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PROBLEM SET 8 – Week 11

1. Word translation

- In Pajek, open the file words.net. It contains words related to the English word 'spring'. English words are labeled as e_someword, 'f' for French, 'g' for German, 'h' for Croatian (hrvatski). Your task will be to find translations of the different english meanings of 'spring' into croatian using this network.
- Find the pairwise dissimilarities of nodes in the network
 - Cluster > Create complete cluster
 - Operations > Dissimilarity (experiment with different ones)
 - You will be prompted to save the dendrogram to an .eps file. View it and interpret it. (*I*)
 - Draw a network using the dissimilarity values
 - + in the draw menu (Options > Values of lines > dissimilarities)
 - + Layout (use your favorite spring layout algorithm) (*I*)
 - + Are related nodes close together (if you don't know french or german, ask a neighbor)?
 - Save a permuted matrix that should have grouped related terms together
 - + make sure you re-select the original matrix and not the full dissimilarity matrix
 - + File > Network > Export matrix to EPS > using permutation
- How many different meanings of the word 'spring' are captured? Which Croatian words correspond to each meaning?
- Did you find any same-language synonyms using the hierarchical clustering?