Chalmers lays out three central arguments against materialism, all of which we have discussed to some degree. These are the explanatory argument, the conceivability argument, and the knowledge argument.

He notes that all of these arguments are of the same general structure. They begin by positing an epistemic gap between the physical and consciousness — that is, a seeming gap between the physical and the phenomenal. They infer from that a real — metaphysical, or ontological — gap between the physical and the phenomenal.

So, in the case of the conceivability argument (which we will focus on) the epistemic gap in question is the fact that we can imagine, or conceive of, a situation physically identical to the actual world but in which the facts about consciousness are different.

To put things in Chalmers’ terms, let’s introduce the following abbreviations:

\[ P = \text{a statement of all the physical truths about the universe} \]
\[ Q = \text{some fact about a subject’s conscious experience (e.g., the fact that I am seeing red right now, or that Bob is feeling an itch right now)} \]

Then the claim is that we can imagine a world in which

\[ P \text{ and not } Q \]

or, as Chalmers writes it,

\[ P \land \neg Q \]

From this we infer the conclusion that

\[ \text{It is possible that } P \land \neg Q \]
Given the necessity of identity, this implies that the relevant fact about consciousness — Q — is not identical to any physical fact.

Chalmers defines three different versions of materialism by how they respond to this sort of argument. The three versions are as follows:

- **Type A materialism**: denies that there is any epistemic gap between the physical and the phenomenal. So, as regards the conceivability argument, denies that P \(\land\) \(\neg\)Q is conceivable.

- **Type B materialism**: agrees that there is an epistemic gap between the physical and the phenomenal. So, as regards the conceivability argument, agrees that P \(\land\) \(\neg\)Q is conceivable. But denies that it follows from this that P \(\land\) \(\neg\)Q is possible.

- **Type C materialism**: agrees that, in our current state of knowledge, there is an epistemic gap between the physical and the phenomenal. So, as regards the conceivability argument, agrees that in our current state of knowledge P \(\land\) \(\neg\)Q is conceivable. But holds that if we really did have a complete understanding of the physical world, P \(\land\) \(\neg\)Q would not conceivable. Given this, there is no reason to think that P \(\land\) \(\neg\)Q is possible.

Chalmers against type A materialism: it just denies the obvious; we can clearly conceive of these things.

Chalmers against type B materialism: the two-dimensional argument (which we will discuss separately).

Chalmers against type C materialism: what extra physical knowledge could make a difference?