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hereditary category

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**Definition 0.1.** Let  $\mathcal{C}$  be a locally small  $\mathcal{Ab}$ -category. A subcategory  $\mathcal{A}$  of  $\mathcal{C}$  is called *hereditary* if it verifies the following condition: if  $Y$  is an object in a full subcategory  $\mathcal{F}$  of  $\mathcal{C}$ , then any subobject of  $Y$  is also in  $\mathcal{F}$ .