GrEvo ~ Problems & Possible Solutions

- Problem 1 — Large Insertions or deletions

Source   Target

Rank of Source (1)

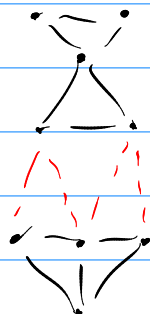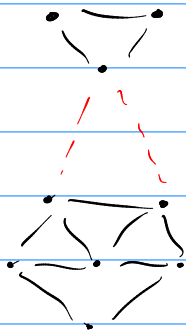difference in max ranks. (7 - 4 = 3)

Path distance in Target Network
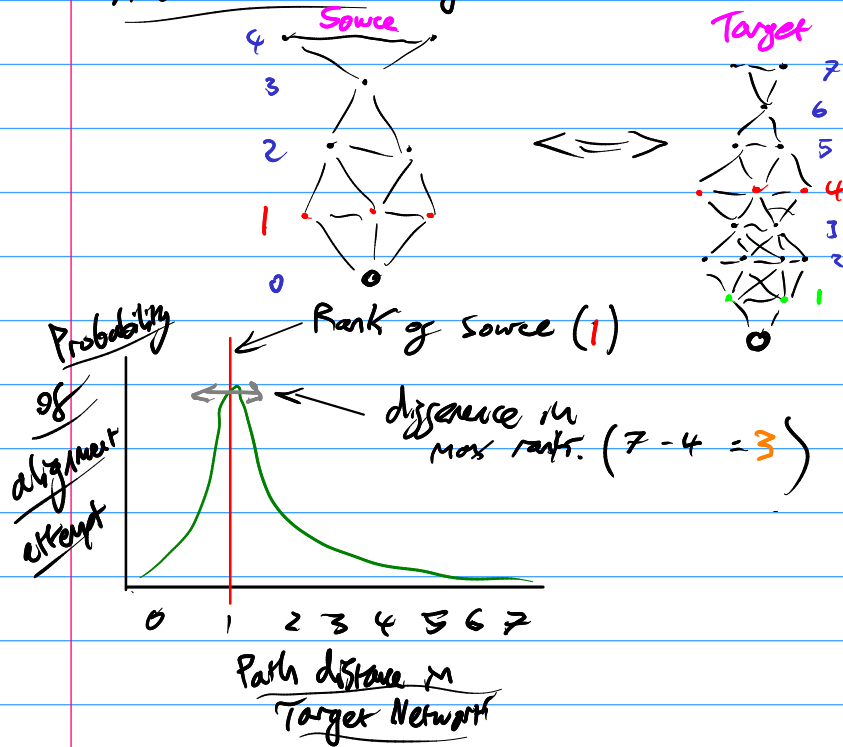
- Seed alignment (the body's node)
- Nodes that Ought to be aligned but are not of the same path distance.
- Nodes that would be aligned in current flawed method.

Note, that in current method some missalignment is ok, so long as Mutations correct for it in later steps.

- Problem 2 — Fragmented Paths

- - - Missing information

- [ ] Build Node Similarity Matrix based on topology (Graphlet degree) & Bio Similarity Scores.
- [ ] Seed the alignment with Maximally similar nodes, Symmetrically
- [ ] Greedily extend alignment using SYPA independently for each partially aligned Sub graph.
- [ ] Missing subgraphs from either Network assumed exchanged between Networks and will be either lost or incorporated depending on the hill climb.