September 3rd, 1911

Dear Bertie,

I hope to post the proofs at the same time as this letter, ⟨?⟩ before 5 or 6 o'clock when the mail departs. But last night when I should have finished them, the idea suddenly flashed on me that time could be |2| treated in exactly the same way as I have now got space [which is a picture of beauty, by the bye]. So till the small hours of the morning, I was employed in making notes of the various ramifications.

The result is a relational theory of time, exactly on four legs with that of space. As far as I can see, it gets over all |3| the old difficulties, and above all abolishes the instant in time, e.g. the present instant, even in the shape of the instantaneous group of events. This has always bothered me as much as the 'point' – but I have had to conceal my dislike from lack of hope. But I have got my knife into it at last.

|4| According to the theory, the time-relation as we generally think of it [sophisticated by philosophers] is a great cook up. Simultaneity does not belong to it. That comes in from the existence of the space-relation. Accordingly the class of all points in space serves the purpose of the instant in time. Also each object runs its own time (properly so called).

|5| I don't pretend that this is an explanation of the theory. But I jot these notes down to let you see that the theory is rather far-reaching.

The fact is that with large objects – i.e. extended through long times and large spaces – their mutual relations |6| become too complicated for simple logical statement. We break them up into small enough objects and then ∨relations∨ of a sufficient logical simplicity begin to appear. We push this process of paring away at the objects to its ideal limit [marked of course by classes of things tucked away in each other] |7| and [with some cooking] we reach the ideal logical simplicity of time and space as usually conceived.

My root idea is that an object has essential extension in time as well as in space, and that ∨there are∨ time-parts of an object just as there are space-parts. In fact the time and space extensions |8| are the object. The merely formal properties of time and space, as usually considered, arise from their being logical abstractions. The scientific universe arises from the research for objects which are always time-parts of yet greater objects.

The general result seems to me to help a naive realism.

Yours affectionately,
A.N. Whitehead