

# Globular Multicategories with Homomorphism Types

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## Abstract

We introduce structures called globular multicategories with homomorphism types. We discuss how various collections of “higher category-like” objects can be used to construct these globular multicategories. We show how to obtain a number of higher categorical structures using this data. We will see that in this setting there is a precise sense in which:

- types are higher categories,
- dependent types are profunctors,
- terms are higher functors,
- terms in a dependent context are higher transformations,
- there is a higher category of all types and terms.