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*( $\infty, \infty$ )-categories with adjoints are a bit like spaces*

Recent developments have been reinforcing the idea that  $(\infty, \infty)$ -categories are directed analogues of spaces ( $=\infty$ -groupoids) ( $=$ homotopy types) ( $=$ anima). Some examples are the directed analogues of products, cylinders, cones, loop spaces, suspensions, joins, spectra, fibers, fibrations, and so on. Despite this happy observation, in many ways,  $(\infty, \infty)$ -categories have no hope to behave like spaces precisely because of their directionality. For instance, unlike spaces, the “homotopy monoid” of an  $(\infty, \infty)$ -category depends tremendously on the choice basepoint.

However, if we restrict ourselves to  $(\infty, \infty)$ -categories with adjoints (at all levels), the theory starts to resemble the theory of spaces much more closely (essentially because then we can leave the basepoint and come back). We will explain that by examples, focusing in particular in a Grothendieck construction involving such  $(\infty, \infty)$ -categories with adjoints.