

The Philosophy of Sleep: The Views of Descartes, Locke and Leibniz *James Hill*

In the last decade or so consciousness has once again become a focus of interest in philosophy of mind, but so far sleep has barely been mentioned. Sleep raises special issues for any theory of consciousness. By this I am not referring to dreams and the sceptical difficulties that surround them – those difficulties always attract at least a moderate amount of attention. I am referring to *dreamless* sleep, the dark episodes of the mind that seem to leave no trace in us. In the seventeenth century there was lively controversy over the nature of dreamless sleep and philosophers attempted to incorporate their understanding of sleep into a more general view of the mind and consciousness. Here we will explore and contrast three philosophical accounts of sleep – those of Descartes, Locke and Leibniz – before assessing some of the problems and insights the debate about sleep provides for an understanding of consciousness.

I

It was for René Descartes and his followers that sleep first reared its head as a philosophical problem in the modern period. In the *Meditations* Descartes found his mind to be essentially a ‘thinking thing’, *res cogitans*. To say that the essence – or principal attribute – of the mind was thinking, meant also to say that the mind could not lose this attribute and still continue to exist. The existence of the mind without a thought was no more conceivable than of a piece of matter without extension. Since Descartes used the term ‘thinking’ to refer to all conscious states, this meant that so long as my mind exists I must always be conscious, even during a fainting fit, or in the deepest sleep. In the Second Meditation Descartes memorably asserts,

I am, I exist – that is certain. But for how long? For as long as I am thinking. For it could be that were I totally to cease from thinking, I should totally cease to exist.¹

Now, it is true, one option still seems to remain for Descartes if he wanted to deny the conclusion that we are conscious the whole time we are sleeping. He could take the view that in sleep the mind stops thinking *and* existing and on waking returns to existence and thought: he might have opted, that is, for a pause in the existence of the mental substance. After all, it is already a feature of his system that the human mind is, in common with all finite substances, continually conserved in existence by the action of God, and he asks us to look upon this conservation as a kind of continuous recreation. So what stopped Descartes from saying that when a mind goes to sleep God takes a pause before recreating that same mind on waking?

It was his doctrine of substance that closed off the option of the existential pause. Descartes held the mind to be a substance, and a substance is a thing that is able to exist independently of the activities of all things other than God. An existential pause during sleep would mean that (with God’s connivance) the mind could be temporarily destroyed by, say, the action of a sleeping-pill, or the voice of a certain lecturer, and

that it could be brought back into existence by a loud noise or a wet flannel. Its existence would be contingent on the activities of other finite existences and it would therefore be quite unfit to qualify as a substance.

So, taken together, Descartes' metaphysical doctrines of substance and essence meant that he had to commit himself to the controversial view that even in the deepest sleep we are really conscious. An obvious objection immediately suggests itself: why, if we are always conscious, do most of us think that we are not so in dreamless sleep? Why is deep sleep looked upon by practically all people, outside Cartesian circles, as a gap in mental activity? Descartes tried to meet this objection, when it was put forward by his critic and adversary Pierre Gassendi, in the following way:

So long as the mind is joined to the body, then in order for it to remember thoughts which it had in the past, it is necessary for some traces of them to be imprinted on the brain; it is by turning to these [...] that the mind remembers. So is it really surprising if the brain of [...] a man in a deep sleep, is unsuited to receive these traces?²

During dreamless sleep, his argument runs, the mind can lay down no new memories. Thus, on waking up we are unable to recall any of the thinking that was in fact going on while we were sleeping. In fact, even if we are woken in the midst of a dreamless sleep, we will still be convinced that we were conscious of nothing: our brains, the physical organs in which memories are stored, do not retain, even for a split-second, the thoughts in question.

But why this memory-failure? Descartes seems to hold that it is the result of the soul withdrawing – so to speak – from the body (and in particular from the brain).³ The consciousness that goes on in this state of withdrawal, or retirement, does not engage the physical mechanisms of memory in the brain – it wafts by without being recorded. In fact, 'memory-failure' may be a misleading phrase for what happens here: the thoughts of the sleeper never even enter the memory and therefore there is really no possibility of recall succeeding. The experiences are just not available for recollection.

Descartes' understanding of sleep as the conscious mind retiring, or withdrawing, from the brain finds explicit expression only in the reply to Gassendi that we have just mentioned. And here there is just one paragraph in which the tone is somewhat speculative. Other Cartesians, however, developed the position found in embryo in their master. Nicolas Malebranche, for example, offered two different accounts of why there was non-recollection. The first adds to Descartes' own view. Malebranche explains the suspension of memory by the fact that only 'pure intellection' takes place, and that such thought – which deals with the abstract concepts of maths, logic and metaphysics – has no imagery associated with it and therefore, unlike sense and imagination, does not involve the animal spirits, and thus leaves no traces in the brain.⁴ This shows skilful employment of the Cartesian doctrine to bring a more precise understanding of the soul's thinking in retirement from the body, though of course it would be unappealing to those who were downright sceptical about the faculty of pure intellection in the first place.⁵

Malebranche's second explanation departs somewhat from the original suggestion made by Descartes: It sometimes happens that we have so many different thoughts that we believe we are thinking about nothing at all. This is seen in the case of people who fall into a swoon. The animal spirits, swirling irregularly in their brain, stir up so many traces that no one of them is opened sufficiently to excite a particular sensation or distinct idea in the mind. As a result of this, these people perceive so many things simultaneously that they perceive nothing distinct – which leads them to think they have perceived nothing.⁶

Here we can more legitimately talk about 'memory-failure'. What Malebranche seems to be describing is thinking that is so fragmented and confused that it doesn't stick in the mind. Whatever traces are laid down they are too indistinct to be the subject of recall. As a result the subject concludes that he was not thinking at all in the episodes in question. In this second explanation Malebranche comes close to the view of Leibniz which we shall examine in a moment. But it is Malebranche's first explanation, in which the soul contemplates ideas of pure intellection in retirement from the body, that is most quintessentially Cartesian and which was generally recognised as the orthodox Cartesian view of sleep; so I shall refer to the Cartesian view, put forward in Descartes' replies and in Malebranche's later *Recherche*, as the *retirement* view

II

Now, it is hardly surprising that the Cartesian view should be subject to the sharpest criticism by an empiricist such as John Locke. In the first section of the second book of his *Essay Concerning Human Understanding* Locke launches a swingeing attack on the Cartesian position. He makes his first and most important move against the Cartesians by treating their thesis (that the mind always thinks) quite independently of its metaphysical background – the definition of mind as *res cogitans*, the doctrines of essence and substance. For Locke such a thesis was, like any other sweeping statement about the actual content of our minds, an empirical hypothesis. And, as such, it went against all the evidence and was grossly improbable. Anyone will tell you that they spent much of last night without thinking at all. If metaphysics leads us to deny this commonplace, Locke implied, then so much the worse for metaphysics.

Locke held, broadly speaking, that we should accept the verdict of sleepers themselves that dreamless sleep constitutes a gap in thinking – the mind does not retire to contemplate ideas of pure intellection in some phantom realm, it simply blacks-out. Let us call this the *black-out* view. Now Locke thinks that he is on particularly strong ground when it comes to hypotheses about sleep – he takes it that there is no higher authority for whether a person is thinking or not than the consciousness of that person themselves. The common-man is in a much better position to know what he did or did not think about last night than an armchair hypothesis-monger.

Some of what Locke says against the Cartesians is in a satirical vein. At one point he declares that 'every drowsy Nod shakes their Doctrine'.⁷ But Locke makes more subtle moves too. His dissatisfaction with the view that the mind is thinking throughout dreamless sleep but remembers nothing, leads him to the question of personal identity. Who is this person that is thinking in me while I sleep? It is not I,

myself, he argues, because there is no continuity with my present thoughts. Memory, as Locke makes more explicit in the chapter on personal identity,⁸ is constitutive of the self as a continuing, reflecting person. If there are periods of thinking in me that I can have no conceivable access to when awake, then the thinking in question is really that of another person. If, say, Socrates asleep is busy thinking, but remembers nothing on waking, then this night-time thinking no more concerns Socrates than does the 'Happiness, or Misery of a Man in the *Indies*, whom he knows not'.⁹

Generally, Locke holds that it is a much more probable hypothesis that we are without thoughts in dreamless sleep. But realising that he cannot definitively refute the Cartesian hypothesis, he is content to at least point out that thoughts deemed to take place in sleep do not belong to the waking self.

III

In Descartes and Locke we have seen a fairly straightforward contradiction of opinions – thesis, antithesis. It is Gottfried Leibniz who, in commenting on Locke's *Essay*, comes up with a synthesis of the two conflicting positions. Leibniz's view of sleep is, in my opinion, the most promising and fertile of the three views we are considering.¹⁰

Leibniz begins by agreeing with the Cartesians that the mind is always thinking, even in dreamless sleep. Just as there is always motion, however imperceptible, in bodies, so there are confused and indistinct thoughts continually passing through the mind of the sleeper. However, Locke is also right to say that there no *conscious* thinking goes on in sleep. The thinking in question is unconscious. It is unconscious by virtue of being unfocused, fragmented and unattended to. Leibniz therefore drops the major assumption of both the Cartesians and Lockeans that thinking is by its very nature conscious. He saw that if he allowed unconscious thoughts, or perceptions, then an acceptable third way between the opposing views of sleep opened up. In Leibniz's terminology 'perceptions' occur in sleep, but not 'apperception' – his term for self-conscious thought.

These unconscious perceptions he called *petites perceptions*, or 'minute perceptions' and he held that they were too faint and indistinct to be the subject of awareness. Let us call Leibniz's view of sleep the *confusion view*.

Leibniz's reasons for arriving at this synthesis were manifold and he drew on metaphysical principles, just as Descartes did, as well as on empirical observation, like Locke. Among the empirical reasons, two stand out, appealing to the phenomena of waking and falling asleep respectively. In the first of these Leibniz notes that it is sometimes easier to wake up a sleeper than at other times. It is natural, he argues, to treat this as being because someone sleeping lightly has more sense of what is going on around him. His minute perceptions grow into larger, conscious ones more readily. If this is so, the implication is that there are degrees of being asleep – a continuum from waking to the deepest slumber. And this continuum is to be understood in terms of the relative distinctness of the minute perceptions in the different stages of sleep. Secondly, Leibniz notes that a good way of getting oneself to sleep is to allow one's thoughts to wander. We all know how thinking about a problem with too much single-mindedness stops us dropping off. By letting one's attention be divided between many

perceptions, one may induce sleep. It then seems natural to treat the induced state as unattentive, unfocused thought. Thus the confusion view has the virtue of suggesting that there is a continuity between extreme tiredness and the process of falling asleep on the one hand and sleep itself on the other.

Leibniz goes on to draw a comparison between sleep and the periphery of consciousness. In any waking experience there are many perceptions that are too unfocused to be consciously registered. To use an example not in Leibniz, but which is in harmony with his thought: if the clock in a room stops ticking, we 'hear' the silence it leaves. This implies that although we were not conscious of the ticking of the clock, we must have been perceiving it in some unconscious way all the time, otherwise we could not notice its absence. In sleep such unregistered perceptions become the *sole* contents of the mind. In other words the periphery of consciousness is a kind of partial sleep that becomes more general when we are drowsy and finally takes over completely when we drop off. As Leibniz puts it, it is as though we had been 'selectively asleep' with regard to objects at the periphery of consciousness, 'and when we withdraw our attention from everything all together, the sleep becomes general'.¹¹

IV

Three well-defined and contending views of the mind's activity during sleep emerge from Descartes' original discussion:

- (i) The *retirement* view of Descartes and Malebranche. The soul is consciously thinking throughout dreamless sleep, but no new memories are laid down because the thinking is disembodied 'pure intellection'.
- (ii) The *black-out* view. Locke's more common-sense contention that the mind simply does not think in dreamless sleep and is therefore quite unconscious.
- (iii) The *confusion* view. Leibniz's view that the mind continuously thinks in sleep but, because the perceptions involved are too confused and fragmented, it does not do so consciously.

I will now say something about how these views, and the reasons used to support them, relate to the problem of consciousness.

Firstly the retirement view raises a problem for the most obvious and popular definition of consciousness which is favoured by, for example, John Searle:

'consciousness' refers to those states of sentience and awareness that typically begin when we awake from a dreamless sleep and continue until we go to sleep again, or fall into a coma or die or otherwise become 'unconscious'.¹²

This is a definition by contrast: consciousness is what goes on when we are not sleeping, comatose etc. One problem with such a definition is that it relies on the reader *not* being a Cartesian. For, on Descartes' conception, the mind is permanently conscious (even after death), and so there is no contrast to be had with states of unconsciousness. Searle would surely reply that even for the Cartesian, it *seems* as if

we are unconscious during sleep because of the gap in our memory and that that is enough to get the contrastive definition off the ground. But this would be to imply that any memory gap will do the job of making a contrast with consciousness just as well – I cannot remember what I was doing on the afternoon of June 29th, 1987 for example, so that would be an example of my being unconscious. This brings us to the crux of the problem. There seems to be no way of imagining unconsciousness that distinguishes it from a blank in the memory, a point we have seen exploited by the Cartesians. This means that a contrastive definition of consciousness is quite different from, say, a definition of light by contrast with darkness. It makes sense to define light as the negation of darkness and vice versa, because we have experience of both (for darkness just turn out the lights). With consciousness and unconsciousness the experience is inevitably one-sided.

A second important question is raised by Locke's critique of the Cartesian position that attributes consciousness to us without the faculty of retaining our thoughts, even in the shortest term. Locke describes this as 'a very useless sort of thinking'. He continues,

the Soul in such a state of thinking, does very little, if at all, to excel that of a Looking-glass, which constantly receives variety of Images, or *Ideas*, but retains none; they disappear and vanish, and there remain no footsteps of them; the Looking-glass is never the better for such *Ideas*, nor the Soul for such Thoughts.

Locke comes close here to saying that thinking without memory is not really thinking, any more than the passing images on a mirror are perceptions. Just as someone could not talk meaningfully if they were quite lacking in short-term memory – they would forget what they had said from one word to the next – so one could not think successfully if what one was thinking about dropped out of one's mind the very instant it was thought. I suspect one should go further and say that consciousness itself is not possible without memory. In order to be conscious, I must be conscious of something. But what could be the object of my consciousness if none of my thoughts could be retained for any duration. Could I be conscious of a triangle, for example, if when I thought about one angle I forgot about the other two and, indeed, about the sides and everything else? Would I even be able to think of the angle under these circumstances? Even if I concentrated on just one thing continuously, I would not be aware of doing so without memory, since each instant I would have forgotten what I was thinking of the instant before. Mentation would be a succession of vanishing points: it would be a blind-play of imagery, less even than a dream, one would like to say, paraphrasing Kant. The faculty of memory is internal to consciousness: it is not an optional extra.

A third point at which this debate about sleep touches on the question of consciousness is seen in Leibniz's comparison between sleep and the periphery of consciousness. As we have seen, for Leibniz the unregistered peripheral perceptions, which always attend our consciousness in waking life, become the *sole* contents of the mind in sleep. In other words the periphery of consciousness is a kind of partial sleep that becomes general when we drop off. Leibniz's view here is important because it has the advantage of understanding sleep not as a special phenomenon which calls for special treatment (as in Descartes and Locke), but as a case continuous with what is

going on beyond the borders of our conscious perceptions throughout waking experience. Sleep is fitted into a larger whole. An explanation that is *ad hoc* is always suspicious. It suggests that the terms of the explanation are artificial, having been invented specially for the case in question (*ad hoc* means 'for this'). But there is no '*ad hocery*' about Leibniz's explanation: it accounts not only for mental activity during sleep, but also for a class of (peripheral) mental activity throughout waking life. Ideally, a theory of consciousness and a theory of sleep should be cut from the same cloth in this way.

James Hill
Charles University, Prague

¹ The Second Meditation, CSM II 18; AT VII 27. My references here are to *The Philosophical Writings of Descartes*, translated and edited by Cottingham, Stoothoff and Murdoch (CSM), Cambridge, 1984 and to the *Oeuvres de Descartes*, edited by Ch. Adam and P. Tannery (AT), revised edition, Vrin, 1964-76.

² CSM II 247; AT VII 357

³ The terms 'withdrawing', or 'retiring' should, of course, be understood in a metaphorical way when talking of the mind in Descartes: *res cogitans* is not really in space and therefore cannot 'go off' elsewhere. What I mean is that there is a suspension in the causal relation between thinking and the body.

⁴ Animal spirits were swiftly moving fluids that seventeenth century philosophers used to explain the workings of our the brain and the nervous system. In particular they were responsible for making the tracks in the brain that were the physical basis of memory. Malebranche's view of sleep and states of unconsciousness is in his *Recherche de la vérité*, translated as *The Search after Truth*, by T.M. Lennon and P.J. Olscamp, Cambridge: CUP, 1997, III.i.2 (1)

⁵ The faculty of pure intellection (*pura intellectio*) is described by Descartes at the beginning of his Sixth Meditation.

⁶ Malebranche, *ibid.*

⁷ E.II.i.13. Here and elsewhere I use the standard practice of referring to Locke's *Essay concerning Human Understanding*, (originally published 1690), by the numbers of the book, chapter and section. I have used the critical edition of the *Essay*, edited by Peter Nidditch, Oxford: OUP, 1975. There is really no substitute for this edition.

⁸ E.II.xxvii

⁹ E.II.i.11.

¹⁰ Leibniz's view of sleep is to be found in his *New Essays on Human Understanding*, translated by Peter Remnant and Jonathan Bennett, CUP, 1996, pp. 112-118

¹¹ *Ibid.*, 115.

¹² J.R. Searle, *The Mystery of Consciousness*, London: Granta, 1997, p.5.