RestAR “Puzzle”

Read the following paper: RayNet

From your understanding of it, try to answer the following questions:

- What’s the purpose of the MRF reasoning? i.e why not just learn end-to-end using a vanilla CNN?
- Outline in broad terms why the usual application of Belief Propagation is infeasible in the case of this MRF.
- What you would expect as a result of the algorithm if the input images are only binary silhouettes of the object?
- Why would this algorithm perform better in the presence of strong view-dependent effects (specularity, refraction, etc.)
- Outline significant limitations of the proposed approach? Would it fare well with very thin structures?
- Propose an improvement to this algorithm.