Substance and the First Analogy

1. **Background: the Schematism of the Pure Concepts of the Understanding** (A138/B177 ff.). Kant asks: how can intuitions be brought under pure concepts? Pure concepts seem to have little in common (are not ‘homogeneous’) with intuitions, e.g. the pure concept of substance is ‘a something which can be thought only as subject, never as a predicate of something else’ (A147/B186). Question: how are we to apply this to experience? Answer: by interpreting it in a temporal way, ‘the permanence of the real in time’ (A143/B183). (Likewise for the other concepts.)

2. **Background: the Analogies of Experience.** ‘Experience is possible only through the representation of a necessary connection of perceptions’ (B218); ‘All appearances are... subject *a priori* to rules determining their relation to one another in one time’ (A177). The Analogies concern necessary connections in the objects of experience: between different qualities of a single persisting substance; between cause and effect; between properties of interacting things. These necessary connections are linked to certain temporal connections: substance with persistence, or permanence; causality with succession; community with simultaneity or co-existence. We are to think of ourselves as tracing a subjective path through an objective world: the question about objectivity is about determining objective time relations, which are to be distinguished from the subjective time relations.

3. **The First Analogy (A182/B224).** ‘In all change of appearances substance is permanent; its quantum in nature is neither increased nor diminished’ (B224). ‘All appearances contain the permanent (substance) as the object itself, and the transitory as its mere determination...’ (A182). Is there a difference between these conclusions? Note Kant’s gloss on this conclusion, at the beginning of the Second Analogy:

The preceding principle has shown that all appearances of succession in time are one and all only alterations, that is, a successive being and not-being of the determinations of substance which abides... all change (succession) of appearances is merely alteration (B233).

4. **Different conceptions of substance, according to van Cleve:**

   (i) Substance 1, ‘the pure concept’ of substance: ‘a something which can be thought only as subject, never as a predicate of something else’ (A147/B187). Since Kant’s point is not so much linguistic as metaphysical, we can gloss this as: *a bearer of properties that cannot itself be borne by anything else* (van Cleve, 105).

   (ii) Substance 2, the ‘schematized concept’ of substance: ‘the permanent’, or enduring, something that exists at all times. This is the main concept of substance of the First Analogy.

   (iii) Substance 3, that which is *conserved*: something whose ‘quantum in nature is neither increased nor diminished’ (B224). Kant identifies this with (ii), but many commentators say that such a conservation principle is different, and really a topic for physics, rather than philosophy.
5. Kant’s distinction between alteration and change:

Alteration is a way of existing which follows upon another way of existing of the same object. All that alters [sich verändert] persists, and only its state changes [wechselt]… we can say, using what may seem a paradoxical expression, that only the permanent (substance) is altered, and the transitory suffers no alteration but only a change, inasmuch as certain determinations cease to be and others begin to be. (A187/B231)

Stating the conclusion of the First Analogy in these terms, all change is alteration of substance: For any x, if x changes, there is a y such that y is a substance, and x’s change is an alteration of y. What sort of substance? See 7 below.

6. The ‘backdrop argument’. Kant seems to argue that we need substance as a kind of perceivable permanent backdrop, without which we would not be able to perceive change (B225), but the argument is unclear: substance isn’t perceivable really, nor need it be permanent for the purposes of this argument, nor does this role for substance seem to bear on the conclusion that all change is alteration of substance.

7. A more promising argument. A train of thought supporting Kant’s argument may go something like this. All change must be alteration of something or other. Suppose a leaf’s change of colour is an alteration of a leaf. Is a leaf a Substance 1? No, since the being of a leaf consists of certain molecules being arranged in a certain way: just as the colour is adjectival on the leaf, so the leaf is adjectival on the molecules. But then the leaf’s colour is adjectival on the molecules too. Are the molecules in turn adjectival on something else? Perhaps, but, arguably, the regress has to stop somewhere. So all change is going to involve, somewhere down the line, an alteration of Substance 1, i.e. an alteration of something that is not in turn adjectival on something else.

Now, can we get from here to the conclusion that all change must be alteration of something permanent, i.e. Substance 2? Many philosophers (Bennett, Strawson) have said no: all Kant is entitled to conclude is that change that is an alteration of something that is relatively persisting. But van Cleve argues yes, Kant is entitled to his conclusion. Suppose the ultimate substance, Substance 1, were to stop existing; in other words, suppose, for purposes of reductio, that Substance 1 is not Substance 2: that the absolute substance is not permanent. Then it would undergo change, in Kant’s terms: it would be a dependent, adjectival being, whose change corresponds to an alteration of some other substance. Then it would not be a Substance 1, contrary to the hypothesis. So we must suppose that this ultimate Substance 1 is also a permanent Substance 2 (for more details on this line of thought, see van Cleve 108-9).

8. Substance and objectivity. Subjective experience is an ever-flowing succession of one representation after another. To distinguish this subjective experience from an objective world represented by it, we must think of the time order of things in that world as being not necessarily the same as the time order in which our perceptions occur. We must think that, although our perceptions change in an ever-flowing succession, the world itself/things in the world persist. Permanence or abidingness must somehow be represented in the objective order (Strawson, 125 ff.). Strawson says that the permanence is represented (a) in the absolutely enduring spatial framework of things, and (b) the relatively enduring persistent objects that we are able to re-identify at different times, thanks to (a).
We can build further on this line of thought, importing the examples the house and the boat, from the Second Analogy (A191/B236-A193/B238). The subjective time order is always successive, $a$ at $t_1$, $b$ at $t_2$, etc. When we represent a time-order as being objective, we have to represent it a number of different ways. The objective world isn’t just a flow of one thing succeeding another, $a$ at $t_1$, $b$ at $t_2$, etc: it involves different time relations such as that of co-existence, $a$ at $t_1$ and $b$ at $t_1$. Kant draws a contrast between our perception of a house, and our perception of a moving boat, in order to draw a conclusion about causation in the Second Analogy; but we can bring it in early, to see its relevance for the First Analogy too.

(1) My subjective perceptions of parts of a house are successive, first the window, then the door, then the basement. But the objective time order there is co-existence, the parts (window, door, basement) being judged to exist at the same time. This is possible only if window, door, persist through different times of my subjective perceptions of them, i.e. $a$ at $t_1$ and $a$ at $t_2$. (2) My subjective perceptions of a ship moving downstream are successive. To think of a successive sequence as objective, I must think of it as being an alteration: a change of properties of a persisting thing: the sequence ‘ship upstream, ship downstream’ involves different (spatial) properties of the ship, which exists at both of those times, hence endures. The ship endures, the ship alters, and its properties change. So both of the objective time orders (coexistence and succession) presuppose some (relatively) persisting thing. We manage to distinguish the two objective time orders by thinking of (1) as involving persisting things with same properties at different times; (2) as involving persisting things with different properties at different times.