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The name isometry is used in three different meanings: preserving topological distance; algebraic isometry preserving metric tensor given by algebraic condition, this apply to arbitrary metric tensor. The third meaning of isometry is diffeomorphism generated by Killing vector fields. Algebraic isometry group acting transitively on homogeneous spaces possesses the link problem to determine all isometries that permute given two points a and b of the homogeneous space, $g(a,b)a=b$, such that $g(a,a)=\text{identity}$, and $g(a,b)$ is algebraic isometry known in the physics publications as the boost from a to b . It is not well known that in general the link problem for the given isometry do not possess the unique solution. We solved completely the link problem in terms of decomposable (simple) Grassmann bivector showing that in general every isometric permutation is ternary, ie depends crucially on the choice of extra ‘preferred’ point on homogeneous space, $g(p,a,b)$. This general solution of the link problem allows two different binary composition of such ternary permutations. One binary composition is unital quasigroup (non-associative group known as a left Bol and left Bruck loop) - compatible with the non-normal isometric stabilizer subgroup. Other possibility is associative binary composition. (Received January 27, 2013)