1. Kripke also thinks that certain physical and phenomenal properties are essential properties of whatever has them. In particular, suppose that some event E is in fact a headache; then that very event could not have been, say, the occurrence of an afterimage instead: whenever you imagine the occurrence of an afterimage you are imagining an event that is distinct from E, however much it may resemble E in non-phenomenal respects (time, ‘owner’). Again, suppose that some event is in fact a neural event, say a firing of C-fibres. Then that very event could not have failed to be a firing of C-fibres: you cannot imagine that it was a firing of D-fibres (say) instead.

2. He also thinks that theoretical identifications are necessary. On one reading these are identity statements equating kinds of phenomena e.g. Heat = molecular motion; Blue light = electromagnetic radiation of such-and-such wavelength. And they are necessary because the terms on either side of the identity statement are rigid designators; and we have already seen that such identity statements are necessarily true if true at all.

3. Notice the difference between the idea that these identifications are necessary truths and the idea that individual things, like persons and pains, have certain properties essentially. The former is the attribution of necessity to some proposition or state of affairs (in the jargon: a de dicto modality). The latter is the attribution of an essential property to an object (in the jargon: a de re modality).

4. In any case these identifications certainly seem contingent: it seems as though I can imagine a world in which molecular motion was not heat but light, or in which the relevant portion of the electromagnetic spectrum was invisible and so not a form of light at all.

5. On Kripke’s view this appearance is a modal illusion of the same kind as the one that we saw in connection with Hesperus and Phosphorus. What you are really imagining, he says, is a situation in which the feature by which we pick out hot things (the way they feel) applies only to things with low or no molecular motion; or one in which the feature by which we pick out blue light (the way it looks) does not apply to radiation of that wavelength. But these features by which we pick out those phenomena are contingent features of those phenomena: so what we are really imagining are not situations in which the identifications are false but situations in which what are really cold things happen to feel hot, or situations in which what is really blue light happens to be invisible.

6. Now one version of materialism (the type-identity theory of e.g. J. J. C. Smart, ‘Sensations and brain processes’, Phil. Rev. 1959) asserts the truth of theoretical identifications that connect phenomenal and physical phenomena in the manner of the examples at no. 2. These identifications if true are, Kripke thinks, necessary: if pain is in fact C-fibre stimulation then C-fibre stimulations could not have failed to be
pains. But it seems as though we can imagine C-fibre stimulations that are not pains. So it looks as though it is possible that C-fibre stimulation is not pain. Hence C-fibre stimulation is actually not pain.

7. Can we say this is an illusion of the same sort as the illusion discussed at 5? No. Pain, unlike heat, is something that we pick out by an essential feature of it: heat might not have felt hot but pain could not have failed to be painful. So when we imagine that C-fibre stimulations are not painful we really are imagining that C-fibre stimulation is not pain. It therefore seems possible that C-fibre stimulation is not pain; so it must be true that C-fibre stimulation is not pain.

8. A second form of materialism asserts only the token-identity of mental and physical phenomena. Thus if A is a name for some particular pain and B is a name for some particular C-fibre stimulation then the theory asserts that A = B. NB this is an identification of individuals not phenomena. Again if ‘A = B’ is true then it is necessarily true because ‘A’ and ‘B’ are rigid (or we can stipulate that they are).

9. But again it looks as though we can imagine that ‘A = B’ is false: just suppose that that very C-fibre stimulation had in fact felt different. Now the materialist might reply that here we are not really imagining that ‘A = B’ is false but only that some contingent feature of A by which we pick it out happens not to apply to B (cf. the Hesperus / Phosphorus case).

10. But again this is no good, says Kripke: we do not pick out A by a contingent feature of it but by an essential feature of it—that it was that pain that occurred then: A could not have both existed and not been that pain (cf. Benjamin Franklin could both have existed and not been the inventor of bifocal lenses). So if we are imagining B without pain then we really are imagining B without A.

11. It is also true that the standard reply to the Cartesian argument that you learnt at IA doesn’t work, or at least seems not to work. That reply was supposed to be that just because you can imagine that, or it is possible that, an identity is false doesn’t mean that it is false. It is possible that Benjamin Franklin is not the inventor of bifocal lenses; it is not possible that Benjamin Franklin is not Benjamin Franklin; but it does not follow that Benjamin Franklin is not actually the inventor of bifocal lenses. But if we accept the Cartesian premise that the mental and the physical are possibly distinct then we cannot by this means evade the Cartesian conclusion that they are actually distinct. If ‘A’ and ‘B’ are both rigid designators then if they are identical then they are necessarily identical.

12. In short: we can revive the Cartesian argument in the following form: (i) □A≠B (ii) A=B → □A=B; therefore (iii) A≠B. Premise (i) cannot be attacked by appeal to modal illusion; premise (ii) cannot be attacked by the familiar arguments from IA metaphysics; and the argument is valid.