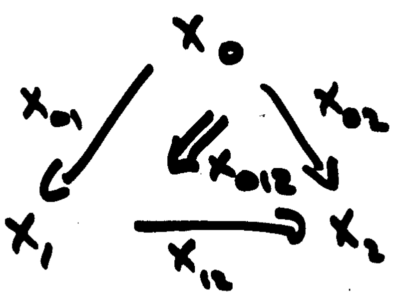
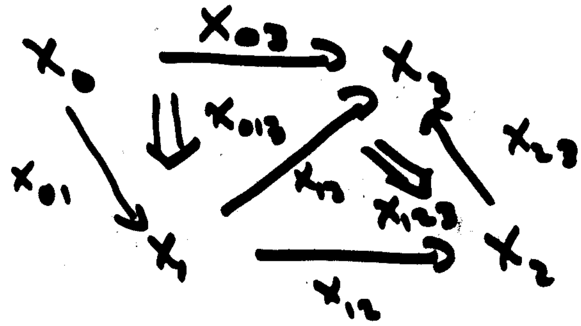
Filling $(\Lambda^1[3], r^1)$

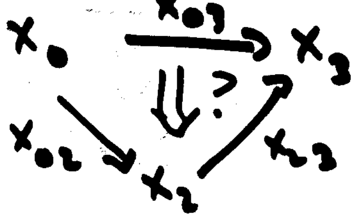
$(\Lambda^1[3], r^1)$ is the data:





x_{012} is thin, so $x_{02} = x_{12} \circ x_{01}$.

We want a 2-cell



such that the whole 3-simplex will commute.

We have a 2-cell

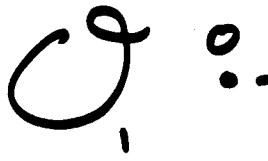
$$x_{03} \xRightarrow{x_{013} \circ_{x_{13}} x_{123}} x_{23} \circ \underline{x_{12} \circ x_{01}}$$

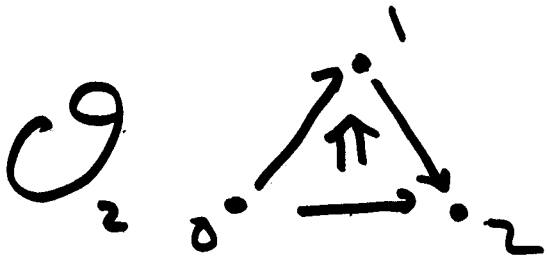
(equal since x_{012} is thin)

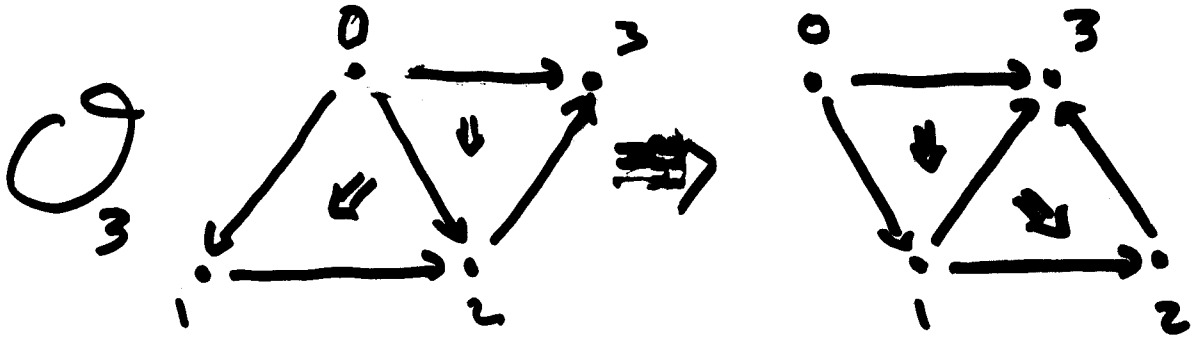
$$= x_{23} \circ x_{02}.$$

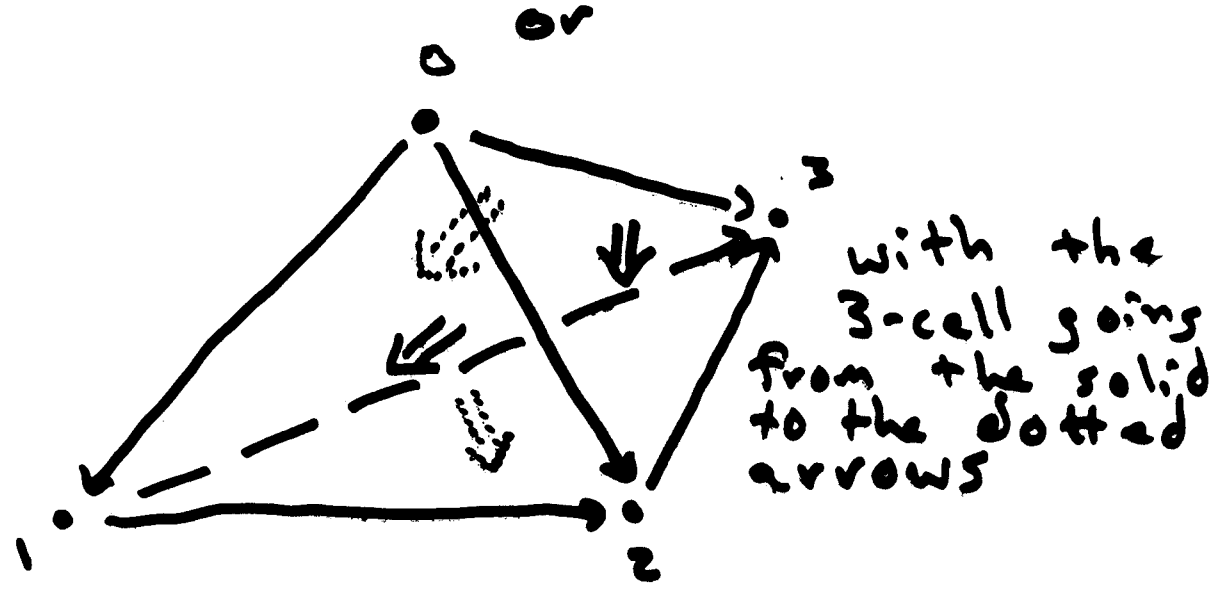
This defines ? so as to make the whole diagram commute.

$\mathcal{O}_0$ 

$\mathcal{O}_1$ 

$\mathcal{O}_2$ 

$\mathcal{O}_3$ 



with the 3-cell going from the solid to the dotted arrows

Faces $d_i x$ with i odd are sources, and i even are targets.