$$(\langle a,b\rangle,c\rangle \longmapsto \langle a,\langle b,c\rangle\rangle$$

$$(A\times B)\times C \xrightarrow{\alpha_{A,B,C}} A\times (B\times C)$$

$$(f\times g)\times h \qquad \qquad \downarrow f\times (g\times h)$$

$$(A'\times B')\times C' \xrightarrow{\alpha_{A',B',C'}} A'\times (B'\times C')$$

$$\langle \langle f(a),g(b)\rangle,h(c)\rangle \longleftrightarrow \langle f(a),\langle g(b),h(c)\rangle\rangle$$