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An element-based reformulation of restriction monads

Last year, I introduced restriction monads: monads in a bicategory equipped with a restriction 2-cell satisfying axioms reminiscent of those satisfied in a restriction category. This talk will give a reformulation of restriction monads in bicategories with an initial object. An immediate benefit of this reformulation is a pair of one-to-one correspondences between (i) small restriction categories and restriction monads in $\text{Span}(\mathbf{Set})$ and (ii) small restriction categories and restriction monads in $\mathbf{Set}\text{-Mat}$. These correspondences form the motivation for defining internal restriction categories and restriction enriched categories, respectively.