of this term as 'component . . .', but there is no good reason to depart from the straightforward translation 'partial . . .' (cf. such standard technical terms as *Partialbruch*, *Partialdruck* – 'partial fraction', 'partial pressure').]

9. [The phrase 'these guardians of life' presumably refers back to 'the drives' – but this is left unclear by Freud.]

10. [*Addition 1923*:] And yet it is to these alone that we can attribute an inner tendency towards 'progress' and higher development!

11. [*Addition 1925*:] It should be clear from the whole context that the term 'ego drives' is intended here only as a provisional one that harks back to the original nomenclature of psychoanalysis.

12. Ferenczi arrived at the same potential interpretation, but via a different route: 'If we follow this line of thought to its logical conclusion, we must accustom ourselves to the idea that a tendency to stasis or regression also prevails in organic life, while the tendency to development, adaptation, etc. is aroused only by external stimuli.' (*Entwicklungsstufen des Wirklichkeitssinnes* [*Stages in the Development of the Sense of Reality*], 1913, p. 137.)

13. [See below, pp. 181ff.]

VI

There are no doubt many respects in which we ourselves are going to feel dissatisfied with our conclusions thus far, which posit a sharp contrast between the 'ego drives' and the sexual drives, and argue that the former are bent on death, the latter on the continuation of life. Furthermore, it was really only the *former* that we could claim showed the conservative character of drives or – better – their regressive character, corresponding to the compulsion to repeat. For according to our hypothesis, the ego drives arise when inanimate matter becomes animate, and set out to restore the inanimate state. In the case of the sexual drives, on the other hand, they clearly *do* reproduce the primitive states of the organism – but the goal they strive for with all the means at their disposal is the merging of two germ-cells that are differentiated in a particular way. If this union does not come about, then the germ-cell dies,

just like all the other elements of multicellular organisms. Only in this one circumstance can the sexual function extend life and confer upon it a semblance of immortality. But what important event in the developmental history of living matter is being repeated by sexual reproduction or by its precursor, the conjugation of two individual organisms amongst the protista? We do not know the answer to this question, and would therefore find it a considerable relief if our entire theory were to prove wrong. The antithesis of ego drives (death drives) and sexual drives (life drives) would then lose all validity, and at the same time the compulsion to repeat would lose the significance that we have attached to it.

Let us therefore go back to one of the postulates woven into our argument, in the confident expectation that it will lend itself to complete rebuttal. We based a whole variety of conclusions on the presupposition that all living matter dies for reasons that are *intrinsic* to it. We made this assumption so blithely because it does not appear to us to *be* an assumption. It is our habit of mind to think in these terms, and the habit is reinforced by our poets and playwrights. Perhaps we have decided to embrace this belief because it brings us comfort. If we are to die ourselves, having first lost to death all those most dear to us, then we prefer to succumb to an implacable law of nature, the majestic Ἀνάγκη ['necessity'], rather than to a chance event that might well have proved avoidable. But perhaps this belief that death has its own intrinsic logic is simply one of the illusions we have created for ourselves in order to be able to 'bear the heavy burden of existence'.[1] It is certainly not primal: the idea of 'natural death' is alien to primitive peoples, who attribute every death that occurs amongst them to the influence of an enemy or an evil spirit. To investigate this belief, therefore, let us turn without further ado to biological science.

Once we do so, however, we are entitled to feel astonished at how little agreement there is amongst biologists on the question of 'natural death', indeed at the way the whole concept of death loses all substance the moment they touch it. The fact that, in the case of the higher animals at least, there is a distinct average lifespan

does, of course, tend to support the notion that death occurs for intrinsic reasons; but this impression is cancelled out again by the circumstance that individual large animals and giant trees reach a very great age that we are as yet unable to calculate. According to Wilhelm Fliess's grand conception, all the vital phenomena of an organism – and doubtless its death as well – are tied to the fulfilling of a specific timescale that expresses the dependence of two living substances, one male, one female, on the solar year. But when we look at how easily and how extensively external factors can influence the timing of physiological events in plants in particular, accelerating or delaying them, we see a picture that is sharply at variance with the rigidity of Fliess's formulae, and at the very least raises doubts as to whether the laws he postulates do indeed reign supreme.

In our view, the most interesting treatment of the topic of the lifespan and death of organisms is to be found in the publications of August Weismann (1882, 1884, 1892, etc.). It was Weismann who proposed the differentiation of living matter into two parts: the mortal and the immortal. The mortal part is the body in the narrower sense of the word, the 'soma'; it alone is subject to natural death. The germ-cells, however, are potentially immortal inasmuch as they are capable under certain favourable conditions of developing into a new individual, or – to put it another way – of enveloping themselves with a new soma.[2]

What is truly fascinating here is the unexpected similarity of this to the view that we ourselves arrived at by such a very different route. Weismann, who looks at living matter in morphological terms, discerns in it one part that is doomed to die – the soma, the entire body *except* the element concerned with sexuality and heredity – and another that is immortal, precisely this latter element, the germ-plasm, that serves to preserve the species by reproducing it. We for our part focused not on living matter itself but on the forces at work within it, and this led us to identify two different kinds of drives: those that seek to guide life towards death; and others, the sexual drives, that continually seek and achieve the *renewal* of life. This sounds very much like a dynamic corollary to Weismann's morphological theory.

However, all sense of a basic concurrence of views immediately evaporates once we take note of Weismann's position on the problem of death. For in Weismann's view the distinction between mortal soma and immortal germ-plasm is applicable only to multicellular organisms, while in unicellular organisms the specific individual and the reproductive cell remain one and the same.[3] He therefore declares unicellular organisms to be potentially immortal, death only entering the picture with the metazoa, i.e. multicellular organisms. While the death of these higher organisms is indeed a natural one in his view, that is to say a death arising from inherent factors, it does not rest upon a primal attribute of living matter,[4] and therefore cannot be regarded as an absolute necessity grounded in the very essence of organic life.[5] He sees it instead as a purely functional device, a phenomenon reflecting adaptation to the external conditions of life: once the body-cells separated into soma and germ-cells, it would have been a functionally quite inappropriate luxury if the individual had carried on having an unlimited lifespan. As soon as this differentiation took place in multicellular organisms, death became possible and functionally appropriate. Ever since then the soma of higher organisms has died after a certain span of time due to inherent factors, whereas the protista have remained immortal. Reproduction, on the other hand, did not appear only when death did, but instead is for Weismann a primal attribute of living matter, just like growth, out of which indeed it arose, and life has accordingly been continuous right from its very beginnings on earth.[6]

It will be readily appreciated that our own argument gains very little from the fact that Weismann grants that the higher organisms die a natural death. If death is a late acquisition on the part of living beings, then there can no longer be any question of death drives that date from the very beginning of organic life. In this scenario, multicellular organisms may well still die due to inherent factors, be it shortcomings in their differentiation or imperfections in their metabolism – but this is wholly irrelevant to the question that concerns us. It is surely the case, too, that this sort of view, and this sort of explanation of the origins of death, are

much closer to people's customary way of seeing things than the discomfiting theory of 'death drives'.

The debate prompted by Weismann's propositions did not in my judgement decide the issue either one way or the other.[7] Some authors reverted to the position taken by Goette (1883), who regarded death as the direct consequence of reproduction. Hartmann does not characterize death in terms of the supervention of a 'corpse', of a portion of living matter that has become dead, but instead defines death as the 'conclusion of individual development'. In this sense, the protozoa are mortal too; in their case death is always coincident with reproduction, but is masked as it were by the latter, in that the entire substance of the parent organism can be transferred directly into the individual offspring.[8]

Researchers soon turned their attention to testing the alleged immortality of living matter by means of experiments on unicellular organisms. An American, Woodruff, started to breed a ciliate infusorium, a 'slipper animalcule', which reproduces by dividing into two new individual organisms, and followed it right through to the 3,029th generation before breaking off the experiment, each time isolating one of the two products of the division process and putting it into fresh fluid. The remote descendant of the first animalcule was just as vigorous as its ancestor, without any signs of ageing or degeneration; the hypothesis of the immortality of the protista thus appeared to be susceptible of experimental proof, assuming that figures of this order can be deemed conclusive.[9]

Other researchers came to other conclusions. In contradistinction to Woodruff, it was found by Maupas, Calkins and others that after a certain number of divisions these infusoria, too, become weaker, diminish in size, lose part of their organic structure, and ultimately die, unless they are revitalized by certain influences acting upon them. According to this view, the protozoa die after a period of senile decay just as the higher animals do – which directly contradicts the assertions of Weismann, who sees death as an attribute acquired by living organisms only relatively late in their evolution.

From this whole body of research we would single out for

special emphasis two particular facts which appear to support our argument.

First: if, at a point before they exhibit signs of senescence, two animalcules are able to coalesce with each other, to 'conjugate' – after which in due course they separate again – then they remain unaffected by age; they have become 'rejuvenated'. This conjugation is surely the precursor of sexual reproduction in the higher animals; at this stage, however, it has nothing to do with propagation, but is limited simply to the merging of the respective individuals' living matter (Weismann's 'amphimixis'). But the rejuvenating effect of conjugation can also be achieved by other means: use of certain stimulative agents, changes in the composition of the nutrient fluid, increase in temperature, or shaking. One is reminded of the famous experiment undertaken by J[acques] Loeb, who by the use of certain chemical stimuli induced segmentation in the eggs of sea-urchins – a process that normally occurs only after fertilization.

Second: it *does* seem altogether probable that the infusoria proceed via their own life-processes to a natural death, for the contradiction between Woodruff's results and those of others derives from the fact that Woodruff put each new generation in fresh nutrient fluid. When he tried *not* doing so, he observed the same senescence across the generations as the other researchers did. He concluded that the animalcules must be damaged by the metabolic products given off into the surrounding fluid, and was then able to demonstrate convincingly that it is only the products of their *own* metabolism that have this lethal effect. For when placed in a solution supersaturated with the waste products of a less closely related species, these same animalcules that would surely have perished if massed in their own nutrient fluid flourished in a quite remarkable way. Left to itself, therefore, an infusorium dies a natural death because it does not satisfactorily dispose of the products of its own metabolism; but perhaps all the higher animals also die essentially because of the same deficiency.

We might begin to doubt at this point whether it was at all helpful to try to resolve the question of 'natural death' by reference to

the study of protozoa. The primitive structure of these organisms may conceal from us certain features which, though present in them too, are actually *observable* only in the higher animals, where they have found morphological expression. If we shift from a morphological to a dynamic standpoint, then we can regard it as a matter of complete indifference whether or not the protozoa can be said to die a natural death. In their case the matter identified as being immortal at some later point has not yet separated off in any way whatever from the part that is mortal. The drives that seek to convert life into death could easily be at work from the very beginning in them too, and yet their effect could be so well masked by the effect of the life-preserving forces that it becomes extremely difficult to demonstrate their presence. As we have discovered, the biologists' observations *do* allow us to suppose that such inner processes conducing to death may be present in the protista as well. Even if the protista prove to be immortal in Weismann's sense, however, his assertion that death is an attribute acquired at a relatively late stage applies only to the physical *manifestations* of death, and does not rule out hypotheses about *processes* doing all they can to bring about death.

Our expectation that biology would simply scupper the notion of death drives thus turns out to be unfounded. We can continue to entertain the possibility of such drives, assuming we have other grounds for doing so. Furthermore, the striking similarity between Weismann's soma/germ-plasm distinction and our own differentiation of death drives and life drives not only still exists, but has regained all its relevance.

Let us dwell for a moment on this exquisitely dualistic conception of the life of the drives. According to Ewald Hering's theory of what happens in living matter, two processes are ceaselessly at work within it that run in opposite directions to each other: one that is anabolic or 'assimilative', and another that is catabolic or 'dissimilative'. We are surely not presuming too much if we see in these two contrary directions taken by the vital processes the workings of our two sets of drive-impulses, the life drives and the death drives. One thing we cannot close our eyes to, however, is the fact

that we have unwittingly fetched up in the philosophical domain of Schopenhauer, for whom, of course, death is the 'proper result' of life and hence its purpose,[10] whereas the sexual drive is the embodiment of the will to life.

Let us boldly attempt to take the argument a step further. It is generally accepted that the coming together of numerous cells to form a single animate unit – the multicellularity of organisms – became a means of extending their lifespan. Each cell helps to preserve the life of the others, and the community of cells can survive even if individual cells have to die off. We have already heard that even conjugation, the temporary coalescence of two unicellular organisms, has a life-preserving and rejuvenating effect on both of them. All of this being so, we might try to take the libido theory evolved through psychoanalysis and apply it to the cells' relationship to each other. We might then try to imagine that it is the life drives or sexual drives active within each cell that make the other cells their object, partially neutralizing their death drives (or rather the processes that the latter instigate) and thereby keeping them alive, while other drives do exactly the same for them, and others again sacrifice their whole existence by performing this libidinal function. The germ-cells themselves could be said to behave in a totally 'narcissistic' fashion – to apply the term we are accustomed to use in neurosis theory when an individual retains his libido entirely within his own ego and expends none of it on object-cathexes. The germ-cells need their libido, the activity of their life drives, entirely for themselves by way of reserves for their later, magnificently anabolic activity. (Perhaps we may also use the term 'narcissistic' in the same sense to describe the cells of malignant neoplasms that destroy the organism. After all, pathologists are prepared to accept that the seeds of these growths are present at birth, and to concede that they display features characteristic of embryos.)[11] All of this being so, it would appear that the libido of our sexual drives is one and the same thing as the Eros evoked by poets and philosophers, the binding force within each and every living thing.

This seems an opportune moment for us to review the slow

evolution of the libido theory. The psychoanalysis of transference neuroses initially compelled us to postulate an antithesis between 'sexual drives' directed outwards at an object, and other drives that we only very imperfectly understood, and that we provisionally termed 'ego drives'. Amongst the latter, the drives that were inevitably recognized first were those that contribute to the individual's self-preservation; for the rest, no one was in a position to know what other drives might be identified. In order to establish psychology on a sound footing, nothing could have been more important than some kind of insight, however approximate, into the general nature of drives and the particular characteristics they might prove to have; but there was no other field of psychology in which people were groping so completely in the dark. Everyone posited as many drives or 'basic drives' as they liked, and played around with them rather as the ancient Greek philosophers did with their four elements: earth, air, fire and water. Psychoanalysis, which couldn't escape having *some* kind of theory on the subject, stuck initially to the distinction popularly made between drives, exemplified in the phrase 'hunger and love'. At least this was no new arbitrary act. And it enabled us to progress quite a long way in the analysis of neuroses. The concept of 'sexuality' – and with it the concept of a sexual drive – did of course have to be considerably extended, to the point where it included much that could not be classed as having a reproductive function, and this caused quite a stir in the world of the puritanical, the posh and the purely hypocritical.

The next step came about when psychoanalysis was able to feel its way a bit closer to the psychological ego, which initially it had known only as an entity given to repression and censorship, and adept at reaction-formation and the construction of protective mechanisms.[12] It is true that critical spirits and others of a far-sighted disposition had long since objected to the libido concept being restricted solely to the energy manifested by *object-oriented* sexual drives; but they neglected to tell us the source of this superior knowledge, and they had no idea how to turn it to advantage in the actual practice of psychoanalysis. Things then began to progress

in a more considered way when practitioners of psychoanalysis observed how regular an occurrence it was for libido to be withdrawn from the object and directed onto the ego (introversion); and in the process of studying the earliest phases of libido development in children, they came to the conclusion that the ego is the true and original reservoir of the libido, and that it is from *there* that the libido is first extended to objects.[13] The ego thus took its place amongst the sexual objects, and was immediately recognized as the most sophisticated of them all. When the libido resided in the ego in this way, it was termed 'narcissistic'.[14] This narcissistic libido was of course also in psychoanalytical terms a manifestation of energy on the part of *sexual* drives, which one had no choice but to identify with the 'self-preservation drives' that had been acknowledged from the outset. This meant that the original antithesis of ego drives and sexual drives was no longer adequate. A part of the ego drives was now recognized as being libidinal; within the ego there were – in addition to others no doubt – sexual drives at work as well. None the less, it can justifiably be said that the old principle that psychoneurosis[15] rests upon a conflict between the ego drives and the sexual drives contains nothing that we would nowadays reject. The distinction between the two kinds of drives, which was originally thought of as being *qualitative* in some way, now simply has to be differently defined, namely as being *topical* in nature.[16] The transference neuroses in particular – the real object of study in psychoanalysis – are still the result of a conflict between the ego and a libidinal object-cathexis.

It is all the more necessary that we stress the libidinal character of the self-preservation drives at this point since we want to take the argument a step further by venturing to see in the sexual drive the all-preserving force that is Eros, and to suggest that the ego's narcissistic libido derives from the quotas of libido that enable the soma cells to adhere to each other. But we now find ourselves suddenly confronted by a challenging question: if the self-preservation drives are *also* libidinal in nature, then perhaps we have no drives whatever *except* libidinal ones? There are certainly no others in evidence. But if this is so, then we are going

to have to concede the point after all to those critics who suspected from the outset that psychoanalysis would explain *everything* in terms of sexuality, or to those innovators like Jung who opted without further ado to use 'libido' for 'drive-energy' in general. Is this not the case?

This would certainly not be the outcome we intended. On the contrary, the starting point of our whole argument was the sharp distinction that we drew between ego drives – death drives – on the one hand, and sexual drives – life drives – on the other. (We were of course prepared at one stage to include amongst the death drives the self-preservation drives attributed to the ego, but we have since decided that this view was incorrect and withdrawn it.[17]) Our conception has been a *dualistic* one right from the outset, and remains so today more emphatically than ever, particularly since we started classifying the two opposites as 'life drives and death drives' rather than 'ego drives and sexual drives'. Jung's theory, on the other hand, is *monistic*; the fact that he used the term 'libido' for what he saw as a single drive-energy was bound to cause confusion, but need not concern us any further.[18] We strongly suspect that other drives are active within the ego besides the libidinal self-preservation drives; we just need to be able to produce evidence of them. It is regrettable that analysis of the ego has made so little progress that we find it exceedingly difficult to provide this proof. The libidinal ego drives may of course be tied in some very particular way to the other ego drives that are as yet unknown to us. Even before we had fully recognized the phenomenon of narcissism, it was suspected within psychoanalysis that the 'ego drives' had acquired libidinal components. But these are distinctly shaky notions that will hardly do much to convince our opponents. It really is most unfortunate that analysis has thus far only ever enabled us to demonstrate the presence of *libidinal* drives.[19] None the less, the conclusion that there simply aren't any others is not one that we are minded to share.

Given that so much is obscure at present in the theory of drives, it would surely not be sensible of us to reject any idea that promises to cast light on the matter. Our departure point was the great

antithesis of life drives and death drives. Object-love itself shows us a second such polarity – that of love (affection) and hate (aggression). What if we succeeded in connecting these two polarities, what if we succeeded in tracing one back to the other! We have always acknowledged a sadistic component in the sexual drive;[20] as we know, this component can develop a life of its own and turn into a perversion that dominates a person's entire sexual life. It also occurs as a dominant partial drive in one of those forms of organization of sexual life that I have termed 'pre-genital'. But how could we possibly suppose that the sadistic drive, which aims to harm its object, derives from Eros, the preserver of life? Isn't it altogether plausible to suppose that this sadism is actually a death drive that has been ousted from the ego at the instance of the narcissistic libido, and as a result only becomes apparent in conjunction with the object? It then becomes an ancillary of the sexual function. In the oral stage of the organization of the libido, 'taking possession of the love object' and 'destroying the object' are still coterminous; later, the sadistic drive separates off, and ultimately, in the phase of genital primacy, it serves the purposes of reproduction by taking on the role of subjugating the sexual object to the extent necessary for the fulfilment of the sexual act. Indeed, one could say that, following its expulsion from the ego, the sadistic element shows the libidinal components of the sexual drive which direction to take; in due course they follow its example and strive to reach the object. Where the primal sadism element does not undergo any mitigation or dilution, the outcome is an erotic life marked by the familiar ambivalence of love and hate.[21]

If such a supposition is indeed permissible, then we might be said to have met the requirement that we produce an example of a death drive, albeit a displaced one. The only problem is that this conception is altogether impalpable, and indeed has a positively mystical air. We will be suspected of having resorted to desperate measures in an effort to escape from a gravely embarrassing situation. In that case we may reasonably point to the fact that such a supposition is by no means new, that we have indeed already put it forward at an earlier stage, before there was ever any mention

of an 'embarrassing' situation. At that particular time, clinical observations compelled us to form the view that masochism, the partial drive complementary to sadism, has to be understood as the sadism within an individual turning back upon his own ego. But a drive turning from object to ego is in principle no different from a drive turning from ego to object – the latter phenomenon being the new contention at issue here. That being so, then masochism – an individual's drive turning back upon his own ego – is in reality a return to an earlier stage of the drive, a regression. The account of masochism given at that time may need correcting in one particular, on the grounds that it was altogether too restrictive: masochism could also very possibly be a primary phenomenon – a notion I then sought to dispute.[22]

But let us return to the life-preserving sexual drives. As we have already learnt from the research carried out on protista, the coalescence of two individuals *without* subsequent [cell-]division (i.e. conjugation) has a strengthening and rejuvenating effect on both individuals, assuming that they separate from each other soon afterwards (see above, p. 177; cf. also Lipschütz). In later generations they display no symptoms of degeneration, and appear to be capable of withstanding the injurious effects of their own metabolism for a longer period. I believe that this particular observation may *also* be regarded as exemplifying the effect of sexual union. But in what way does the coalescence of two cells that differ very little from one another bring about such a revitalization? The experiment in which the action of chemical and even of mechanical stimuli[23] is substituted for conjugation in protozoa surely allows us to answer this question with complete confidence: it happens because of the supply of new quanta of stimulation. This in turn accords well with the hypothesis that the life process of the individual leads for intrinsic reasons to the equilibration of chemical tensions, that is to death, whereas union with the living matter of a different individual *increases* these tensions, introduces new *vital differentiae* as it were, which must then be 'lived out'. Needless to say, this differentness must be subject to one or more optima. One of our strongest motives for believing in the existence of death drives is indeed the

fact that we have perceived the dominant tendency of the psyche, and perhaps of nervous life in general, to be the constant endeavour – as manifested in the pleasure principle – to reduce inner stimulative tension, to maintain it at a steady level, to resolve it completely (the *Nirvana principle*, as Barbara Low has called it).[24]

However, we still see it as a major drawback in our argument that in the case of the sexual drive, of all things, we remain unable to demonstrate a compulsion to repeat, the very attribute that put us on the trail of the death drives in the first place. It is true that the realm of embryonal development processes exhibits a plethora of such repetition phenomena; indeed the two germ-cells involved in sexual reproduction, together with their whole life-history, are themselves but repetitions of the very beginnings of organic life. But the fact remains that the essence of the processes that fall within the purview of the sexual drive is the coalescence of two cell bodies. In the case of the higher organisms, it is this coalescence alone that ensures the living matter's immortality.

In other words, we would really need to attain to a full understanding of the genesis of sexual reproduction and the origins of the sexual drives in general – a task that non-specialists are bound to shrink from, and one that the specialists themselves have so far been unable to accomplish. Let us therefore focus – in the most compressed and concentrated manner possible – on those elements amidst the mass of conflicting assertions and opinions that will permit us to pick up the thread of our argument.

One particular interpretation takes the teasing mystery out of the problem of reproduction by treating it as a manifestation of just one aspect of growth (fissiparation, gemmation, blastogenesis). Taking a sober Darwinian view of how reproduction through sexually differentiated germ-cells came about, we might envisage a scenario in which the advantage of amphimixis[25] that arose from the chance conjugation of two protista at some point in the past was retained and exploited in the subsequent development process.[26] On this premiss, therefore, 'sex' is not all that old, and the extraordinarily fierce drives that seek to bring about sexual union are thereby merely repeating something that happened by chance

at a random moment in time and subsequently became firmly established because of the advantages it brought.

The same question arises here as arose earlier in respect of death, namely whether we should rely solely on the characteristics that the protista actually exhibit, and whether we should assume that forces and processes that only become *manifest* in the higher organisms also only began to *exist* in those organisms. For our particular purposes, the above-mentioned interpretation of sexuality has very little to offer. One can reasonably object that it presupposes the existence of life drives that were already active in the simplest organisms, for otherwise conjugation – which runs counter to the course of life and makes it more difficult to live life out and then die – would obviously have been avoided, not seized on and elaborated. Therefore if we do not want to abandon the hypothesis of death drives, we have to see them as having been accompanied from the very beginning by life drives. But we then have to admit that we are working on an equation with two unknowns.

When we look to see what else science can tell us about the origins of sexuality, we find so very little that we can liken the problem to a Stygian darkness that remains unrelieved by even the faintest glimmer of a hypothesis. We *do* come upon such a hypothesis in a very different sort of place, but one that is so fantastic – unquestionably more myth than scientific explanation – that I would not dare to mention it here but for the fact that it meets precisely that particular condition that we are so keen to see met. For it traces a drive back to *the need to restore a prior state*.

Needless to say, I mean the theory that Plato has Aristophanes expound in the *Symposium*, and which deals with the origins not only of the sexual drive, but also of its most important variation in relation to the object: 'Long ago, our nature was not the same as it is now but quite different. For one thing, there were three human genders, not just the present two, male and female. There was also a third one, a combination of these two . . . [the] "androgynous".' In these human beings, however, everything was double; they therefore had four hands and four feet, two faces, two sets of genitalia, etc. Zeus then decided to 'cut humans into two, as people

cut sorb-apples in half before they preserve them . . . Since their original nature had been cut in two, each one longed for its own other half and stayed with it. They threw their arms round each other, weaving themselves together, *wanting to form a single living thing*.'[27]

Shall we follow the poet-philosopher's hint and venture the hypothesis that when living matter *became* living matter it was sundered into tiny particles that ever since have endeavoured by means of the sexual drives to become reunited? That in the course of the protistan era these drives, in which the chemical affinity of inanimate matter still subsists, gradually overcame the difficulties put in the way of such an endeavour by an environment charged with life-threatening stimuli, and developed a cortical layer as a necessary protection against that environment? That in this way the scattered fragments of living matter achieved multicellularity and ultimately transferred the reunificatory drive to the germ-cells in the most intensely concentrated form? – But this, I think, is the appropriate point at which to stop.

Not, however, before adding a few words of critical reflection. People might ask me whether and to what extent I myself am convinced by the hypotheses set out here. My answer would be that I am not convinced myself, nor am I trying to persuade others to believe in them. Or to put it more accurately: I do not know how far I believe in them. It seems to me that the emotional factor of 'conviction' need not enter into it at all. One can certainly give oneself over completely to a particular line of thought, and follow it through to wherever it leads, out of sheer scientific curiosity, or out of a desire to act as devil's advocate – without signing oneself over to the devil. I am well aware that this third step in the theory of drives that I have undertaken here cannot lay claim to the same degree of certainty as the previous two, namely the broadening of the concept of sexuality, and the postulate of narcissism. These latter innovations were a direct translation of actual observations into theory, and were susceptible to sources of error no greater than those that inevitably pertain in all such cases. To be sure, the assertion that drives are *regressive* in nature is also based on the

observation of facts, namely those manifest in the compulsion to repeat – but I have perhaps overestimated their importance. In any event, it is only possible to carry this idea through by repeatedly combining the factual with the purely notional, and thereby moving far away from empirical observation. One knows very well that the more often one does this in elaborating a theory, the more unreliable the end result becomes, but the degree of uncertainty cannot be calculated. One might have made a lucky guess, or one might have gone horribly wrong. In work of this kind I put little trust in so-called intuition, which, whenever I have encountered it, has always seemed to me more the fruit of a certain impartiality of mind – except that people are unfortunately seldom impartial when it comes to the ultimate questions, the great problems of science and of life. Here, I think, we are all ruled by proclivities that go to the very root of our being, and in our speculations we unwittingly play into their hands. Given such good grounds for mistrust, the only way for us to approach the results of our own intellectual endeavours is probably to regard them with cool benevolence. I hasten to add, however, that a self-critical stance of this kind entails absolutely no obligation to show particular tolerance to discrepant opinions. One can pitilessly reject theories that even the briefest analysis of empirical evidence serves to refute, while at the same time recognizing that the validity of one's own theory is merely provisional.

In judging our speculations about life drives and death drives we would be little bothered by the fact that so many strange and impalpable processes figure within them, such as one drive being ousted by others, or a drive turning from the ego to the object, and so on. All of this simply arises from the fact that we must necessarily operate with the given scientific terminology, i.e. the *figurative* language specific to psychology (or, more precisely, depth psychology). Otherwise we couldn't describe the relevant processes at all, indeed we wouldn't even have realized that they were there. The shortcomings in our account of things would probably disappear if, instead of using psychological terminology, we were already in a position to use that of physiology or chemistry. It is true that

this terminology, too, belongs to a merely figurative language – but a perhaps simpler one, and one that we have known for a longer period of time.

On the other hand we need to be fully aware that the uncertainty of our speculations has been greatly increased by the need to borrow repeatedly from the science of biology. Biology is truly a realm of infinite possibilities; we can expect it to yield the most astonishing insights, and we cannot begin to guess what answers it might give to our questions in a few decades' time. Perhaps such as will sweep our carefully contrived edifice of hypotheses entirely away. 'If that is the case', someone might ask, 'then what is the point of writing papers like this, and why on earth bother to make them public?' Well, I just have to admit that some of the analogies, correlations and connections contained therein have seemed to me to be worthy of attention.[28]

Notes

1. [Freud is quoting from Schiller's dire tragedy, *The Bride of Messina* (I, 8).]
2. Weismann (1884) [August Weismann, *Über Leben und Tod* (*On Life and Death*)].
3. Weismann (1882, p. 38) [August Weismann, *Über die Dauer des Lebens* (*On the Duration of Life*)].
4. Weismann (1884, p. 84).
5. Weismann (1882, p. 33).
6. Weismann (1884, pp. 84ff.).
7. Cf. Max Hartmann (1906) [*Tod und Fortpflanzung* (*Death and Reproduction*)], Alex[ander] Lipschütz (1914) [*Warum wir sterben* (*Why We Die*)], Franz Doflein (1919) [*Das Problem des Todes und der Unsterblichkeit bei den Pflanzen und Tieren* (*The Problem of Death and Immortality in Plants and Animals*)].
8. Hartmann (1906, p. 29).
9. For this and what follows, cf. Lipschütz (1914, pp. 26 and 52ff.).
10. *Über die anscheinende Absichtlichkeit im Schicksale des Einzelnen* [*On Apparent Intentionality in the Destiny of the Individual*].
11. [These two sentences were added by Freud in 1921.]

12. [See *On the Introduction of Narcissism*, pp. 381ff.]
13. [See *On the Introduction of Narcissism*, p. 366, note 10.]
14. *On the Introduction of Narcissism* (1914).
15. [See below, *On the Introduction of Narcissism*, p. 377, note 3.]
16. [See above, *Beyond the Pleasure Principle*, p. 137, Section I, note 1.]
17. [See above, pp. 167 and 181.]
18. [This sentence and the one preceding it were added by Freud in 1921.]
19. [Although he does not say so, Freud clearly means *ego* drives here.]
20. *Drei Abhandlungen zur Sexualtheorie* [*Three Essays on Sexual Theory*], from the first edition onwards (1905).
21. Cf. *Sexualtheorie* [*Sexual Theory*] and 'Triebe und Triebschicksale' ['Drives and Their Fates'] (1915).
22. These speculations have been anticipated to a very considerable extent by Sabina Spielrein in a paper that is rich in substance and ideas but not, to my mind, entirely lucid. Her term for the sadistic component of the sexual drive is 'destructive' (1912). Using yet another approach, A[ugust] Stärcke (1914) identified the libido concept itself with the theoretically supposable biological concept of an *impulsion to death*. (Cf. also Rank, 1907.) All these efforts, like those in the present text, bear witness to the urgent need to bring to the theory of drives the clarity that has so far proved elusive.
23. Lipschütz (1914).
24. [Barbara Low, *Psycho-Analysis*, (London and New York, 1920), p. 75.]
25. [See above, p. 177.]
26. However, Weismann (1892) denies this advantage too: 'Fertilization does not by any means signify a rejuvenation or renewal of life; it would not be in the least necessary for the continuation of life; it is solely and simply *a device for enabling two different heredity streams to merge*.' But he *does* consider increased variability in the organism to be an outcome of such merging.
27. [Plato, the *Symposium*, trans. by Christopher Gill (London, Penguin, 1999), pp. 22–4.] [*Addition 1921:*] I am indebted to Professor Heinrich Gomperz (Vienna) for the following suggestions regarding the origins of Plato's myth, which are reproduced here partly in his own words:

I should like to point out that essentially the same theory already occurs in the *Upanishads*. For in the *Brihad-aranyaka Upanishad*, 1,4,3, where the emergence of the world from the Atman (the self or ego) is described, we read: 'He, verily, had no delight. Therefore he who is alone has no delight. He desired a second. He became as large as a woman and a man in close embrace. He caused that self to

fall into two parts. From that arose husband and wife. Therefore, as Yājñvalkya used to say, this (body) is one half of oneself, like one of the two halves of a split pea. Therefore this space is filled by a wife' [trans. by S. Radhakrishnan, *The Principal Upanishads*, (London, 1953), p. 164]. The *Brihad-aranyaka Upanishad* is the oldest of all the *upanishads*, and no competent scholar is likely to date it later than *c.* 800 BC. As to the question whether Plato could possibly have drawn on these Indian ideas, even if only indirectly: contrary to current opinion I should not want to dismiss the idea completely, given that in the case of the metempsychosis theory, too, such a possibility cannot really be disputed. If there *were* indeed such a link, mediated in the first instance by the Pythagoreans, it would scarcely detract from the significance of the congruity of ideas, since if any such story *had* somehow percolated through to Plato from the oriental tradition, he would not have made it his own, let alone given it such a prominent role, if it had not seemed to him replete with truth.

In his essay *Menschen und Weltenwerden* [*The Coming into Being of Man and World*] (1913), K[onrat] Ziegler systematically explores the history of this particular notion *prior* to Plato, and traces it back to Babylonian conceptions.
28. We would like to add a few words here in order to clarify our nomenclature, which has undergone a certain degree of evolution in the course of this discussion. We derived our knowledge of 'sexual drives' from their relationship to the sexes and to the reproductive function. We still retained this term when the findings of psychoanalysis obliged us to recognize that their relationship to reproduction was more slender than we had supposed. With our postulation of narcissistic libido and our extension of the libido concept to the individual cell, the sexual drive transformed itself in our scheme of things into Eros, the force that seeks to push the various parts of living matter into direct association with each other and then keep them together, and the sexual drives – to use the common appellation – appeared to be the portion of this Eros that is turned towards the object. We then speculated that this Eros was active from the beginning of life, and, as the 'life drive', pitted itself against the 'death drive', which came into being when the inorganic became animate. We sought to solve the riddle of life by supposing these two drives, and supposing them to have been locked in battle with each other right from the very beginning. [*Addition 1921:*] The changes undergone by the concept of the 'ego drives' are perhaps less clear. Originally we used this term for all those drives about which we knew nothing except that their *direction* made them distinguishable from the sexual drives directed at the object; and we represented the ego

drives as being in opposition to the sexual drives, the manifestation of which is the libido. Later we began to analyse the ego, and realized that one part of the ego drives, too, is libidinal in nature, having taken the ego itself as its object. These narcissistic self-preservation drives therefore now had to be reckoned as belonging to the libidinal sexual drives. The opposition between ego drives and sexual drives changed into an opposition between ego drives and object drives, both libidinal in nature. This, however, was replaced by a new opposition between libidinal (ego and object) drives and others that may be posited in the ego, and which are perhaps evincible in the destruction drives. In the course of our speculations, this opposition changes into the antithesis of life drives (Eros) and death drives.

VII

If it really is such a universal characteristic of drives to seek to restore a prior state, we should not be surprised that so many processes in the psyche take place quite independently of the pleasure principle. This characteristic would automatically be transmitted to each and every partial drive, and in the case of such drives would involve the retrieval of a particular stage of the development process. But while the pleasure principle may not as yet have gained command of these things, this does not necessarily mean that they are in conflict with it; in fact the problem of determining the relationship of the drives' repetition processes to the dominion of the pleasure principle still remains unsolved.

We have found it to be one of the earliest and most important functions of the psychic apparatus to 'annex' newly arriving drive-impulses, replace the primary process prevailing within them by a secondary process, and change their free-moving cathectic energy into a largely quiescent (tonic) cathexis. While this transformation is taking place no attention can be paid to any unpleasure that may arise – but that does not mean that the pleasure principle is thereby nullified. On the contrary, the transformation occurs on *behalf* of the pleasure principle: the annexion is a

preparative act that both heralds and ensures the dominion of the pleasure principle.

Let us distinguish more sharply than we have done hitherto between 'function' and 'tendency'.[1] The pleasure principle can then be seen as a tendency serving the interests of a specific function whose responsibility it is *either* to render the psychic apparatus completely free of excitation, *or* to keep the quantum of excitation within it constant, *or* to keep it at the lowest possible level. We cannot yet decide for certain which of these alternatives is the correct one, but we note that this function as here defined would partake in that most universal endeavour in all living matter to revert to the quiescence of the inorganic world. We have all experienced how the greatest pleasure we can ever achieve, namely that of the sexual act, is accompanied by the momentary vanishment of a supremely intense excitation. The annexing of the drive-impulse, however, might be seen as a preparative function intended to make the excitation ready for its final dissolution in the pleasure of release.

This same context gives rise to the question whether sensations of pleasure and unpleasure can be produced equally by both annexed and non-annexed excitation processes. Now it does appear to be clear beyond all doubt that the non-annexed, primary processes result in far more intensive sensations in both directions (pleasure and unpleasure) than do the annexed, secondary ones. The primary processes are also the ones that occur first; they are the only ones operative at the start of the psyche's life; and we can reasonably infer that if the pleasure principle were not already active within these earlier processes, it would not be able to materialize at all for the later ones. We thus arrive at the basically rather convoluted conclusion that at the beginning of the psyche's life the striving for pleasure manifests itself far more intensively than it does later on, but enjoys less of a free run, in that it has to put up with frequent irruptions. Once the psyche is more developed the dominion of the pleasure principle is very much more secure, but the pleasure principle itself has no more escaped the taming process than any of the other drives have. In any event, the element within the excitation process that gives rise to the sensations of pleasure and

unpleasure must be present in the secondary process just as much as in the primary one.

This would be the appropriate starting-point for further research. Our consciousness transmits to us from within ourselves sensations not only of pleasure and unpleasure, but also of a peculiar tension that again can be either pleasurable or unpleasurable. Are we then, on the basis of these sensations, to differentiate annexed and non-annexed energy processes from one another? Or does the sensation of tension relate to the *absolute* quantum, or perhaps level, of cathexis, whilst the incidence of pleasure/unpleasure reflects *changes* in the quantum of cathexis within a particular period of time? We also cannot fail to be struck by the fact that the life drives have so much more to do with our inner perception, since they behave as troublemakers and constantly bring tensions, the resolving of which is perceived as pleasurable, whereas the death drives appear to do their work unobtrusively. The pleasure principle seems to be positively subservient to the death drives; but it *does* also watch for any stimuli from without that are adjudged by both kinds of drives to be dangerous, and more particularly for any increases in stimulation emanating from within that make the task of living more difficult.

This all leads on to countless other questions to which at present we have no answers. We have to be patient and wait for new means and opportunities for research. And we must also be prepared to abandon any path that appears to be going nowhere, even though we may have followed it for quite some time. Only those fond believers who demand of science that it take the place of the catechism they have forsaken will object to a scientist developing or even changing his ideas. For the rest, let us take consolation for the slow progress of our scientific knowledge from the words of a poet (Rückert in his *Makamen des Hariri*):

> Was man nicht erfliegen kann, muss man erhinken.
>
> . . .
>
> Die Schrift sagt, es ist keine Sünde zu hinken.

> (Whatever we cannot achieve on the wing, we have to achieve at a patient limp . . . Scripture tells us clear enough: it never was a sin to limp.)

(1920)

Notes

1. [See above, pp. 133–4.]