsolete as a result of technological advances. A criterion is better if it is more useful—easier to apply; more practical; more decisive. It would apply only to human beings. Thus, if enough morticians, prosecutors, judges, transplant teams, etc., agreed at a convention to adopt (4), it would be the criterion of death in human beings (until replaced).

A philosophical *analysis*, on the other hand, is supposed to report a necessary truth about the construction of a concept. If D1 is true, then the concept of death is constructed out of the concepts of life and cessation in the indicated way. No amount of voting or adopting could make D1 true if in fact it is false; nor could any human activity make it false if in fact it is true. (Of course, we could conventionally adopt some other meaning for the word 'dies'. But this would have no bearing on the analysis of the concept that word formerly expressed.)

Furthermore, the existence of possible counterexamples shows that a proposed analysis is simply false. It shows that the concept expressed by the term to the left of the '=df.' sign is not the same as the concept expressed by the term to the right. When this happens, the analysis fails. Counterexamples are not decisive against proposed criteria in this way. The excellence of a criterion is *usefulness*, not truth. It's not entirely clear what a counterexample would be. But the mere possibility of a few counterexamples to (4) has no bearing whatsoever on its suitability as a criterion of death for human beings. If actual counterexamples are sufficiently rare, (4) might remain perfectly acceptable as a criterion of death in human beings.

The topic under consideration here is the *analysis* of the biological concept of death. Let us now turn to an analysis that has recently been proposed.

### Perrett's Analysis

In his book *Death and Immortality*, Roy Perrett seems to be discussing the nature of death itself. He distinguishes between *persons*

and *biological organisms* and says that he is focusing on the question about what we mean when we speak of the death of a biological organism.<sup>2</sup> Thus, it appears that Perrett's target in his book is identical to my target in this chapter. He calls it "the concept of death that is neutral to all deaths."<sup>3</sup> He goes on to say: "My proposal is that death be identified with [the destruction of a functioning biological organism]."<sup>4</sup>

If Perrett said no more on this topic, the reader would surely assume that he meant to defend this analysis of the concept of death:

D2:  $x$  dies at  $t =df.$   $x$  is a living biological organism up to  $t$ , but at  $t$ ,  $x$  is destroyed.

However, Perrett has more to say.

In a passage just a sentence later than one already cited, Perrett says that "*death* is the annihilation of a functioning biological organism."<sup>5</sup> And only a page after that, he says that death is 'the disintegration of a living organism . . .'<sup>6</sup> These remarks seem to confuse matters, since it now appears that Perrett has committed himself to three different analyses of the biological concept of death. According to the first, death is the *destruction* of a living biological organism; according to the second, it is the *annihilation* of such an organism; according to the third, it is the *disintegration* of the organism.

The three proposals are distinct. We could investigate them independently. However, it seems to me that none is correct. One example suffices to show that each of Perrett's proposals is false. Suppose a butterfly collector captures a rare specimen. Suppose she carefully places it in the killing jar. Surely it is possible that she might kill it without breaking off any legs and without dislodging even so much as a single scale from the wings. The specimen might be "perfect." In such a case, I think, even though the butterfly had died it would be wrong to say that it has been "destroyed." It is even more obvious that it would be wrong to say that it has disintegrated or that it has been annihilated. Thus, Perrett's proposal, no matter how interpreted, is false.

In another passage, Perrett notes that death "marks the transition from being alive to being dead."<sup>7</sup> This hints at a much more popular conception of death—the conception according to which a

thing dies at a time if and only if it then ceases to be alive. Since this conception is so popular, I refer to it as "the standard analysis." Let us turn to it.

### The Standard Analysis

I think it is fair to say that something like the analysis formulated above in D1 is almost universally assumed to be correct. Some would accept D1 as it stands. Thus, in his recent book *Thinking Clearly about Death*, Jay Rosenberg says, "to die is to cease to live, to cease to be in the condition of life."<sup>8</sup> Others would modify this by adding that death occurs only if life *permanently* ceases. Rosenberg cites a dictionary definition that suggests this idea. According to this dictionary, death is "the total and *permanent* cessation of all the vital functions of an animal or plant."<sup>9</sup> Still others would modify it in a slightly different way by adding that death occurs when life *irreversibly* ceases. Rosenberg himself suggests this view when he says elsewhere in his book that ". . . an organism dies when it loses its power to preserve and sustain its self-organizing organization permanently *and irreversibly*."<sup>10</sup> Since Rosenberg takes life to be the cited power, this is tantamount to saying that an organism dies when it irreversibly ceases to live. The variations may seem trivial. Let us say that each of the proposed analyses, and any others relevantly like them, are instances of "the standard analysis." According to this view, death is the (perhaps permanent, perhaps irreversible) cessation of life.

### Puzzles About Suspended Animation

I think the three above-mentioned versions of the standard analysis are genuinely distinct and mutually incompatible. Furthermore, I think none of them is true. Although each of them is open to several sorts of objection, I want to discuss two main sorts of difficulty. The first difficulty is that the standard analysis is incompatible with some facts concerning suspended animation. Let us then consider this phenomenon.<sup>11</sup>

As a rough first approximation, we may say that an organism

undergoes suspended animation when it temporarily ceases to be alive. The most familiar type of suspended animation involves freezing. It takes place every day in biology laboratories all over the world. In a typical case, some sort of microorganism has been grown in a culture. The culture is then flooded with glycerol or some other suitable cryoprotectant, and the whole thing is gradually cooled until frozen solid. Subsequently, the frozen culture is placed for storage in liquid nitrogen at a temperature of  $-196^{\circ}\text{C}$ . The glycerol prevents crystalization within the cells, which otherwise would rupture.

Later on, when there is need for the microorganisms, a lab technician can remove the culture from the freezer and allow it gradually to warm up. If the culture has been properly handled, the microorganisms will return to life merely as a result of being returned to room temperature.

This sort of procedure can be applied to all sorts of microorganisms, as well as to isolated cell cultures. It is also an important step in certain reproductive techniques. For example, consider in vitro fertilization as applied to cows. Sperm and eggs can be removed from adult animals and then mixed in a dish. Fertilized eggs can then be removed and allowed to undergo a relatively small number of cell divisions. The blastulas are then soaked in glycerol and frozen in liquid nitrogen. They cease to be alive.<sup>12</sup> Later, the frozen blastulas may be thawed and implanted in the reproductive tracts of suitable cows. They resume growth and eventually are born just like old-fashioned calves.

In vitro fertilization followed by fetal implantation is very common in cows and horses. It is much less common in human beings, but it has been used on hundreds of occasions during the past twenty-five years or so. All these cases illustrate suspended animation, since in every case a living organism (or cell culture, or blastula) temporarily ceases to be alive and then lives again.

I realize that it is currently impossible to freeze adult human beings (or any other large mammals) and subsequently revive them. Freezing destroys too many cells. However, it is reasonable to believe that the problems are all merely technical. Just as we can now freeze and later reanimate a day-old human blastula, so someday we will be able to freeze and then later reanimate an adult human being. Let us imagine that the technology has in fact been

developed, and that an adult human being can be frozen and later reanimated. I prefer to proceed in this way primarily for dramatic effect, even though my argument could just as well be formulated by appeal to an example involving organisms that currently can be frozen and revived.<sup>13</sup>

To see how facts about suspended animation bear on the standard analysis of death, let us consider a case.

*Case One.* A man has a bad disease. There is currently no cure. Unless some way can be found to stop the disease, he will die in a few days. There is good reason to believe that a cure will be found in a dozen years or so. Cryogenics, Inc., offers to inject some specially formulated glycerol and to freeze the man solid. Then, when the cure has been perfected, they will thaw him out, reanimate him, and see to it that he is cured of the disease. The man accepts the offer and is injected and frozen. Ten years later, a cure for the disease is found. The body is thawed, reanimated, and subjected to the cure. The man goes on with his life.

In one of the passages cited above, Rosenberg said that to die is to cease to live.<sup>14</sup> This surely suggests the following version of the standard analysis of the concept of death:

D1:  $x$  dies at  $t = df.$   $x$  ceases to be alive at  $t$ .

Case One refutes D1. For in Case One the man ceased to be alive when he was frozen. Without an accepted analysis of the concept of life, this point is hard to prove. But it seems reasonable to say that the man ceased to live when he was frozen. After all, he then ceased to engage in metabolism, growth, motion, and the other life functions. D1 therefore implies that the man died when he was frozen. But the implication is false—the man did not die when frozen. He went into suspended animation. Unless something went wrong with the procedures, and it became impossible to reanimate him, no one would want to say that Cryogenics, Inc., *killed* its client.

The mere possibility of suspended animation shows that death cannot be defined as the cessation of life. When an organism enters

suspended animation it ceases to live, but it does not then die. We must alter the standard analysis to accommodate this fact. The analysis of death must be consistent with the fact that not all organisms that enter suspended animation die.

Perhaps we can think of suspended animation as the *temporary* cessation of life. Then perhaps we will want to say that death is the *permanent* cessation of life. This suggests another version of the standard analysis of death:

D2:  $x$  dies at  $t = df.$   $x$  ceases permanently to be alive at  $t$ .

Notice first that D2 yields a different result in Case One. Since the frozen man did not cease *permanently* to live when he was frozen, D2 (unlike D1) entails that he did not then die. This may seem to be an improvement, since it seems to be consistent with the facts about suspended animation. But another example shows that there is something implausible about D2.

*Case Two.* Each of two identical twins has the same currently incurable disease. Both are frozen and go into suspended animation. Unfortunately, about one year later, one frozen body is damaged. The damage is so severe that it would be impossible ever to reanimate the body. It is then thawed out and buried. That twin never lives again. The other twin remains frozen until a cure is found. He is then thawed, reanimated, and cured. The second twin goes on with his life.

D2 yields strange results in Case Two. Since the first twin in fact never lives again after being frozen, D2 entails that he died when he was frozen. His loss of life was *permanent*. On the other hand, even though there is no discernible difference between the twins during their first year on ice, D2 entails that the second twin did not die when he was frozen. This follows from the stipulated fact that the second twin comes back to life later. His loss of life was only *temporary*. But it seems to me that until the accident occurs, the twins are in relevantly similar conditions. We can imagine that, cell-for-cell, they are indiscernible. So either they are both dead, or they are both alive, or they are both neither dead nor alive. (My own view is that they are both neither dead nor alive. As I see it,

suspended animation is a state that excludes both life and death. But the point of the example does not depend on my intuition.<sup>15</sup> D2 entails that the twins are in different "vital states" during the first year on ice—one is dead, the other not. Since the twins are in fact not in different vital states during that period of time, D2 is wrong.

Consider yet a third analysis of death suggested by Rosenberg's remark<sup>16</sup> about *permanence* and *irreversibility*:

D3:  $x$  dies at  $t$  =df.  $x$  ceases permanently and irreversibly to be alive at  $t$ .

D3 has truly bizarre implications in Case Two. Consider the twin whose body is damaged. According to D3, this twin *never* dies. He does not die when frozen, because at the time of freezing later reanimation is still possible. Though he then ceases permanently to be alive, he does not cease irreversibly to be alive. If he had been handled properly, his condition would have been reversed. He would have come back to life. Nor according to D3 does he die when the body is damaged in handling, for he does not cease in any way to be alive at that time. That is a time at which he is not alive to start with. So there is no time at which the twin "ceases permanently and irreversibly to be alive." Surely this is wrong; surely there is *some* time at which that twin dies.

Let us consider a variant of D3:

D4:  $x$  dies at  $t$  =df. (i)  $x$  ceases permanently to be alive at or before  $t$ , and (ii) at  $t$ , it becomes physically impossible for  $x$  ever to live again.

The idea behind D4 is that the time of death is the time at which the loss of life becomes irreversible. The loss of life may have occurred years before. D4 implies that there is a time of death for the damaged twin. The time of his death, according to D4, is not the time when he was frozen but the time when the body is damaged beyond repair, for this is the time at which the loss of life becomes irreversible.

In more mundane cases, D4 implies that death occurs approximately when life ceases. For in more mundane cases, when life ceases, it is almost immediately impossible for it to return.

Some would reject D4 because it implies that it is impossible for an organism to live again after it dies. The comedian Jerry Lewis claims that he died several times while undergoing open-heart surgery. If D4 is correct, Lewis must be wrong. We can offer a somewhat less striking claim for Lewis. Perhaps he would be satisfied to say instead that he ceased to live several times while undergoing open-heart surgery. D4 permits that. Maybe that's all Lewis means.

A more serious problem with D4 can be brought about by consideration of a distinction. In some cases, later reanimation becomes impossible because of changes that take place *within* the body. Thus, for example, if the body is damaged beyond repair, internal changes make later reanimation impossible. In other cases, however, changes that take place *outside* the body may make later reanimation impossible. Perhaps the body is moved to a place where it cannot be reached; perhaps a crucial reanimation chemical is irretrievably lost; perhaps the atmosphere of the earth becomes so choked with pollution or radioactivity that it would be impossible to reanimate the frozen corpse (even if there were some technicians to try!).

Suppose a body is in suspended animation, and some such external change takes place, thereby making later reanimation impossible. Provided that the body is *internally* unchanged, I would be uneasy about saying that it had just died. I would rather say that the body remains undead until *internal* changes occur that would independently make subsequent reanimation impossible. Thus I propose:

D5:  $x$  dies at  $t$  =df. (i)  $x$  ceases to be alive at or before  $t$ , and (ii) at  $t$ , internal changes occur in  $x$  that make it physically impossible for  $x$  ever to live again.

While I think that D5 comes pretty close to solving the problem of suspended animation, I still have my doubts. I am troubled by the obscurity of the concepts of *internality*, *physical impossibility*,

and *life*. But let us assume that we have come close enough. I want to turn to another problem for the standard analysis.

### Problems Concerning Fission and Fusion

In spite of its plausibility and in spite of the fact that Rosenberg seems to endorse something quite like it, D5 is inconsistent with certain other plausible views Rosenberg maintains. In an interesting passage, Rosenberg asserts that death is not the only route out of life. To illustrate his point, he describes the case of an amoeba, Alvin.<sup>17</sup> He tells us that Alvin was a fat and healthy amoeba. According to the story, Alvin was so fat and healthy that at precisely midnight on Tuesday night/Wednesday morning, Alvin underwent fission and became two amoebas. According to Rosenberg, Alvin no longer existed on Wednesday. Apparently, Alvin was "replaced" by his two descendants, Amos and Ambrose. Rosenberg claims that Alvin's example shows that "there are other ways for a life to come to an end besides death."<sup>18</sup> So while Alvin is no longer among the living on Wednesday, it is ". . . clear that he did not die."<sup>19</sup> My own intuitive sense of the situation is identical to Rosenberg's. I would not say that Alvin died.

Fission is not the only biological process that may seem to provide a deathless exit from life. Rosenberg apparently thinks that metamorphosis does the same thing. As he sees it, when a caterpillar turns into a butterfly, the caterpillar ceases to exist but does not die.<sup>20</sup>

The point that Rosenberg seems to have missed is this: if Alvin ceased to be alive at midnight, but did not die at midnight, then death cannot be the cessation of life. When we say that a thing died, we cannot mean just that it ceased to live. For Alvin ceased to live without dying. If we think that the caterpillar gets out of life without dying, we will have to say that its case also refutes the idea that death is the cessation of life.

A natural "fix" would be based on a crucial feature that is common to division and metamorphosis. In each case, an organism seems to go out of existence, but the stuff of which it is made continues to exist—and this stuff continues to support life. We can

make use of this common feature in a relatively economical new analysis of death:

D6:  $x$  dies at  $t$  =df. (i)  $x$  ceases to be alive at or before  $t$ , and (ii) at  $t$ ,  $x$  undergoes internal changes that make it physically impossible for  $x$  ever to live again, and (iii) it's not the case that  $x$  turns into another living thing or a bunch of other living things at  $t$ .

It may be useful to say a few words about a phrase—"turns into"—that appears in D6. This phrase is intended to express what is traditionally called 'substantial change'. Some would say that the caterpillar undergoes substantial change when it turns into a butterfly. As I understand it, the crucial elements in a pure example of such a change are these: the first entity (the caterpillar) is a concrete individual substance—a "thing." It is made of some "stuff"—a certain parcel of protoplasm, perhaps. During the substantial change, the first entity goes out of existence, and a new concrete individual substance (in this case, the butterfly) comes into existence. The new entity is diverse from the old entity, but they are made of the same parcel of stuff (or "matter"). In such a case, we can say that the first entity "turned into" the second.<sup>21</sup>

D6 gets the fission example right. At the moment of division, Alvin turns into Amos and Ambrose. Each of these is a living thing. So, according to D6, Alvin does not die. Furthermore, in an ordinary case, in which some organism ceases to live and simply rots, D6 still yields the correct result. Since, in such cases, the organism does not turn into living things, D6 entails that it dies. D6 also preserves Rosenberg's intuitions concerning the caterpillar example.<sup>22</sup> At the moment of metamorphosis, the caterpillar allegedly turns into the butterfly, which is a living thing. So, although it ceases to be alive, it doesn't die.

Reflections such as these on cases of fission invite reflections on corresponding cases of fusion. Are there examples in which organisms go out of existence by fusing with others? Would we want to say that such organisms die when they fuse? Let us look into this.

Under certain environmental conditions, certain types of single-celled green algae engage in a sort of fusion. These creatures, called chlamydomonas, are flagellated, chlorophyll-bearing plants. In their normal state, each individual is haploid. Although they are

all of approximately the same size, they come in two different mating types. When conditions are favorable, large clusters of individuals form.

Eventually the clustered cells move apart in pairs. The members of a pair are positioned end to end, with their flagella, which bear species-specific and mating-type-specific attractant sites at their tips, in close contact. The cells then shed their walls, and their cytoplasms slowly fuse. Finally, their nuclei unite in the process of fertilization, which produces a single diploid cell, the zygote.<sup>23</sup>

Suppose two chlamydomonas, *c*<sub>1</sub> and *c*<sub>2</sub>, fuse to form a new zygote, *c*<sub>3</sub>. It seems reasonably clear that, in this process, *c*<sub>1</sub> and *c*<sub>2</sub> go out of their existence. Furthermore, it seems reasonably clear that neither one of them turns into any new living individual. No living part of the resultant individual, *c*<sub>3</sub>, can be identified as the part such that *c*<sub>1</sub> turned into it. The stuff from which *c*<sub>1</sub> and *c*<sub>2</sub> were made is thoroughly blended in *c*<sub>3</sub>.

In this case, we must say that *c*<sub>1</sub> ceases irreversibly to live and does not turn into another living thing or even into a bunch of living things. D6 then legislates that *c*<sub>1</sub> dies at the moment of fusion. Yet I would hesitate to say that *c*<sub>1</sub> dies at the moment of fusion. I would say that the example of the chlamydomonas shows that there are still more ways of getting out of life. In addition to death, suspended animation, and deathless fission, there is also a certain sort of deathless fusion that sometimes does the trick. So D6 is wrong.<sup>24</sup>

We can revise D6 in such a way as to take account of fusion, too. We merely add a clause specifying that if an organism engages in deathless fusion, then it does not die. In other words, if it is a member of a set of living things that fuses into a new living thing, then it does not die:

D7: *x* dies at *t* =df. (i) *x* ceases to be alive at or before *t*, and (ii) at *t*, *x* undergoes internal changes that make it physically impossible for *x* ever to live again, and (iii) it is not the case that *x* turns into a living thing, or a bunch of living things, at *t*, and (iv) it is not the case that *x* is a member of a set of living things whose members fuse and turn into a living thing at *t*.

The fundamental idea behind D7 is reasonably simple: a thing dies if and only if it ceases irreversibly to live without making use of one of the deathless exits; the deathless exits are metamorphosis (turning into another living thing); a certain sort of fission (turning into a bunch of living things) and a certain sort of fusion (being a member of a set of living things that fuse into a living thing). I think D7 gets a wide variety of cases right. In simple cases, in which an organism ceases to live and simply rots, D7 says that the organism dies. In cases of fission like the one illustrated by Alvin, D7 says that the organism does not die, even though it ceases to live. Similarly for the chlamydomonas—they cease to live without dying because they make use of one of the deathless exits.

Nevertheless, it seems to me that D7 still fails. One problem is that there are forms of division that mimic deathless fission but that seem to involve the death of the divided organism. Consider an example. Imagine a device for use in biology laboratories—a "cell separator." This is a machine that grinds up mice and then emits a puree of mouse cells. The machine is constructed in such a way that all the mouse cells come out alive. Each cell can be placed in a suitable medium and kept alive indefinitely.

Suppose some mouse is placed in the cell separator and is ground up into a puree of living mouse cells. In this case, the mouse goes out of existence, and hence ceases to be alive. However, it turns into a bunch of living things. As a result, the mouse fails to satisfy the right-hand side of D7. D7 then legislates that the mouse does not die. It seems to me, however, that the cell separator kills the mouse.

Another example involves not cells, but bodily organs. Reasonably sane medical personnel sometimes want to harvest living organs from dying patients. Suppose a mad scientist wants to harvest *all* the organs from some perfectly healthy victim. Suppose he captures his victim, knocks him out, and then carefully dissects the victim's body in such a way as to waste nothing. Every organ is preserved alive. (If need be, we can imagine that each organ is transplanted into some needy body, where it remains alive for years to come.) In this case, it would appear that the poor victim goes out of existence and is replaced by a complete set of living bodily organs. If D7 were correct, we would have to say that the victim did not die. This seems wrong.<sup>25</sup>

If we allow ourselves to make use of another rather obscure concept, we may be able to revise D7 in such a way as to accommodate these examples. Let us assume that we have sufficient understanding of what we mean when we say that something is an *organism*. Now notice that when an amoeba deathlessly divides, it turns into living *organisms*, but that when a mouse is killed in the cell separator, it does not turn into living organisms. It turns into living cells. Similarly, in the case of the Mad Organ Harvester, the victim does not turn into living organisms. He turns into the members of a set of living *organs*. Perhaps this marks the distinction between deathless and deadly division.

We can revise D7 as follows:

D8:  $x$  dies at  $t$  =df. (i)  $x$  ceases to be alive at or before  $t$ , and (ii) at  $t$ ,  $x$  undergoes internal changes that make it physically impossible for  $x$  ever to live again, and (iii) it is not the case that  $x$  turns into a living organism or a bunch of living organisms at  $t$ , and (iv) it is not the case that  $x$  is a member of a set of living organisms whose members fuse and turn into a living organism at  $t$ .

It seems to me that the introduction of talk about organisms in D8 is a fundamental mistake. It is a mistake, as I see it, because the concepts of life and death apply univocally to biological entities, whether organisms or not. The difficulty can be brought out by reflection on a variant of the example concerning Alvin the amoeba.

Suppose a researcher has removed a single cell from a frog and is keeping it alive in a suitable medium. Suppose the researcher is interested in cell division. She treats the cell in a special way. Subsequently, the cell divides, giving rise to two "daughter cells." Since neither daughter cell is an organism, the original frog cell does not turn into a bunch of living organisms. Thus, D8 entails that the frog cell dies at the moment of division. But it seems to me that the frog cell is relevantly like Alvin the amoeba. Since we don't want to say that Alvin dies when he divides, we should not say that the frog cell dies when it divides. Each of them gets out of life deathlessly. So D8 is wrong.

Fission and fusion are puzzling. I find that I cannot explain the difference between their deathless forms and their deadly forms.

### The Mystery of Death

I think there is a single concept of death that applies across the biological board. When we say of some plant or animal, or of some cell or tissue, or of some organ, that it has died, we may be expressing this concept. I call this the biological concept of death. Roughly, what we seem to mean in such cases is that the biological entity has ceased to live but has not entered suspended animation and has not engaged in one of the deathless forms of fission or fusion. Explaining death in such rough (and circular) terms is not too difficult. The difficulty arises when we try to clarify the concepts of suspended animation and deathless fission and fusion. It is then that the enigma of death begins to reveal itself.

My main point is that when we say that some biological entity has died, we do not invariably mean that it has ceased to live. I am inclined to suspect that we never mean just this. If there is some single thing that we do mean, then it is hard to say precisely what it is. So, though death looms large in our emotional lives, though we hate it, and fear it, and are dismayed by the thought that it will someday overtake us and those we love, we really don't know precisely what death is. The Reaper remains mysterious.



process' was defined by appeal to the concept of death. Thus, even if there is no guarantee that there is a causal connection, in particular cases, between death and dying<sup>2</sup>, there is some, however weak, conceptual connection between the concept of death and the concept of dying<sup>2</sup>.

## 6

### The Survival of Death

One of the most profound and troubling questions about death is whether it can be survived. I take this to be the question whether people (and other living things) continue to exist after they die. I think I know how this question should be answered, and I think the answer contains some good news and some bad news.

Those who think that we do not survive death may be called "terminators." They accept the termination thesis, according to which people cease to exist when they die. It should be clear that the termination thesis is just the denial of the notion that we survive death. The termination thesis is my main focus in this chapter. In the first section, I attempt to formulate the doctrine clearly. In the second section, I indicate something of its popularity. Then, in the third section, I try to show how profoundly counterintuitive it really is. Various lines of argument in favor of the doctrine are then discussed. In each case, I try to show why the argument is unsuccessful. I conclude in the final section with a brief discussion of the implications of my view.

#### The Termination Thesis

To focus the discussion, let us introduce a general principle that expresses a version of the thesis that we cease to exist when we die. This version of the thesis is restricted to people. It says:

**TTp:** If a person dies at a time, then he or she ceases to exist at that time.

I should perhaps say a word or two about the intended meaning of TTp. Three concepts are especially interesting: the concept of a *person*; the concept of *death*; and the concept of *existence*.

I think we will have to begin our consideration of this issue without any explicit account of the concept of persons. Later, I will distinguish between two different meanings that the term may have. (Still later—in Chapter 7—I will consider two more concepts of personality.) For now, let us assume that we have sufficient grasp of the meaning of the term ‘person’ as it appears in TTp. I mean to use the word in such a way that it would be correct to say that I am a person, and you are a person.

‘Dies’ in TTp can be taken to express what I have been calling ‘the biological concept of death.’<sup>1</sup> Although I cannot provide a satisfactory philosophical analysis of this concept, I think the concept is sufficiently familiar for present purposes. In typical cases, when a living organism ceases to live, it dies. In Chapter 4, I argued that there are some cases in which living organisms cease to live without dying. Organisms that go into suspended animation illustrate one important deathless exit from life; organisms such as amoebas that undergo certain forms of fission or fusion illustrate another. There may be more. Thus, we cannot define ‘dies’ as ‘ceases to live’. At best, we might say that ‘dies’ means ‘ceases to live but does not enter suspended animation and does not undergo deathless fission or deathless fusion.’ Obviously, this is no definition of death. But it will have to do.

When I say that a thing “ceases to exist” at a time, what I mean is that for some period of time up to that time there was such a thing as it; subsequently there is no such thing. So, for example, imagine that I have a little wooden table. Suppose I break off the legs and then chop up the tabletop for kindling. Suppose I burn all the resulting wood and scatter the ashes. Then the table no longer exists. Of course, all the atoms from which it was made still exist. But the table no longer exists. Instead of the table, we now have scattered ashes and dispersed smoke.

We have to be clear on the distinction between two fundamentally different sorts of case. In some cases, such as the case of the little table, a certain object *simply ceases to exist*. In other cases, an object does not simply cease to exist, but merely ceases to exist *as something or other*. This may be illustrated by the case of a Jewish

boy who reaches the age of thirteen. According to tradition, each such boy then ceases to exist *as a boy*. He then becomes a man. But unless something very unusual happens at his bar mitzvah, it would be entirely wrong to say that such a Jewish boy simply ceases to exist when he reaches age thirteen. He keeps on existing; he just stops being a boy.

The distinction can also be illustrated by a variant of the table example. Suppose I alter the table in some trivial ways, place it on top of my desk, and proceed to use it as a lectern. Perhaps the table has ceased to exist *as a table*. But it would be wrong to say that it has simply ceased to exist. The object that formerly was a table still exists. Now it is a lectern.

The case in which the table is smashed and burned illustrates a case in which a complex physical object is so profoundly altered that it simply ceases to exist. The case in which the table is converted into a lectern illustrates the sort of case in which a complex physical object is altered, but does not simply cease to exist. It only ceases to exist as a table. It would be good to be able to state, in fully general terms, the principles that explain the difference between the two sorts of case. We might want to know just why it is that in some cases things persist through change, whereas in others they do not. Unfortunately, I cannot provide such principles. We will have to proceed by appeal to our best metaphysical intuition.<sup>2</sup>

TTp is not the thesis that when a person dies, he or she ceases existing *as a person*. It is the thesis that when a person dies, he or she *simply ceases to exist*. The person goes out of existence; subsequently, there is no such thing as that person. No object that exists afterward is such that we could correctly say of it, ‘this formerly was a living person.’ Terminators believe this. Survivalists deny it. I am a survivalist.

### Some Philosophers Who Have Accepted the Termination Thesis

In his letter to Menoeceus, Epicurus says that “death is nothing to us.”<sup>3</sup> He supports this claim by appeal to some arguments. One premise of one of them is that if an individual does not exist at a

time, then nothing bad can happen to him or her at that time. Another premise of that argument seems to be a version of the termination thesis. He says that "when death comes, then we do not exist."<sup>4</sup> So Epicurus apparently believed that when we die, we simply cease to exist. He was a terminator.

Epicurus's disciple Lucretius maintained the same view and defended it by appeal to similar arguments. He said that we have nothing to fear from death, since "he who exists not, cannot become miserable."<sup>5</sup> The remark would be pointless unless it were assumed that a person who is dead "exists not." Thus Lucretius also must have believed that death marks the end of our existence. So he too was a terminator.

Modern defenders of the Epicurean view about the evil of death sometimes assert TTp. For example, Peter Dalton says. "When a man is dead he no longer exists and will never again exist."<sup>6</sup> Similar remarks can be found in the writings of other modern-day Epicureans.<sup>7</sup>

In his book on *Death and Immortality*, Roy Perrett asserts: " 'A biological organism has died' does entail 'A biological organism has ceased to exist.' "<sup>8</sup> Further remarks in the context of the one cited make it clear that Perrett accepts the claim that death marks the end of existence not only for people, but for biological organisms of all other sorts as well. He would apparently endorse this more general version of the termination thesis:

TTo: If a biological organism dies at a time, then it simply ceases to exist at that time.

Reflection on TTo suggests an even broader version of the termination thesis. Instead of speaking just of persons, as TTp does, or just of organisms, as TTo does, we might formulate a version that applies to every living thing—whether person, organism, cell, tissue, or organ. This would be:

TTu: If a living thing dies at a time, then it simply ceases to exist at that time.

So far as I know, no modern philosopher has discussed the view more extensively than Jay Rosenberg. In *Thinking Clearly about*

*Death*, Rosenberg describes death as a "change in kind."<sup>9</sup> In a typical case, Rosenberg seems to maintain, when a person dies, she ceases to exist. Just as the person ceases to exist, a new entity, a corpse, begins to exist. According to Rosenberg, it is a matter of metaphysical necessity that a person's history comes to an end when she dies. "There is no possibility that a person's history might extend beyond that person's death."<sup>10</sup>

Rosenberg recognizes that ordinary speech is full of talk that seems to presuppose that people regularly continue to exist after death. Thus, for example, we say:

My Aunt Ethel died last week, and we're burying her tomorrow.

This statement clearly suggests that there is one thing ("Aunt Ethel") that both died last week and will be buried tomorrow. But Rosenberg maintains that this is mere "linguistic appearance." He goes on:

There is no one thing which both died last week and will be buried tomorrow. What died last week was Aunt Ethel. What will be buried tomorrow, however, is not Aunt Ethel but rather Aunt Ethel's remains. What will be buried tomorrow is a corpse, Aunt Ethel's corpse. But a corpse is not a person. Aunt Ethel's corpse is not Aunt Ethel.<sup>11</sup>

Lots of other philosophers apparently maintain similar views. So many, in fact, that it would be nearly impossible to cite them all, and, since the view is so common, it seems to me that there is little point in listing any more than the handful so far mentioned. So it is clear that lots of philosophers have maintained that people simply cease to exist when they die. Some have maintained that all biological organisms are relevantly similar—they all simply cease to exist at death.

### Doubts About the Termination Thesis

A substantial portion of our common-sense thought about death conflicts blatantly with the termination thesis. Rosenberg men-

tioned one example. We often say such things as that Aunt Ethel died last week and we're burying her tomorrow. Anyone who finds this (from the metaphysical perspective) a fully satisfactory thing to say must therefore think that at least some entities continue to exist after they have died. Otherwise, they would say that Aunt Ethel died last week and we're burying something else tomorrow, for she is no longer here to be buried.

But Rosenberg's example is just one of a huge supply. Let us consider some others.

1. Consider what goes on in elementary biology courses. The aim is to teach children something about the anatomy of certain organisms—usually frogs. On the appointed day, the children cut open the dead frogs, carefully drawing diagrams of the mutilated guts. The poor frogs have been sacrificed on the altar of scientific education.

Imagine the reaction if someone informed the teachers and students that the items on their lab tables had in fact *never lived*. Suppose someone pointed to one of the dismembered frogs and said: "That very object was never alive. The thing you are dissecting never swam in a pond; never ate a fly; never dozed on a lily pad." Surely such remarks would be greeted with utter disbelief. They would be taken to be completely fanciful. Yet if TTo were true, these remarks would be entirely correct. The former frogs would have gone out of existence when they died. The items being dissected by the children must have come into existence approximately when the frogs departed. The biology students have spent a whole class period investigating the anatomy of objects that never lived. Why is this called "biology"?

2. Suppose a man has an old horse. The horse pulls the man's cart. One hot day, the horse dies. The man removes the harness, dumps it into the cart, and is about to walk off, leaving the horse where it collapsed in the road. Spectators draw near. One says, "Wait a minute there, fellow. What are you going to do with your horse? You can't just leave it there to rot." Suppose the man replied with these words, "You folks must be mistaken. That object is not my horse. My horse went out of existence a few minutes ago when it died. Thus I have no responsibility for this large object blocking the road. If you are worried about it, I suppose you will have to remove it."

Surely the man's remarks would be taken to be simply absurd. Yet if TTo were true, he would be quite right about his main point. If his horse went out of existence when it died, the large horse-shaped object on the road cannot be his horse. At best it might be something else "descended from" his horse.

3. I vaguely recall an occasion in my youth when I was taken to a seafood restaurant. On the napkins and bibs was printed a slogan attesting to the freshness of the food. As I recall, the slogan was: "The fish you eat today, last night slept in Chesapeake Bay." I do not know whether the claim was in fact true.<sup>12</sup> Perhaps the fish were not quite that fresh. Perhaps they hadn't slept in Chesapeake Bay for two or three days. But in any case it seemed to me that the fish being served in that restaurant surely had slept in some body of water at some time in the past. Yet if the termination thesis is true, the slogan was false. If living things cease to exist when they die, then any fish that slept in Chesapeake Bay ceased to exist before they made it to my platter. The "fish" I ate that day never slept or swam in any bay.

These examples, and many more of the same sort, decisively establish that the termination thesis (especially in the generalized forms) runs counter to common-sense views about death. We often think and speak about dead things in a way that reveals that we think that dead things formerly lived; that the dead bodies we encounter once walked or swam with full vitality.

Indeed, if you ask a person unperverted by philosophy to define "dead," he will probably say "formerly living, but no longer."<sup>13</sup> Clearly, however, if any version of the termination thesis is correct, this is an unacceptable way to define 'dead'. For if TTp is true, then no actually existing dead person formerly lived; if TTo is true, then no actually existing dead organism of any sort formerly lived; if TTu is true, then no actually existing dead entity of any sort formerly was alive. At best, dead objects are somehow descended from living things.

We have seen, then, that various versions of the termination thesis are very widely accepted by philosophers, even though it is blatantly inconsistent with common-sense views about death. This provokes a natural question. What do the terminators know that ordinary people do not know? Why do these philosophers accept such a paradoxical view about death?

### The Argument from Definition

Some philosophers define death in such a way that the termination thesis appears to be an immediate consequence of the definition. Consider Perrett again. He suggests several definitions of death. In one passage, he discusses a concept of death that is intended to be applicable not only to human beings, but to organisms of all other sorts as well. This he calls "the concept of death that is neutral to all deaths."<sup>14</sup> He proposes to identify death, so understood, with ". . . the destruction of a functioning biological organism."<sup>15</sup> In the same context, presumably intending to express the same idea, Perrett says that death is "the annihilation of a functioning biological organism."<sup>16</sup> He also says that "death is the disintegration of the living organism as a whole."<sup>17</sup>

Although it seems to me that there are interesting differences between the concepts of annihilation and destruction, and further differences between these and the concept of disintegration, for present purposes it may be just as well to ignore them. Let us say, then, that Perrett defines the all-inclusive biological concept of death in this way:

D1:  $x$  dies at  $t$  =df.  $x$  is a functioning biological organism for some time up to  $t$ , and at  $t$ ,  $x$  is annihilated, destroyed, or disintegrated.

Perrett goes on to say "A biological organism has died' does entail 'a biological organism has ceased to exist.'"<sup>18</sup> I take this to be a clear affirmation of the termination thesis in the form in which it applies to all biological organisms.

It appears, then, that Perrett defines death as the annihilation of a functioning biological organism, and then, noting that what is annihilated goes out of existence, infers that when organisms die, they go out of existence. If this is right, it would be appropriate to formulate his argument in this way:

#### *The argument from definition*

1. When an organism dies, it is annihilated, destroyed, or disintegrated.

2. When an organism is annihilated, destroyed, or disintegrated, it simply goes out of existence.  
3. Therefore, when an organism dies, it simply goes out of existence.

Perrett could defend line (1) by pointing out that it is an immediate consequence of his definition of death. Line (2) is analytic—it is true in virtue of the meanings of 'annihilate', 'destroy,' and 'disintegrate.' The argument as a whole is logically valid.

It seems to me that if the definition were correct, the argument would be (near enough) sound.<sup>19</sup> However, it also seems to me that the definition is clearly incorrect. When a butterfly, for example, is captured and placed in the killing jar, the entomologist may do her job with exquisite care. She may treat the specimen so gently that not so much as a single microscopic scale is dislodged in the process. Though the butterfly dies, it is not destroyed or disintegrated. Surely it is not annihilated. It is a "perfect" specimen. Thus, it is a mistake to suppose that death should be identified with the "annihilation, destruction, or disintegration of a functioning biological organism."

The argument from definition depends on a most implausible and highly question-begging definition of death. If our central question is whether organisms cease to exist when they die, it is clearly pointless to argue as I have suggested Perrett does.

### The Argument from Dualism

It appears that at least some philosophers have maintained the termination thesis at least in part because they also maintain a certain form of dualism. Lucretius seems to be a case in point. He apparently believed that a person is a compound entity, composed of a body and a soul. At the moment of death, the soul and body are separated, the union destroyed.<sup>20</sup>

This conception of persons and their death may seem to provide very strong support for the termination thesis. Let us consider it a bit more closely. According to Lucretius, every person is a compound entity, composed of two main parts. One part, the body, is a

relatively ordinary physical object made of ordinary atoms. The other part, the soul or mind, is a wholly distinct entity. According to Lucretius, the soul is a physical object, but one made of "bodies exceedingly small, smooth, and round."<sup>21</sup> Bits of the soul are dispersed throughout the body of a living organism. The various parts of the soul are bound together with the various parts of the body to form a new entity, a person. In a particularly striking passage, Lucretius describes living persons as entities that ". . . by the binding tie of marriage between body and soul are formed each into one single being."<sup>22</sup> This doctrine we may call "Lucretian personal dualism."

Lucretian personal dualism is associated with a view about death. Lucretius affirms this view about death when he describes death as "a separation of body and soul, out of both of which we are each formed into a single being."<sup>23</sup> The Lucretian view is that when a person dies, his soul separates from his body. The two entities become "unstuck"—whatever mysterious force formerly bound them together somehow releases them.

From this view about the nature of death, Lucretius readily derives the conclusion that each person ceases to exist at the moment of death.<sup>24</sup> I think it would be fair to represent his argument for the termination thesis in this way:

*The argument from personal dualism*

1. When a person dies, his soul separates from his body.
2. When a person's soul separates from his body, he simply ceases to exist.
3. Therefore, when a person dies, he simply ceases to exist.

In spite of its validity, the argument seems to me to be very weak indeed. One crucial problem is that I see no good reason to suppose that Lucretian personal dualism might be true. Thus, I am extremely dubious about line (1).

A more important problem with the argument is this: among terminators, there are very many who reject personal dualism and its associated view about death.<sup>25</sup> Hence, unless these philosophers are very confused indeed, their acceptance of the termination the-

sis cannot be based on the argument from personal dualism. They must have some other reason to think that people cease to exist when they die.

Furthermore, the argument would not have much bearing on the generalized forms of the termination thesis, unless the advocate of the argument wanted to insist that clams and pine trees and isolated cells also have souls, and that death for these entities also involves the separation of body from soul. This view is not very popular nowadays.

Before leaving this argument, I want to make a final comment. According to personal dualism, as I have described it, a person is a compound entity, composed of a body and a soul. At death, the components are separated, and the compound goes out of existence. But what about the body? What happens to it at the moment of death? Presumably, the personal dualist will say that in typical cases, *the body* of a person who dies does not go out of existence at the moment of death. It lingers on until it decomposes. This may seem unproblematic. However, it generates a problem for the generalized versions of the termination thesis.

Suppose we take as an example a certain corpse, which we will call "C." Suppose we ask a personal dualist whether in his view C was ever alive. Perhaps he will tell us that (i) C formerly was alive, back during those times when it was combined with a soul; back during the time when it helped to form a person. This may seem reasonable, but it straightforwardly entails that the generalized forms of the termination thesis are false. For in this view C is an object that formerly was a living organism, and then died—yet C continued to exist after death.

On the other hand, the personal dualist might maintain that (ii) C was never alive. Even when properly bound to a soul, C was always nonliving. What was then alive was only the person of which C was a part. Thus, the personal dualist may protect the generalized forms of the termination thesis. This alternative strikes me as being seriously implausible. The body was able to eat, drink, breathe, and grow; perhaps it was capable of reproduction. Its nervous system might have been in perfect working order. Yet the personal dualist is imagined as saying that in spite of all this, it was never alive. One wonders what it takes to count as a living thing.

### Corpses and People

I earlier quoted a passage in which Jay Rosenberg discusses the sad case of Aunt Ethel. Rosenberg recognizes that we might say "Aunt Ethel died last week and we're burying her tomorrow." This suggests that the corpse that we are about to bury formerly was Aunt Ethel. But Rosenberg rejects this literal understanding of the sentence. He insists that we are not really burying Aunt Ethel; we are really burying Aunt Ethel's "remains." In this context, perhaps in support of his contention, Rosenberg says that "a corpse is not a person."<sup>26</sup> Rosenberg's remark suggests an argument for the termination thesis, but it is not clear just how the argument is intended to work.

My hunch is that Rosenberg's thought is roughly this: when something that has been a person dies, we have a corpse on our hands. But a corpse is not a person. Thus, when something that has been a person dies, it stops being a person. But if a thing that has been a person stops being a person, then it simply ceases to exist. Therefore, when a person dies, he or she simply ceases to exist.

If this is indeed the proper interpretation of Rosenberg's thought, then the argument can be reformulated as follows:

#### *The argument from personality*

1. When a person dies, he or she ceases to be a person.
2. When a person ceases to be a person, he or she simply ceases to exist.
3. Therefore, when a person dies, he or she simply ceases to exist.

Each premise has some initial plausibility, and the argument as a whole seems to be valid. Thus, it appears that we have a fairly persuasive line of thought leading to the termination thesis in its personal form.

The argument makes essential use of the term 'person'. Earlier, I noted that there are ambiguities here, and I suggested that it would be useful to draw certain distinctions. I think there are at

least four distinguishable concepts of personality. Fortunately, some of these probably have no relevance to the present discussion. They can be discussed later. In order to facilitate evaluation of this latest argument, let us then consider a distinction between just two of these concepts of personality. I have in mind the distinction between the *psychological* concept of personality and the *biological* concept of personality. These are often confused but can readily be distinguished. When we say that something is a biological person, we are merely saying that that thing is a human organism—a member of the biological species *Homo sapiens*. On the other hand, when we say that something is a psychological person, we are saying something about the psychological functions, abilities, and capacities of that thing. We are saying that the thing is capable of self-consciousness; that it can engage in purposeful action; that it instantiates a sufficiently rich psychological profile.

Here on earth, it appears that most of the living biological persons are also psychological persons, and most of the psychological persons are also biological persons. But once we recognize the conceptual distinction, we will want to insist that this large-scale coincidence is just a local accident. If there are sufficiently intelligent, self-conscious beings on Mars, then they are full-fledged psychological persons but almost certainly not biological persons. If dolphins are as smart as some marine biologists have suggested, they are psychological persons, too. But, of course, no matter how smart and sensitive they are, dolphins are not members of the species *Homo sapiens*, and so they are surely not biological persons. On the other hand, some unfortunate biological persons may fail to be psychological persons. Biological persons with severe brain damage, for example, may lack self-consciousness and the capacity to engage in purposeful action. Thus, they fail to be psychological persons.

Since there are at least two concepts of personality, we have at least two different ways of interpreting the argument from personality. We can take it either as an argument entirely about psychological personality, or as an argument entirely about biological personality.<sup>27</sup> Let us first consider the version of the argument that makes use of the psychological concept. In other words:

*The argument from psychological personality*

1. When a psychological person dies, he or she ceases to be a psychological person.
2. When a psychological person ceases to be a psychological person, he or she simply ceases to exist.
3. Therefore, when a psychological person dies, he or she simply ceases to exist.

The argument is valid, and there is reason to accept the first premise. When a psychological person dies, his heart stops beating, and his brain is soon deprived of freshly oxygenated blood. It is reasonable to suppose that under these circumstances, the person quickly loses consciousness. Furthermore, in virtue of the fact that brain cells deteriorate relatively quickly, it is also reasonable to suppose that when a psychological person dies, he loses the abilities that are definitive of psychological personality. He no longer can engage in purposeful action; he no longer instantiates a psychological profile; he is no longer self-conscious. Thus, if we use the word 'person' to express psychological personality, it appears that we will have to say that at death, the object that formerly was a person stops being a person. Thus, line (1) seems correct. Perhaps when Rosenberg said that "a corpse is not a person," he meant to indicate that a corpse is not a *psychological* person. If so, I think he was right.

The puzzle here concerns the second premise. Why would anyone think that ceasing to be a psychological person entails simply ceasing to exist?

Perhaps someone will think that (2) instantiates a form that is universally true. Perhaps they will think that everything of this form is true: "When an F ceases to be an F, it simply ceases to exist." Thus, if a tree stops being a tree, it ceases to exist; when a fish stops being a fish, it ceases to exist. Line (2) might be based on this sort of consideration.

If it is not already obvious, a moment's reflection will make it obvious that not everything of the illustrated form is true. As I mentioned at the outset, when a boy ceases to be a boy, he generally does not cease to exist. He becomes a man. When a student ceases to be a student, he or she generally does not cease to exist.

He or she continues to exist either as a graduate or else as a dropout. So we cannot defend (2) by appeal to the claim that everything of its form is true.

Premise (2) might be defended by appeal to the notion that every psychological person is *essentially* a psychological person. Let us look into this.

When we say that every psychological person is essentially a psychological person, our statement has implications for each and every thing that is a psychological person. If our statement is true, then no such thing could have existed without being a psychological person; no such thing can exist at any time without being a psychological person at that time; psychological personality is a *sine qua non* for anything that in fact is a psychological person. If we accept this view about psychological personality, we will also want to accept premise (2) of the argument. For whenever a thing loses an essential property, it simply ceases to exist.

But I see no reason to suppose that psychological personality is essential to the things that have it. Consider some biological person who is also a psychological person. Suppose she comes down with some terrible disease that leads to gradual psychological degeneration. As time goes by, she loses more and more of her psychological capacities. Eventually, she goes into a vegetative state and gradually ceases to be a psychological person. Clearly, however, the very organism that formerly was a psychological person still exists—it has merely ceased having the properties definitive of psychological personality. The same horrible misfortune might befall any of us. Thus, however important psychological personality may be to us, it is not a property we have essentially. We could exist without it. So we are fortunate to be psychological persons. It could have been otherwise.

I think the plausibility of (2) derives in part from the fact that it is easy to confuse psychological personality with biological personality, and it is far more reasonable to suppose that everything that is a biological person is essentially a biological person. In that case, it would be correct to say that when a thing ceases to be a biological person, it simply ceases to exist. Thus, we would have a plausible version of the second premise. Let us consider a revised version of the argument that makes use of this line of thought:



*The argument from biological personality*

1. When a biological person dies, he or she ceases to be a biological person.
2. When a biological person ceases to be a biological person, he or she simply ceases to exist.
3. Therefore, when a biological person dies, he or she simply ceases to exist.

This version of the argument is also valid. Premise (2) can be defended by appeal to the doctrine that each organism has its species essentially. Since this is a reasonable doctrine, (2) seems plausible.

The problem with this version of the argument is line (1). What (1) really says is that when a thing that has been a member of the human species dies, it ceases to be a member of the species. But this seems implausible. I see no reason to suppose that biological organisms lose their species membership merely by dying. A dead horse is still a horse; a collection of dead butterflies still serves to instantiate a collection of butterfly species. Why should human beings be different? Recall that the concept *biological person* is not an "ability concept"; when we say that something is a biological person, we are not saying that it is able to think, to act purposefully, or to be self-conscious. We are merely allocating that object to a certain biological species. It seems to me that dead members of the species *Homo sapiens* are still members of the species *Homo sapiens*. Suppose there has been a terrible disaster, and dead bodies are strewn about. Someone might suggest that the dead dogs and cats be dumped into a common grave, whereas the dead humans ought to be brought to the stadium for identification. Although they are dead, they are still humans. Thus, in this version of the argument, the faulty premise is (1), not (2). My conclusion is that no version of the argument from personality serves to establish the termination thesis.

**Death and Nonexistence As**

The termination thesis, in its various guises, is the view that when they die, things simply cease to exist. In other words, it is the view

that when a living entity dies, that very entity goes out of existence. In my discussion above, I tried to show how counterintuitive this view really is. In subsequent sections, I have been trying to show that the main arguments for it are inconclusive. On balance then, it seems reasonable to reject the termination thesis. It is more reasonable to suppose that many things continue to exist after they die.

I should acknowledge that I agree that when a living thing dies, it ceases to exist *as a living thing*; when a psychological person dies, he or she ceases to exist *as a psychological person*. But since I think that living things (including psychological persons) are certain material objects, and I think that these material objects generally persist (as corpses) for at least a little while past their deaths, I am not prepared to accept any interesting version of the termination thesis.

At the outset, I mentioned that I had both good news and bad news. The good news is that most of us will survive death. Most of us will continue to exist after we die. The bad news is that though we will survive death, and will continue to exist after we die, each of us will then be dead. We will have no psychological experiences. We will just be corpses. Such survival may be of very little value.

Since this view about death and survival may seem a bit awkward at first, it may be useful to spell out in greater detail the materialist conceptual scheme of which it is a part. This is the topic of Chapter 7.