Lemma. **UPos** and **LPos** are equivalent: there exists a pair of functors

$$\swarrow : \mathbf{UPos} \to \mathbf{LPos},$$

$$\nearrow : \mathbf{LPos} \to \mathbf{UPos},$$

such that $\swarrow \fatsemi \nearrow = \mathrm{Id}_{\mathbf{UPos}}$ and $\nearrow \fatsemi \swarrow = \mathrm{Id}_{\mathbf{LPos}}$, where $\mathrm{Id}_{\mathbf{UPos}}$ and $\mathrm{Id}_{\mathbf{LPos}}$ are the identity functors on **UPos** and **LPos**, respectively.