Descartes thought his mind and body could exist apart, and that this attested to a real distinction between them. The challenge as Almog initially describes it is to find a reading of "can exist apart" that is strong enough to establish a real distinction, yet weak enough to be justified by what Descartes offers as evidence: that DM (his mind) and DB (his body) can be conceived apart.  

Descartes is caught in a dilemma. The "prove too little" horn has him claiming only the separability in thought of DM and DB. This is epistemologically too little because it says nothing about DM and DB's relations outside the intellect, not even that DM ≠ DB. It is metaphysically too little because DM and DB are more than non-identical; they are "distinct, complete, subjects, each of which can exist without the other" (xviii).

The "prove too much" horn has Descartes advocating the modal conclusion that there is a real possibility of DM existing without DB. Such a conclusion is epistemologically too much because it outruns Descartes's evidence. It is metaphysically too much because we run the risk of being "so successful at separating mind and body that when we put them together again, we no longer get a real, natural unity" (xviii).

So: "DM and DB can exist apart" must assert more than cognitive separability, but less than modal separability. It may seem no space is left for a third option, but Almog offers to find space.

Not all of the properties necessary to a thing x pertain to what x is. Even if DM and DB exist in the same worlds, there need be nothing in either's nature—in what it is—to require accompaniment by the other. This lack of requirement manifests itself in the existence of coherent stories, respectful of what DM and DB are, featuring one of the two without the other. It is in the stories that DM and DB realize their potential to exist apart. DM and DB are "by nature" or "constitutively" separable items that necessarily coexist.

Now, the beauty of constitutive separability is supposed to lie in its avoidance of the too much/too little dilemma; so it is important that cruder forms of separability really do fall to this dilemma in a way Almog's preferred alternative does not. It is important in other words that

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1 This note confines itself to the "separatist" stage of Almog's "two-stage Cartesian conception of man" (59), ignoring his later denial even of separability in a story.
Modal separability makes the man a "mere unity of composition."
Constitutive separability allows him to be a "natural unity."

Descartes has no good evidence for modal separability.
Descartes has better evidence for constitutive separability.

Cognitive separability cannot establish a real distinction.
Constitutive separability does establish a real distinction.

These claims do seem to be ones to which Almog is prima facie attracted, but he says surprisingly little in their defense. This note tries to needle him into saying more. For discussion purposes we can lump (U-) with (U+), (E-) with (R-), and (E+) with (R+).

**NATURAL UNITY [(U-) and (U+)]**

Almog says that anyone hoping to integrate "DM and DB in a single man—would find such a real possibility [of DM without DB] to be too much, too strong, a premise" (25-6). Why does he think a "mere unity of composition" is the best modally separable items can hope for? Why should their possible separation put limits on DM's actual unity with DB?

A helpful reference point here is the unity of a statue GS of Goliath with the mass of atoms GA of which it is made. There would no ground for complaint about Descartes coming out a "mere unity of composition" if DM and DB were as tightly integrated as GS and GA. Yet this is a case of modal separability. GS would have existed without GA had a certain atom decayed slightly earlier, so that GS had to be made out of GA- instead. GA would have existed without GS had the order been for a statue of Hercules rather than Goliath.

Modal separability need not drive its relata so far apart as to preclude an intimate unity between them. However DM is possible not only without DB, but without any bodies. This is certainly a disanalogy with the statue case, but its implications are unclear. One would have to show that y's potential to exist without anything x-ish prevents y from being in this world naturally unified with x—or hence, presumably, composed of x.

Does it? A recent analysis of composition says that x composes y in a world iff the following three conditions hold there:

1a) x and y have the same parts,
The theory says that $x$ composes $y$ in $w$ only if $y$ has in $w$ teeny-tiny parts essential only to $x$. There is no requirement that $y$ must continue in other worlds to have parts essential only to $x$. It is not even required that $x$-like items exist in other worlds; perhaps the $x$ level of reality just drops away.

I do not say that this is clearly the right result, but it is not clearly the wrong result either. This doughnut is made of quarks. It might be that quarks are made in turn of quirks. If so, then the doughnut is made of quirks as well. But it seems at least an open question whether a world bottoming out at the quark level must therefore omit the doughnut. Similarly it seems an open question whether DM's having a material constitution in this world means that DM cannot persist into worlds where the material level goes missing.

Perhaps we should be asking, not how modal separability hurts the "dual key project," but how modal inseparability—existing in the same possible worlds—helps. Various principles suggest themselves.

(2a) if $x$ and $y$ necessarily coexist, then $x$ is naturally unified with $y$.

(2b) if $x$ and $y$ necessarily coexist and each pertains to what the other is, then $x$ is naturally unified with $y$.

(2c) if $x$ and $y$ necessarily coexist and what each is requires it to be naturally unified with the other, then $x$ is naturally unified with $y$.

But (2a) is not plausible. Abstract objects exist in the same worlds, but a compound of, say, $\pi$ with quadruplucity would be artificial in the extreme. As for (2b), North and South Dakota exist in the same worlds, and each pertains to what the other is; DM and DB presumably aspire to a higher degree of unity than that. (2c) is correct but no thanks to modal inseparability, since the consequent would still follow if the antecedent were weakened to "what $x$ is requires it to be naturally unified with $y,"' or even "it just so happens that $x$ is naturally unified with $y.'"

**MODAL SEPARABILITY [(E-), (R-)]**

It is clear what Descartes thinks his evidence is: DM is conceivable without DB. Since modal separability amounts in this case to the possibility of DM without DB, Almog must think that the conceivability of DM without DB provides no evidence for the corresponding possibility. He reaches this conclusion as follows. Either we follow Arnauld and write possibility into the

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4 "Part" is intended in a spatiotemporal, not an Aristotelian, sense.
definition of conceivability—one only seems to conceive the impossible—or we follow Descartes in writing only the (perhaps misleading) appearance of possibility into the definition. Arnauldian conceivability—conceivability_A—is no use, because to know one is really conceiving_A p one must first know that p is possible (which was to be shown). Cartesian conceivability—conceivability_C—is no use because it establishes at best seeming possibility.

The objection to conceivability_A can be put like this. Suppose that Δ is a feature of propositions. A propositional act or attitude is Δ-factive iff no one counts as φ-ing that p unless p is Δ. Realizing that p is in these terms truth-factive; refuting p is falsity-factive; conceiving_A that p is possibility-factive. The principle Almog seems to be relying on is

\[(3) \text{ If } \phi \text{-ing is } \Delta \text{-factive, then } \phi \text{-ing that } p \text{ provides no basis for the conclusion that } p \text{ is } \Delta.\]

But why should we accept (3)? I know that Sally is asleep because I see that she is asleep. It would be silly to object that whether I do indeed see this remains an open question until someone shows she is not faking. Or suppose φ-ing that p is proving that p. It would be silly to object that “here is a proof that p, therefore p” begs the question since it is not really a proof unless p is true. A principle that casts as much doubt on the evidential value of seeing and proving as it does on conceiving_A can in non-skeptical contexts be safely ignored.

It might be thought that the real evidence in these cases is my seeming to see or prove that p, or my seeming to find p conceivable_A (which corresponds more or less to finding it conceivable_C). This brings us to the second worry: conceivability_C establishes only seeming possibility, not real possibility. This is true if “establishes” means “establishes beyond any possible doubt, however nutty or hyperbolic.” But of course, seeming to see that p does not in that sense “establish” p either. If the problem with conceivability evidence is that it is as bad as the evidence of the senses, that is a problem we can learn to live with. It should be enough for us if conceivability evidence does or can establish possibility beyond any reasonable doubt.

A reasonable doubt might seem to be just what Arnauld is offering, when he challenges Descartes to distinguish himself from a geometer who has “not yet...grasped for certain” that a right-angled triangle has the Pythagorean property \(A^2 + B^2 = C^2\); perhaps he even hypothesizes that

\[(4) \ A^2 + B^2 \neq C^2.\]

The geometer can “confirm” his mistaken hypothesis (4) as follows:
(5) 'I clearly and distinctly perceive...that the triangle is right-angled; but I doubt that \( A^2 + B^2 = C^2 \); therefore it does not belong to the essence of the triangle that \( A^2 + B^2 = C^2 \)’ (CSM II, 142).

So far the conclusion is only that (4) is possible; but that is enough if the geometer appreciates that

(6) the actual ratio of \( A^2 + B^2 \) to \( C^2 \) holds necessarily.

Using his incomplete understanding of the triangle as a basis for modal inference thus leads the geometer into error. And how, Arnauld asks, “is my perception of the nature of my mind any clearer than his perception of the nature of the triangle?” (CSM II, 142).

Descartes responds by listing some disanalogies between the geometer’s situation and his own; but commentators (Almog included) have had trouble connecting these disanalogies to the issue at hand, viz. whose intuition is more to be trusted. So a case can be made that Arnauld has indeed uncovered a non-hyperbolic reason for doubt. But a case can also be made that at least one of Descartes’s disanalogies is not irrelevant. Descartes writes that

(7) It is not possible to have a concept of the triangle such that no ratio at all is understood to hold between the square on the hypotenuse and the squares on the other two sides (CSM II, 158).

This suggests that insofar as the geometer thinks that 1 might turn out not to be the ratio of \( (A^2 + B^2) \) to \( C^2 \), he thinks of other numbers \( r \) that the ratio might turn out to be \( r \). Now suppose for reductio that

(8) whatever the geometer thinks “might turn out” to be the case seems to him genuinely possible.

Then it must seem that the ratio of \( (A^2 + B^2) \) to \( C^2 \) is in some worlds 1, and in others \( r \). But if the ratio varies across worlds, then no ratio “belong[s] to the essence of the triangle.” By (6), the actual ratio, if there were one, would belong to the essence; so our geometer can only conclude that there is no actual ratio. But then by (7), our geometer lacks the concept of a triangle!

This is absurd, so our reductio assumption (8) must be mistaken. That our geometer allows that \( (A^2 + B^2) \) might not be \( C^2 \) does not mean this strikes him as genuinely possible. Since it does strike Descartes as possible that DM should exist without DB, it is hard to see why Descartes should worry that he is under the same modal illusion as the geometer. Such a worry would be doubly silly, since on the one hand,

(9) the geometer is not under a modal illusion, for he is not under a modal impression; nothing presents itself as possible,
and on the other,

(10) Descartes has a kind of evidence that the geometer lacks, viz. the seeming possibility (the conceivability) of DM without DB.

So Descartes has been given no reason whatever to mistrust his intuition that DM could exist without DB, or without bodies. All Arnauld has to offer is the abstract possibility that the intuition is wrong.

Arnauld is not the only philosopher Almog enlists against Cartesian conceivability arguments. The other is Kripke, and their views are seen as closely related. Each holds that de re modal illusions arise because one conceives $x$ too unspecifically; one lacks a proper “conceptual fix” on $x$. They differ, though, in their theories of conceptual fix. Arnauld thinks the illusion that $x$ could have been $F$ arises because one’s idea of $x$ leaves out that to be $F$ is impossible for $x$. One guards against this by arranging that

(11) all properties necessary for being $x$ are included in one’s idea of $x$.

Kripke thinks the illusion arises because one’s idea of $x$ is impoverished in a complementary way: the properties it includes are too few to ensure that one is really thinking of $x$, as opposed to some $x^*$ that is picked out the same way. Intuitions about $x$ are not to be trusted unless

(12) the properties included in one’s idea of $x$ are sufficient for being $x$

Suppose we call $x$ fathomable if (11) holds and inimitable if (12) holds. Then Descartes’s intuition is worthless by Arnauld’s standards because minds fail the fathomability test; in particular we cannot rule out that it is not merely actually true that my mind is connected to a (this) body but also that of necessity it is so connected (20).

Descartes’s intuition is (supposedly) worthless by Kripke’s standards because while pain may be inimitable, thoughts and minds are not. Consider Castor’s thought that $\text{H}_2\text{O}$ is wet and Pollux’s thought that $\text{XYZ}$ is wet; “[t]he phenomenological description is very much the same” (58). And

If the mental states of such subjects are not exhausted by their phenomenological character, it may be argued that the subjects that bear those states do not have their identity so exhausted (55).

Arnauld’s objection from unfathomability is well known, so let me not discuss it here. But the objection Almog finds in Kripke is new, both in itself and as an interpretation of Kripke.

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It ought to strike us as odd that Kripke shows no particular qualms about the intuitions he is said to have proved worthless. Cartesian methods can in his view "establish that a statue is not the hunk of stone, or the conglomeration of molecules, of which it is composed," even though a counterpart of the statue would present itself the same way.\(^6\) He takes our intuition that Nixon could have been a baker at face value, never worrying for a moment that the possible baker is instead Nixon*. (We "are speaking of Nixon, and asking what...would have been true of him."\(^7\)) Intuitions about the self are treated similarly: "I could have been in the same epistemological situation in relation to a lectern made of ice as I actually am in relation to this lectern."\(^8\) Almog's Kripke would not be so bold. Who is to say that it was not Kripke* being taken in by that icy lectern?

Almog appreciates that his interpretation ("nothing external is quite what it seems" (52)) makes Kripke more of a modal skeptic than he professes to be. He puts the blame for this on Kripke, who has not followed through the implications of his own claims. But where does Kripke say that

\[(13) \text{modal intuitions about } x \text{ cannot be trusted unless } x \text{ is inimitable, that is, nothing else presents the same way.}\]

He claims only that

\[(14) \text{modal intuitions about } x \text{ cannot be dismissed (the way we dismiss the intuition of light without photons) unless } x \text{ is inimitable.}\]

This (plus the inimitability of pain) is all Kripke needs to counter the scientific materialist's insistence that \textit{light} = \textit{a stream of photons} can serve as a model for \textit{pain} = \textit{c-fiber firings}.

**CONSTITUTIVE SEPARABILITY [(E+), (R+)]**

The proposition \( x \text{ is } F \) is possible iff it is consistent with what \( x \) is to be \( F \), and necessary iff it is inconsistent with what \( x \) is not to be \( F \). Almog suggests (62) that conceivability might be a better guide to possibility, in some cases, than to possibility. That would presumably be because \( x \) is (in cases of interest) less fathomable than fathomable—in the sense that

\[(11) \text{all properties necessary to } x \text{ are included in our idea of } x \]

and less inimitable than inimitable—in the sense that

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\(^7\) Ibid., p. 81.

\(^8\) Ibid, p. 93, fn 15.
it is not possible for anything other than \( x \) to have the properties in our idea of \( x \).

One expects to find, then, that DM has prima facie a better shot at satisfying (11) and (12) than (11) and (12).

I am not sure that we do find this. We have Almog's own word for it that (12) fails in the same way as (12). When we seem to conceive DM without bodies,

\[ ... \text{we have not...really conceived of this subject that it is this way because its being this way flouts what this subject is} \ (105). \]

What we really conceive is the existence of a thinking being (note the italicized indefinite article) without any extended object in the story...(106).

So any advantage must be on the score of (11). Almog does seem to think that DM is more fathomable than fathomable:

Science may divulge to us various truths about both mind and body, perhaps necessary truths. But our basic conception of what each one of us is is not threatened by future chemical discoveries (40).

But Almog does not explain why our views on DM's essence should be more subject to correction by science than our views on DM's essence. The one passage he cites has Descartes mocking Gassendi for "want[jing] us... 'to conduct a kind of chemical investigation' of the mind, as we would of wine" (CSM II, 248-9). But this passage makes no invidious comparison of the kind Almog needs; Descartes might just as well be denying that science can embarrass his intuitions about DM's (regular old) essence. I do not know how Almog would try to convince Descartes that his essence is more a matter for empirical investigation than his essence.9

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I wish Almog had said more about how he knows that Descartes is underestimating his essence. He hints at an argument from externalism about content (54-8), but that would be a case of blindsiding by philosophy, not science. He may think that no argument is required: "I, for one, would rather assume this at the outset and bar claims of the genuine possibility of the disembodied existence of DM" (39).

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