A Statement of Temporal Realism[1]
By A.N. Prior

Philosophy, including Logic, is not primarily about language, but about the real world. For example, the very simple logical truth that if John is sick then John is sick is not a truth about the sentence "John is sick" but a truth about John. It is not, of course, peculiar to John that if he is sick he is sick; it is true of everyone that if he is sick he is sick. Still it is true of John, and that is what the sentence says.

Formalism, i.e. the theory that Logic is just about symbols and not about things, is false. Nevertheless, it is important to "formalise" as much as we can, i.e. to state truths about things in a rigorous language with a known and explicit structure. It is also important to pay attention to the structure of our language in order to expose and eliminate philosophical "pseudo-problems", and in order to distinguish real objects from mere "logical constructions".

For example, we say that events begin by being future, and then become present, and then become more and more past; and Moore was worried about the question whether events must go on existing in order to become more and more past, or whether they exist only when they are present. Once I fell out of a boat; this falling-out-of-a-boat was once present, and now it is past. Does this falling-out-of-a-boat exist still, but in some place called "the past", or did it only exist when it happened, i.e. when it was present? The answer is that, strictly speaking, events do not "exist" at all; only things exist - events are just what things do and what happens to them. The truth that I once fell out of a boat is not a truth about a falling-out-of-a-boat, but a truth about me, and about the boat. To say that this event is no longer present but only past is simply to say that although I *was* once falling out of the boat, I am not falling out of one now. I am a real object, and I did really fall, but my falling is not an additional real object, but only a "logical construction". To call it a logical construction is not to call it a piece of language - a fall is not a piece of language - but it is to say that pieces of language which seem to about a fall are really about something else, namely the man who falls.

Time is not an object, but whatever is real exists and acts in time. We can describe most of what happens in time by talking about events being earlier and later than one another, and it is possible to construct a formal calculus expressing the logical features of this earlier-later relation between events. But this earlier-later calculus is only a convenient but indirect way of expressing truths that are not really about "events" but about things, and about what these things are doing, have done and will do. For example, to say that my-falling-out-of-a-boat is an earlier event than my-writing-this-paper is just a way of saying that what is now the case is that I am writing this paper but have already fallen out of the boat. The use of past, present and future tenses is a more direct, more fundamental and less misleading way of describing what happens in time that the

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"earlier-later" language; and there is a logic of past, present and future tenses which is just as rigorous, just as capable of being "formalised", as the more artificial logic of earlier and later.

What we need here is not to introduce the <u>adjectives</u> "past", "present" and "future"; these, if we used them, would still only apply to events, i.e. to mere logical constructions. What we need rather is to introduce <u>tenses</u> into logic, and these are not adjectives but modifications of verbs, quite like the modification effected by a negation sign. Just as the truth that I am <u>not</u> falling out of a boat may be expressed by writing "It is not the case that -" in front of "I am falling out a boat", so the truth that I <u>was</u> falling out of a boat may be expressed by writing "It was the case that -" in front of "I am falling out a boat". It is prefixes like "It was the case that -" which have just as clear and definite a logic as the logic of "not". For example, it is a law of this logic that

> (A) If I am falling out of a boat, it will always be the case that it was the case that I am falling out of a boat.

And there are many more such laws, which are now beginning to be systematically treated.

Propositions which are subject to tense-inflections, such as "I am falling out of a boat", are liable to be true at one time and false at another. Certainly there are unchanging truths, but there are changing truths also, and it is a pity if logic ignores these, and leaves it to existentialists and contemporary informal "dialecticians" to study the more "dynamic" aspects of reality. There are clear, hard structures for formal logicians to discover in the world of change and temporal succession. There are practical gains to be had from this study too, for example in the representation of time-delay in computer circuits, but the greatest gain that a logic of tenses brings is the accurate philosophical description of the reality of the passage of time.