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category associated to a partial order

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Let S be a collection of objects, and let \leq be a partial order on S . Then we can construct a category C as follows. Let the objects of C be exactly S . For a pair of objects A and B in S , construct a single arrow from A to B if $A \leq B$; otherwise there are no arrows from A to B . Then C is a category.

Categories of this form are of interest because they provide some justification for using categories as indices for direct limits and inverse limits. This is exactly the construction one goes through to construct the Zariski site, for example, and a stalk on that site is easily recognizable as a limit over a category of this form.