



Math for the people, by the people.

biextensional collapse

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Defines	equivalent Chu space

If $\mathcal{C} = (\mathcal{A}, r, \mathcal{X})$ is a Chu space, we can define the *biextensional collapse* of \mathcal{C} to be $(\hat{r}[A], r', \check{r}[X])$ where $r'(\hat{r}(a), \check{r}(x)) = r(a, x)$.

That is, to name the rows of the biextensional collapse, we just use functions representing the actual rows of the original Chu space (and similarly for the columns). The effect is to merge indistinguishable rows and columns.

We say that two Chu spaces are *equivalent* if their biextensional collapses are isomorphic.