

11 December 1986

Dear Keith,

Thank you very much for the interesting paper on tropes and fields. My reactions are as follows.

To the problems raised in your first part, my response would be the Russelian one that you anticipate. I'd retreat to point-sized tropes located at points of spacetime -- a tropist version of what I call an 'arrangement of qualities' in my introduction to Papers II (DMA has a copy of the 1984 manuscript) -- and mereological sums of these. I would think it a questionable matter whether this atomism was a contingent thesis about this world, or instead a necessary truth about how any world must be built. But if, for instance, tropism can't accommodate a continuous gradient of some magnitude without dissolving that gradient into point-sized tropes, I could just conclude that a non-atomistic possible world would have to lack such gradients.

Of the problems you raise against atomism, the main one is the Nerlich-Mortensen problem about enantiomorphs. I don't see the problem. It's some while since I read Graham's book (and I haven't read all their subsequent joint pieces) but the lesson I came away with was not a problem for atomism. Rather it was this. The relation of like- or opposite-handedness cannot be an internal relation of the gloves, or even an external relation that supervenes on the intrinsic qualities and the distance relations of the gloves alone; rather, it must be a relation that involves distances not only between the parts of the gloves but also between the parts of the gloves and other things everywhere else, and among those other things. Then there must be relata for distances everywhere -- either parts of spacetime itself, or else parts of some omnipresent thing. Bad news for a kind of relationism; but not bad news for the theory that absolute spacetime divides into points with distance relations between them.

Some of the rest of the rejection of atomism seemed to turn on some richer notion that I hold of what it means to be a part -- but here I'm not very sure what was going on.

As to your final view, I have no objection whatever to the idea that fields are all-pervasive abstract particulars, abstract in the sense that they are not the exclusive occupants of their places; or to the speculation that the world consists entirely of a small number of such abstract particulars. But I do have trouble understanding how fields can vary over spacetime otherwise than by having parts that differ one from another; and how they can vary and still be tropes. I'd rather have it that point-sized parts of fields are tropes, and fields are mereological sums of these point-sized parts.

Yours,