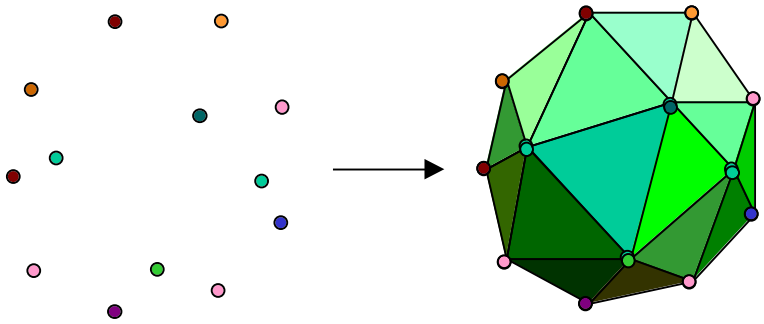


Fig 1: The interpolation of a set of sample points by a triangle mesh

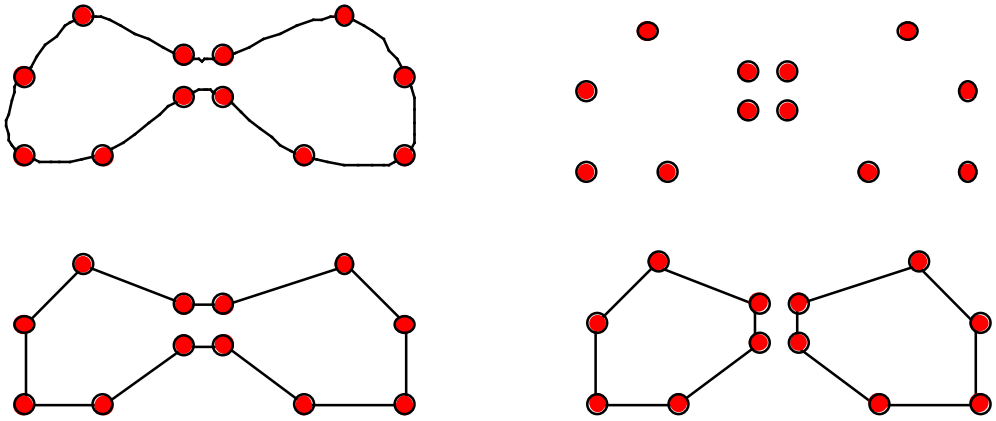


Fig 2: The interpolation of a set of sample points may have the wrong smoothness or connectivity.

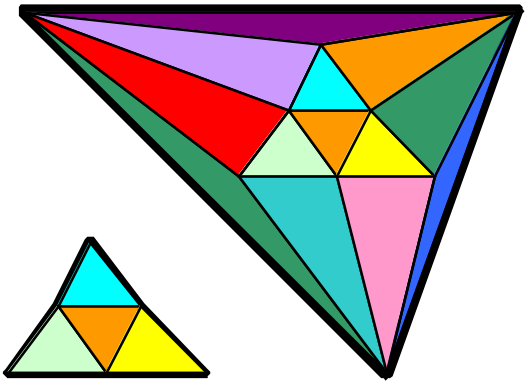


Fig 3: A simple triangle mesh is a planar triangle graph.

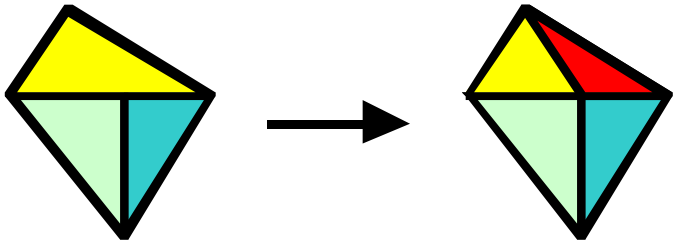


Fig 4: Splitting a triangle to remove a T-junction

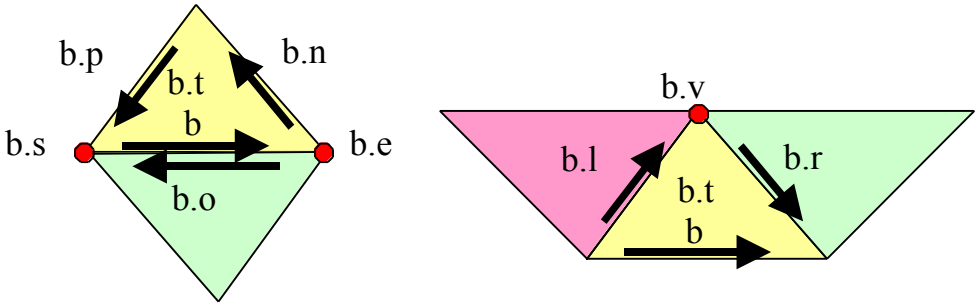


Fig 5: Local border operators.

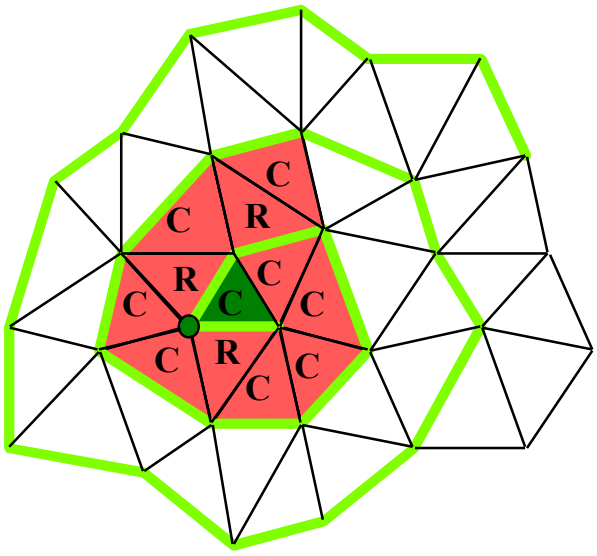


Fig 7: Typical starting Edgebreaker sequence, producing the *clers* stream CCCCCRCCRCRC

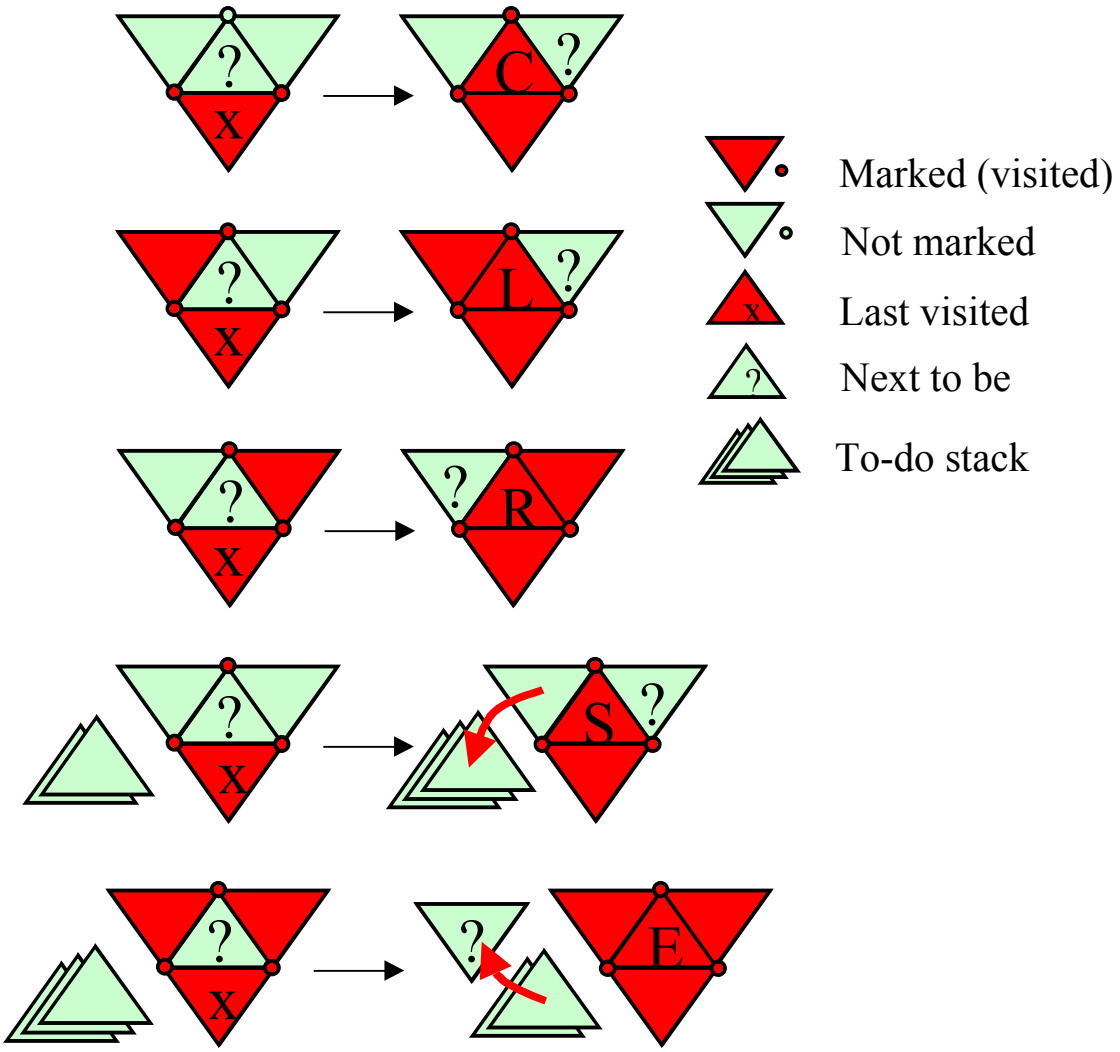


Fig 6: Edgebreaker CLERS states and labels.

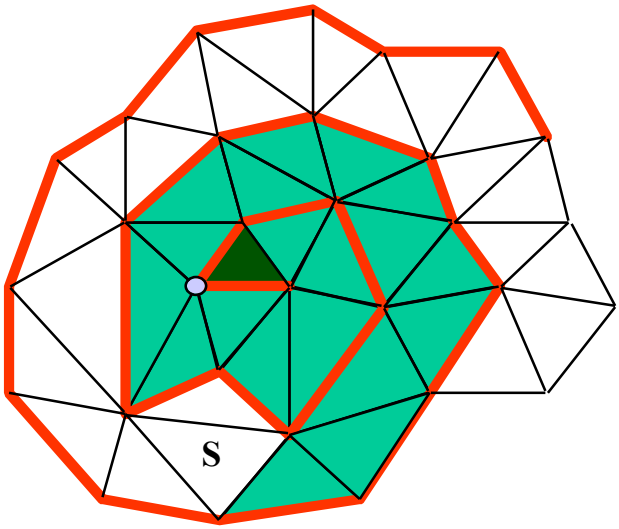


Fig 8: An S triangle early in the spiral.

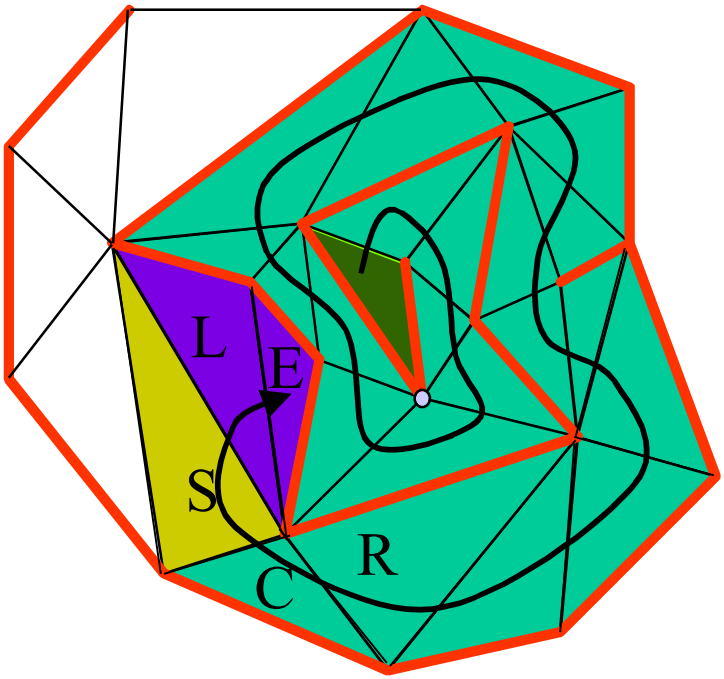


Fig 9: A more complex Edgebreaker beginning producing the *clers* stream CCCRCCCRCCCRCCCRRLCCCRCSLE

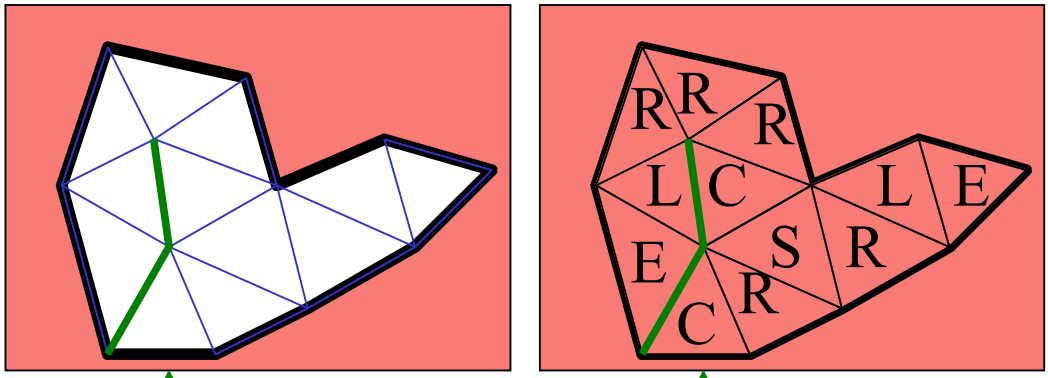


Fig 10: Typical ending Edgebreaker sequence, producing the *clers* stream CRSRLECRRRLE

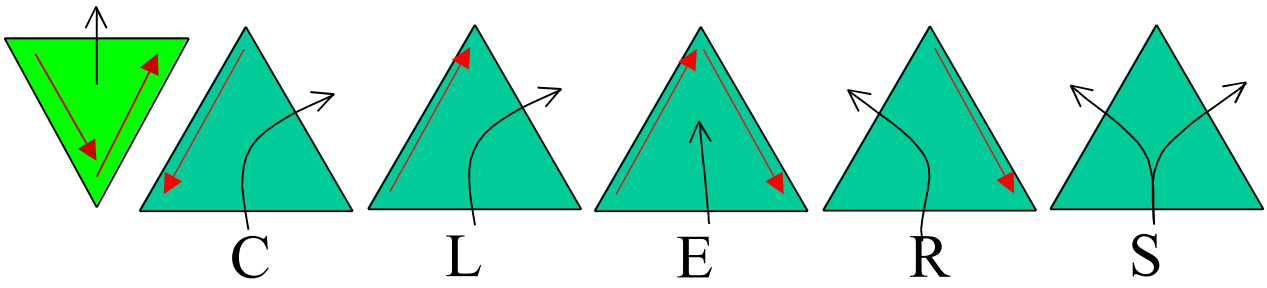


Fig 11: Free border orientation for Wrap&Zip. Initial triangle on the left.

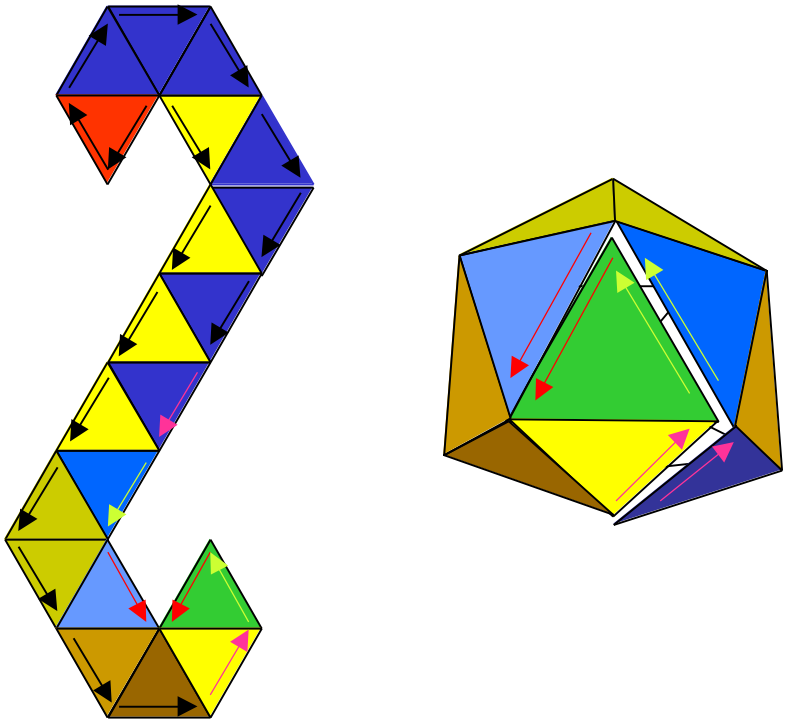


Fig 12: Zipping up the triangle tree.

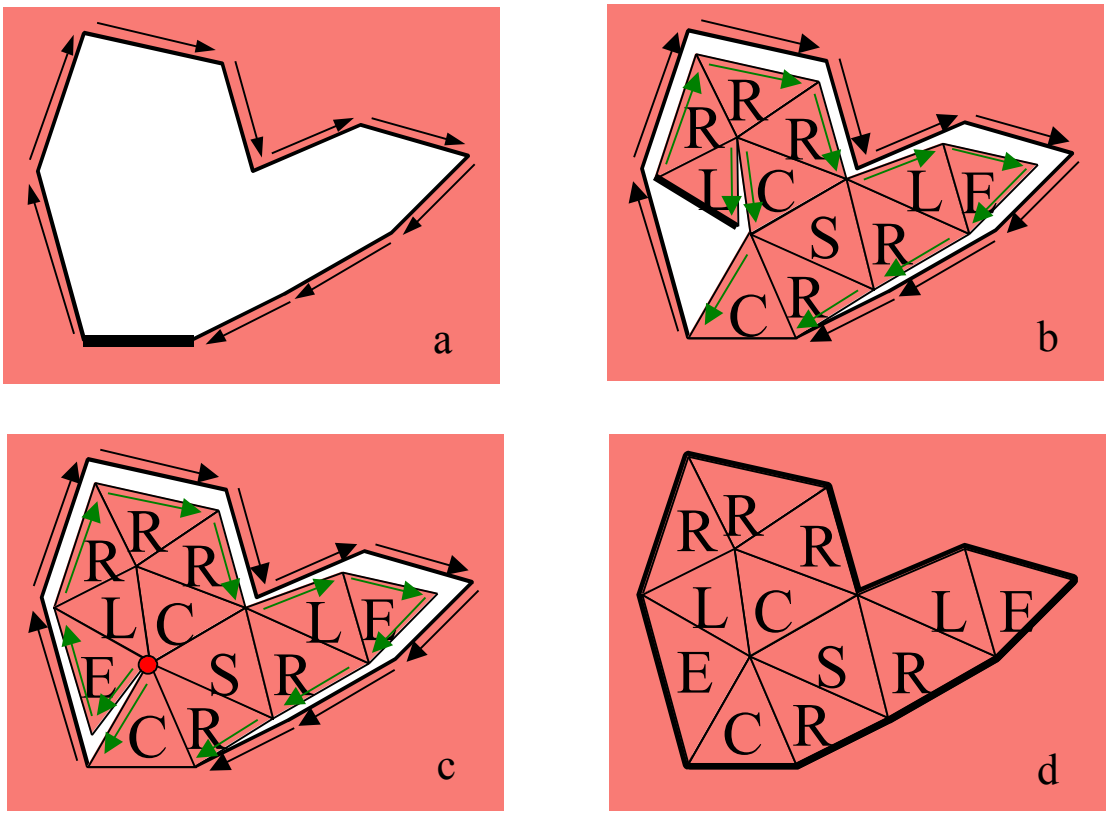


Fig 13: Zipping up the triangle tree.

Fig 14: Non-manifold solid with a non-manifold edge (left) and vertex (right).

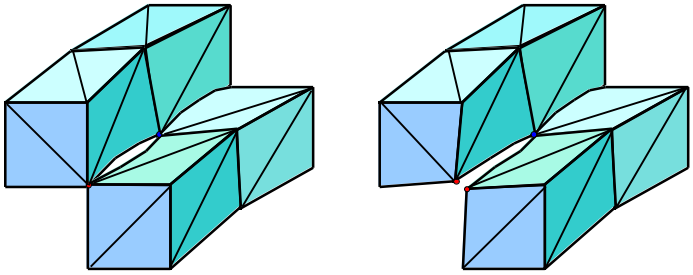


Fig 15: A non-manifold solid.

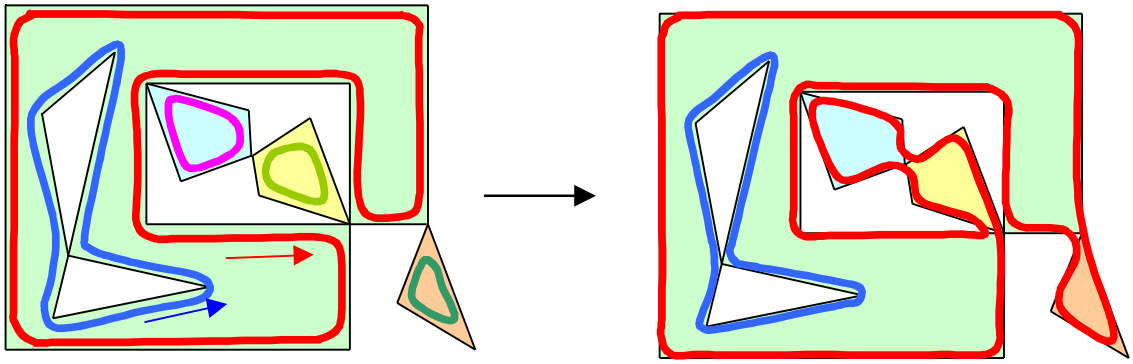


Fig 16: A non-manifold solid.

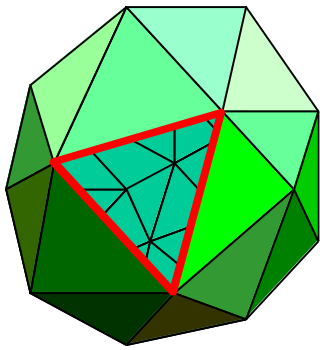


Fig 17: A triangle mesh with a hole

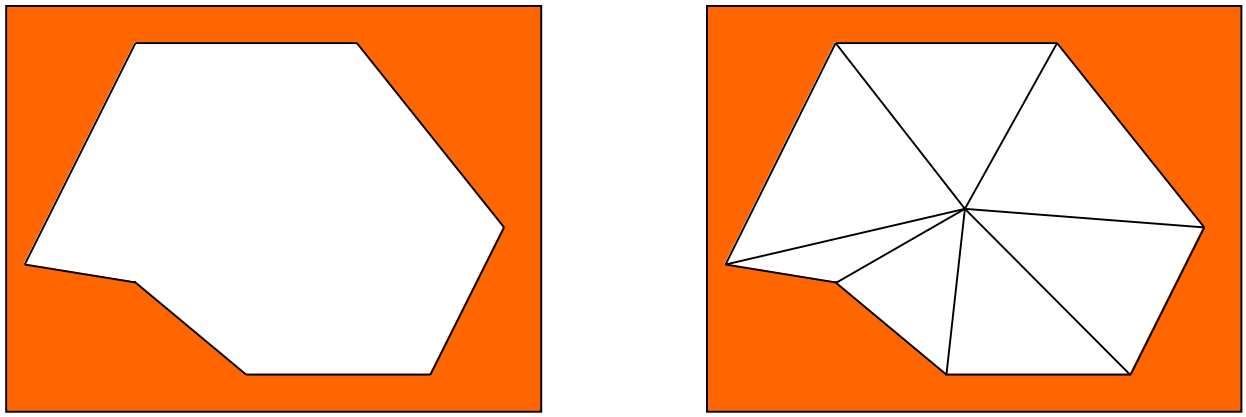


Fig 18: Filling the hole with a dummy vertex.

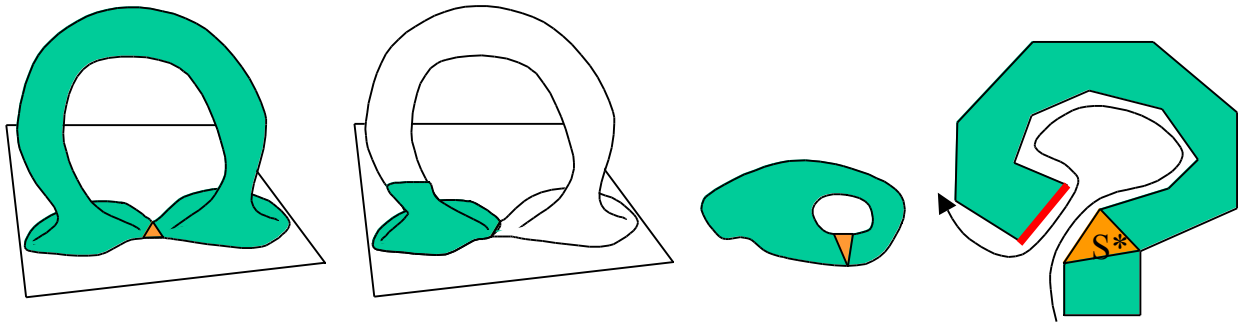
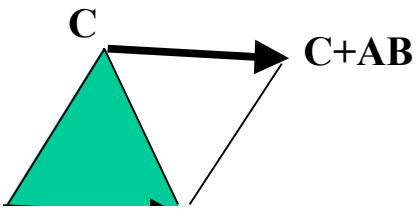


Fig 19: Discovering handles when returning to an S triangle.



B

Fig 20: Parallelogram used for predicting a vertex.

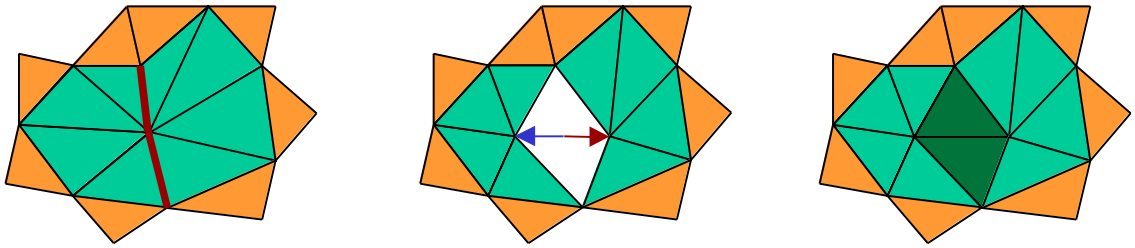


Fig 21: Vertex insertion (the inverse of an edge collapse).

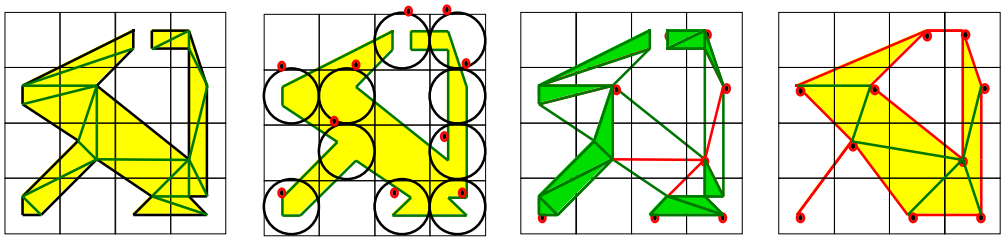


Fig 22: Vertex clustering.

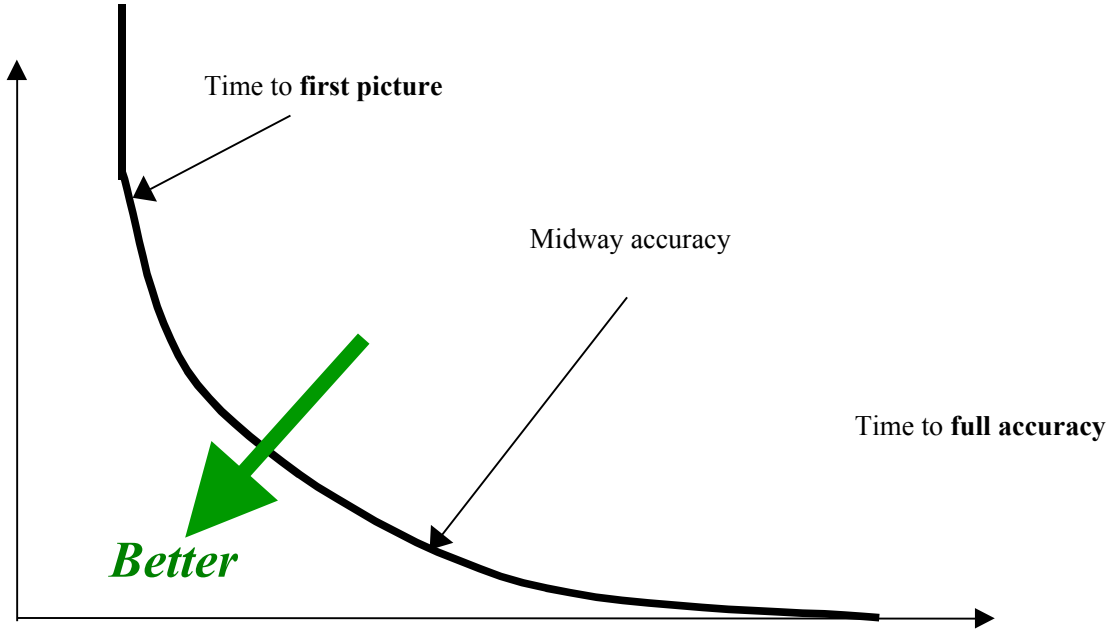


Fig 23: Error/time evolution.

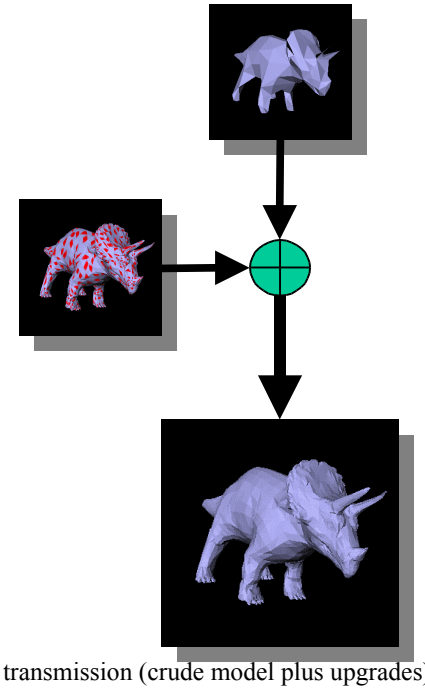


Fig 24: Progressive transmission (crude model plus upgrades)

Fig 25: Triangles inserted in one batch

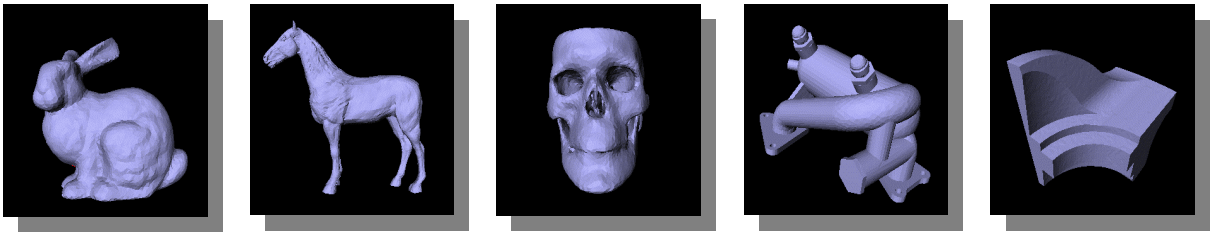


Fig 26: Models used to test our progressive transmission