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This postcard depicts a *collapse Whitehead move* in the spine of Guirardel–Levitt’s Outer Space for a free product F of three finite cyclic groups $\langle a \rangle$, $\langle b \rangle$ and $\langle c \rangle$ with a free group of rank 4, $\langle x, y, z, w \rangle$. The process, reading left to right, top to bottom, is as follows: collapse the edge incident to $\langle a \rangle$, twist by an automorphism, then expand so $\langle a \rangle$ is again a valence-one vertex.

Let me explain. The spine of Guirardel–Levitt Outer Space is a simplicial complex whose vertices represent certain actions of F on trees. Edges in Outer Space correspond to equivariantly collapsing or expanding certain families of edges in the trees. What’s pictured are four different quotient *graphs of groups* labeled to describe an isomorphism of their fundamental group with F . Two of the graphs of groups, the upper right and lower left, represent the same vertex of the spine of Outer Space. This is because they differ by an automorphism of graphs of groups which “twists” the oriented edges labeled in red by a . This twisting cannot be realized as an automorphism of the graphs of groups on the upper left or lower right, so the process describes a path of length two in Outer Space.