

# Heterogeneous simples

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## Prima facie possibility

Of those philosophers who believe the material world contains simples, there has recently been debate over whether there can be extended simples (see Braddon-Mitchell and Miller 2006, Hudson 2006, Markosian 1998, 2004, McDaniel 2007a, 2007b, McKinnon 2003, Parsons 2000, Sider 2006, Simons 2004 inter alia). An extended simple is (i) a material object; (ii) simple, and (iii) it occupies an extended region of space.

Various reasons have been offered in favor of the claim that extended simples are possible, including: (a) that they are conceivable (Markosian 1998), (b) that purportedly plausible modal principles claiming, roughly, that there are no necessary connections between distinct existences entail their possibility (McDaniel 2007a, Saucedo 2009, Sider 2006), and (c) that contemporary physical theories entail that there are extended simples (Braddon-Mitchell and Miller 2006).

If there are, or might be, extended simples, could they be qualitatively heterogeneous?

Might there be distributional properties?

Are these the same question? (Caveats: direct exemplification)

## Examples

Plausible candidates within a posteriori metaphysics:

1. fundamental material particulars
2. singletons
3. reflexive relational facts
4. some mixtures

Some other examples, of questionable ontological categories:

1. states of affairs
2. the universe, if existence monism is true
3. (arguably,) tropes, if they are both simple and non-transferrable
4. things exemplifying properties at extended regions, if it is false that necessarily, if an object occupies region  $R$  then every occupiable proper sub-region of  $R$  is exactly occupied by a proper part of that object

## A worry about similarity

Properties are things that ground objective similarity. Can distributional properties do this?

## Universals or tropes?

McDaniel 2009: to account for qualitative heterogeneity of material simples, one should appeal to tiny and short-lived tropes, rather than appealing to fundamental distributional properties.

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