1. Questions about “criteria of identity through time”
Suppose I tell you that Picture A and Picture B are pictures of one and the same car. What is it for that to be true? What would the world have to be like for that to be true?

General form of the questions we’re interested in: What is it for there to be an F [ship, car, animal, person...] who exists both at t and at t’? More generally still: what is it for there to be an F which is G at t and H at t’?

These questions are (obviously) intimately related to the question what it is for something to be an F [ship, car, animal, person...]?

2. An argument that nothing can ever continue to exist while changing in any way
Here is an argument that the car depicted in Picture A is not the car depicted in Picture B:
(i) The car depicted in Picture B is red.
(ii) The car depicted in Picture A is not red.
(iii) One and the same thing can’t be both red and not red.
(iv) Therefore, the car in Picture A and the car in Picture B are not one and the same thing.

3. What’s wrong with this argument?
Premise (ii) is false if we take it as meaning that the car depicted in Picture A is not red now. (ii) is true only we understand it as meaning that the car depicted in Picture A was
not red at the time Picture A was taken. But (iii) is false if we understand it as meaning that one and the same thing can’t be red at one time and not red at some other time.

4. **Replacement of parts**
   Intuitively, many things—cars, watches, ships, animals, people...—can gain and lose parts: it can happen that something is a part of such an item at one time without being a part of it at some earlier or later time.

5. **Total replacement of parts**
   The original Ship of Theseus case (Plutarch): when Theseus dies, his ship is left in the harbour. Each time a plank wears out, the Athenians replace it. Eventually, none of the original planks is in the harbour: but the Athenians claim that the ship Theseus sailed in is still moored in their harbour. Are they right?

   An argument that they are right: No ship can cease to exist, or cease to be a ship, just by having a single one of its planks replaced. So the original ship is still present in the harbour after the first plank-replacement; so it is present after the second plank-replacement; so it is present in the harbour after the third plank-replacement... so it is still present after the $n$th plank-replacement.

   The premise of this argument could be resisted in two ways.

   (i) One could claim, radically, that every plank-replacement involves one ship ceasing to exist and another ship coming to exist.
   (ii) One could claim that some but not all plank-replacements involve this. But which ones? It seems arbitrary to treat some of the plank-replacements differently from others.

6. **Disassembly and reassembly**
   Intuitively, many things—cars, watches, ships...—can survive being disassembled and reassembled.

   **Question:** where is the object (watch, ship...) after the disassembly and before the reassembly?
   **Answer 1:** it is nowhere—it doesn’t exist at those times. It enjoys an intermittent existence.
   **Answer 2:** it is spatially scattered, being located wherever one of the bits is located.

   **Questions to think about, especially if (like Lowe) you like Answer 2:** what happens if I take just one part—e.g. the rudder of a ship—off and put it on again later? Does it stop being part of the ship during this period, or does the ship come to be spatially scattered? What if I never put it back on?
7. Hobbes’s case
Someone rescues the original, worn-out planks from the trash after the Athenians discard them; when he has them all, he reassembles them, and puts them in a museum, in front of a sign claiming that Theseus sailed in this ship. Is he right?

Argument that Theseus never sailed in the ship in the museum: if it weren’t for the museum owner, it would be true that the ship in the harbour is a ship in which Theseus sailed. But adding in the museum owner and his activities can’t take us from a situation in which this is true to one in which it isn’t. So there is a ship in the harbour in which Theseus sailed. But there is at most one ship in which Theseus sailed, and there is no ship that is both in the museum and in the harbour. Therefore, there is no ship in the museum in which Theseus sailed.

Argument that Theseus did sail in the ship in the museum: this would be true if it weren’t for the fact that the Athenians replaced the original planks with new planks after removing them from the harbour. But adding in the Athenians and their replacement activities can’t take us from a situation in which this is true to one in which it isn’t. So it is true in the actual situation.

8. A list of possible views about the case
(i) The ship in the harbour is the one in which Theseus sailed; the ship in the museum is a different ship.
(ii) The ship in the museum is the one in which Theseus sailed; the ship in the harbour is a different ship.
(iii) Theseus neither sailed in the ship in the harbour nor in the one in the museum: the whole story involves at least three ships.
(iv) Theseus sailed in the ship in the harbour and in the ship in the museum: he sailed (simultaneously!) in two different ships, which back then were in exactly the same place and had exactly the same parts, but now are in different places with different parts.
(v) Theseus sailed in the ship in the harbour and in the ship in the museum, although he sailed in only one ship—that ship is now both in the harbour and in the museum. Like some of the saints, it enjoys the gift of bilocation.
(vi) ‘Ship’ is ambiguous (and so, perhaps, are some of the other words used in stating these options). At least two of the sentences in (i)-(v) are true on some disambiguation.
(vii) ‘Ship’ is vague, so that there is no fact of the matter as regards which of (i)-(v) is true. Perhaps some of (i)-(v) are definitely false; but at least two of them are neither definitely false nor definitely true.
9. Lowe’s argument
Lowe’s aim: provide a principled reason for favouring view (i) over view (ii).

Idea: suppose that the ship in the museum was one in which Theseus once sailed. Where was this ship back when only only a few of the original planks had been replaced? Intermittent existence is impossible, so it must have existed back then. If so, we’ll have to say that it was partly in the harbour and partly in the museum. But at some ship was entirely in the harbour back then. And no two ships ever share the majority of their parts. Contradiction.