## Inference and Execution of Semantic Structures

D. Gueorguiev 7/17/2021

## Inference and augmented semantic distance

Let us consider the following example: We have a semantic structure  $C_1$ .

## Hierarchical Inference Algorithms

Used to limit the search space for inference.

$$A_1 \; \leftarrow \; A_2 \; \leftarrow \; \ldots \leftarrow \; A_{k-1} \; \leftarrow \; A_k$$

 $A_i$  is inference algorithm which can be tuned by higher level inference algorithm  $A_{i-1}$ . Let us describe such simple algorithm involving our semantic structure approach-

What is the optimal structural representation of a set of hierarchical algorithms – a path (as shown above) or more general – a tree? Should we allow rearrangement of the connectivity pattern based on data? If yes how to implement it?

TODO: finish this paragraph