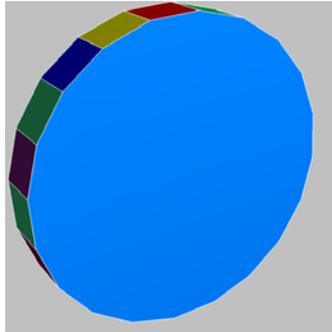
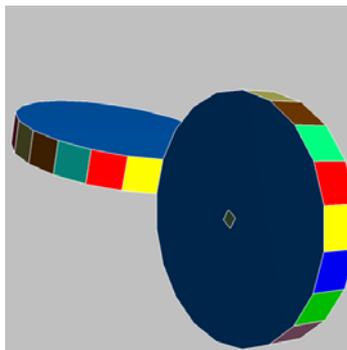


## Construction of twisted rings

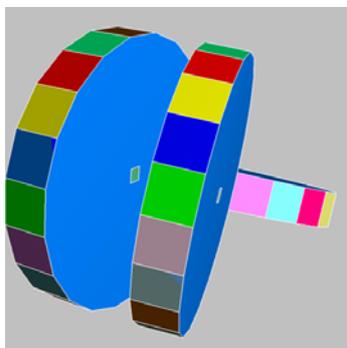
You start with a say 20-sided prism which you “colour per faces (unless parallel)”



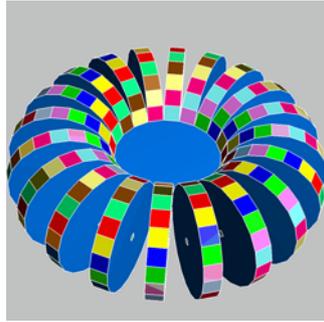
You put this into memory 1. Then you add another polyhedron (a cube or something like that) to it (edit-menu). You select one square face of the prism (a blue one e.g. ) and put this compound into memory 2. Then you retrieve the prism from memory 1, select a square face of the same colour like that one in memory 2 and you augment it by the compound in memory 2 by hitting “a”, “selected face only”, “augment using memory 2” and “Return”.



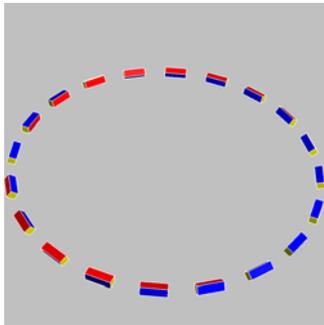
Then you put this model into memory 3. You retrieve the model from memory 2, select a square face adjacent to the former one (in this case a green one) and put it into memory 2 again. Then you retrieve the model from memory 3, select a green square face of the primal prism and you augment it by the model in memory 2 again. You put this into memory 3.



You repeat this procedure face by face until every square face of the initial prism is augmented. You have to take care of a neat sequence of the faces .



Now you select a decagonal face of the central prism and excavate it by the prism from memory 1 (“a”, “excavate selected face only”, “augment using memory 1”, “return”. The central prism disappears, and you do the same thing with all other decagonal prisms (best by using the “all faces of the same type”-option. Now only the polyhedra which were added in the second step (in this case cuboids) are left over.



They appear in a twisted arrangement and you can connect them with the faceting tool.



This procedure can be varied in many ways like number of faces of the primal prism, kind of the added polyhedron, scales of prism and added polyhedron etc.

[http://www.polyedergarten.de/Construction\\_of\\_twisted\\_rings.pdf](http://www.polyedergarten.de/Construction_of_twisted_rings.pdf)