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Enrichment of \mathcal{V} -categories in \mathcal{V} -cocategories

We introduce the category of \mathcal{V} -cocategories with objects comonads in the bicategory $\mathcal{V}\text{-Mat}$ of \mathcal{V} -matrices, and describe how an enrichment of the category of \mathcal{V} -categories in $\mathcal{V}\text{-Cocat}$ is induced. This follows the idea of enrichment of the category of algebras in coalgebras, first suggested by Gavin Wraith in the 1970s, and the enrichment of the total category of modules in the category of comodules. The above is in a more general context of what could be called an “enriched fibration”, leading to further generalisations that include categories of \mathcal{V} -modules and operads.