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Hypercategories

Hypercategories are just **Cat**-indexed categories. A small hypercategory is (represented by) a small strict double category. Small weak double categories can also be viewed as hypercategories and these are essentially small, i.e. weakly equivalent to small ones. 2-categories are double categories whose vertical arrows are identities and thus may be considered as hypercategories. Even large 2-categories produce hypercategories with small homs. This was our motivation for appropriating the old name for 2-categories, “hypercategories”.

Another source of hypercategories is the indexing of **Cat** by itself. There is the standard way, via slice categories, but there are several other possibilities and sorting them out poses interesting questions. In general, 2-categories of categories with extra structure will give examples of large hypercategories.

Derivators are also hypercategories and provide a wealth of examples. We will comment on some of the implications they have for hypercategories and vice versa.