Analyzing Bollywood Social Network with Pajek

Dave King

HICSS 47

2014

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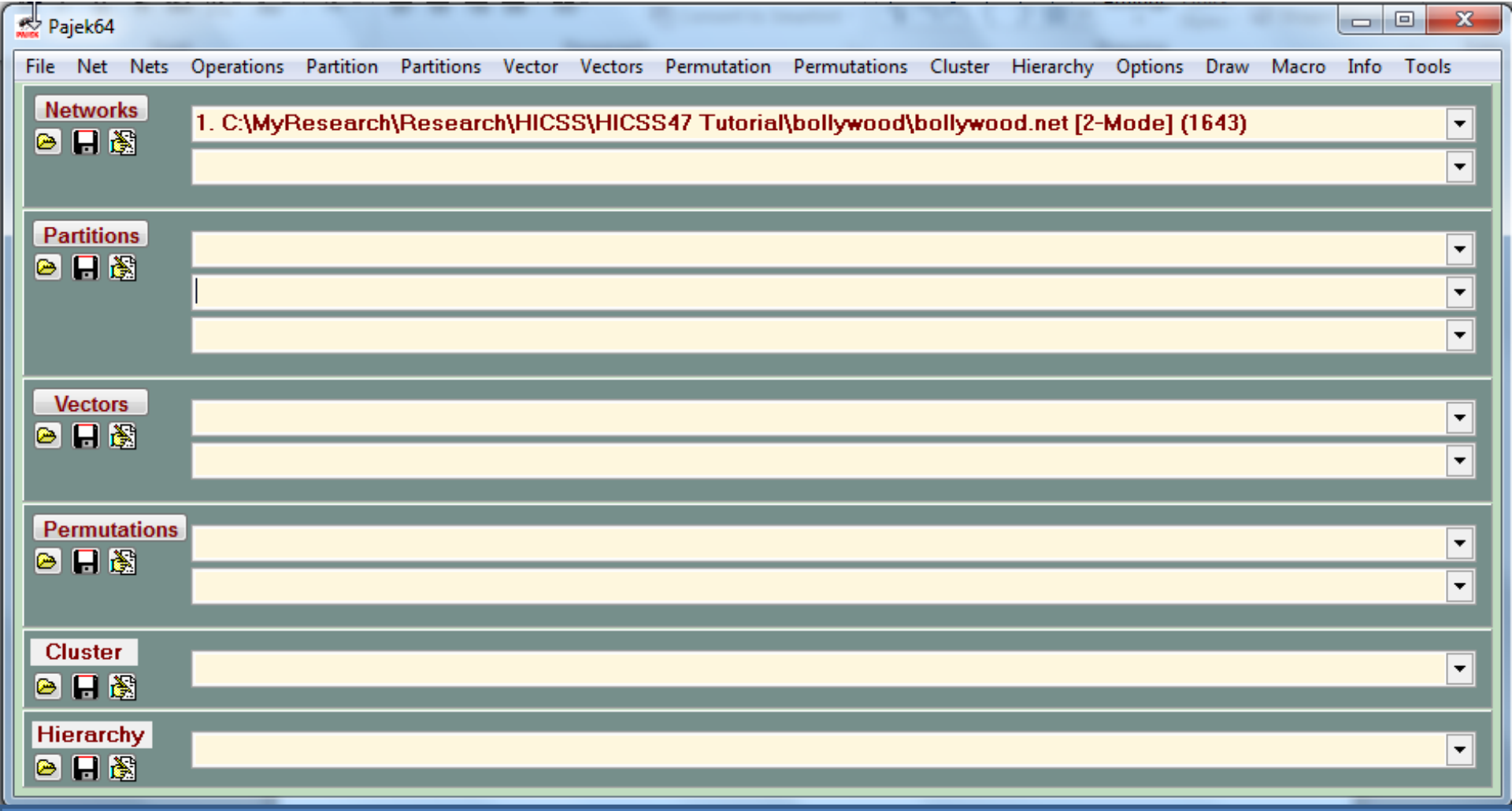
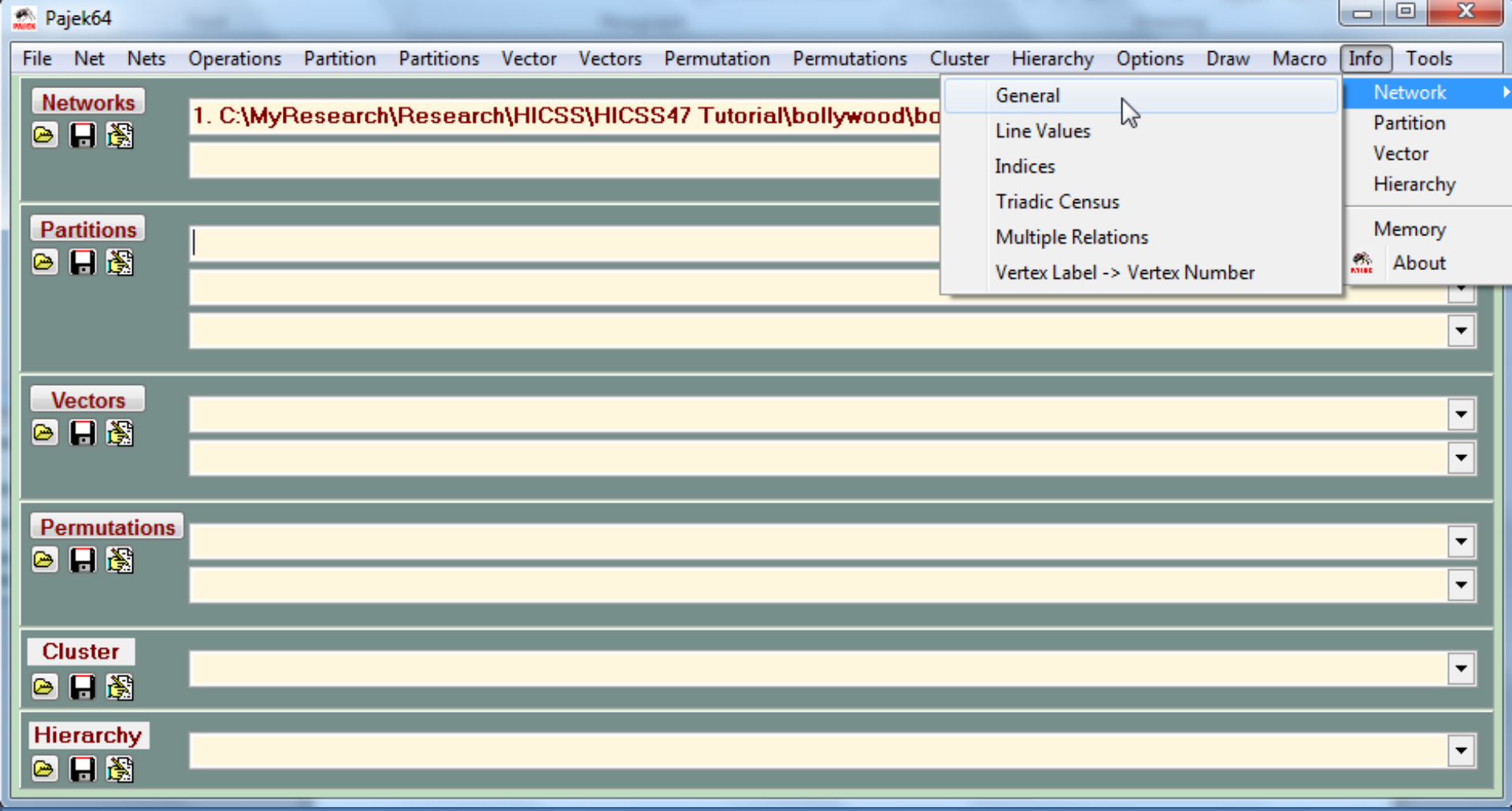
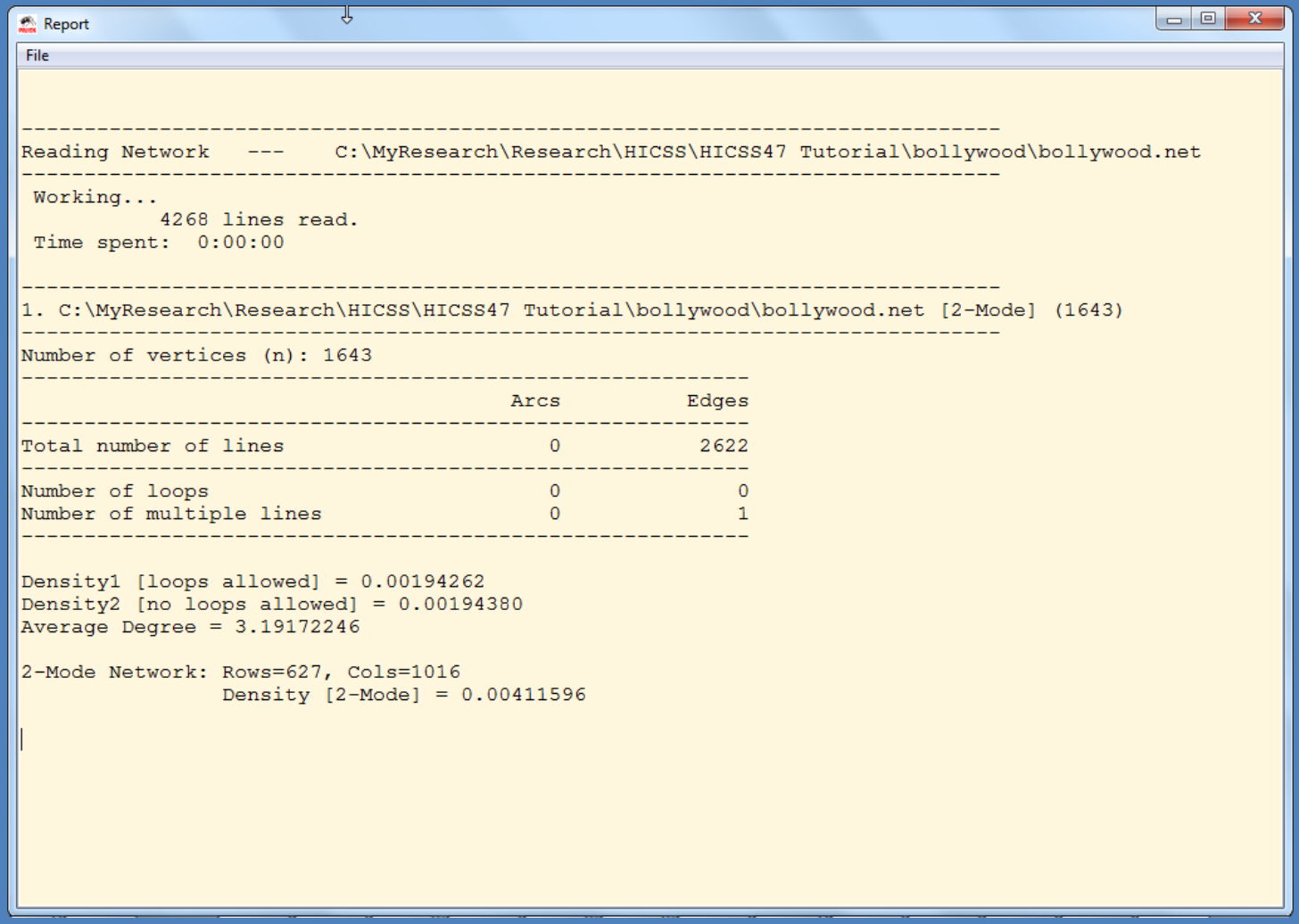


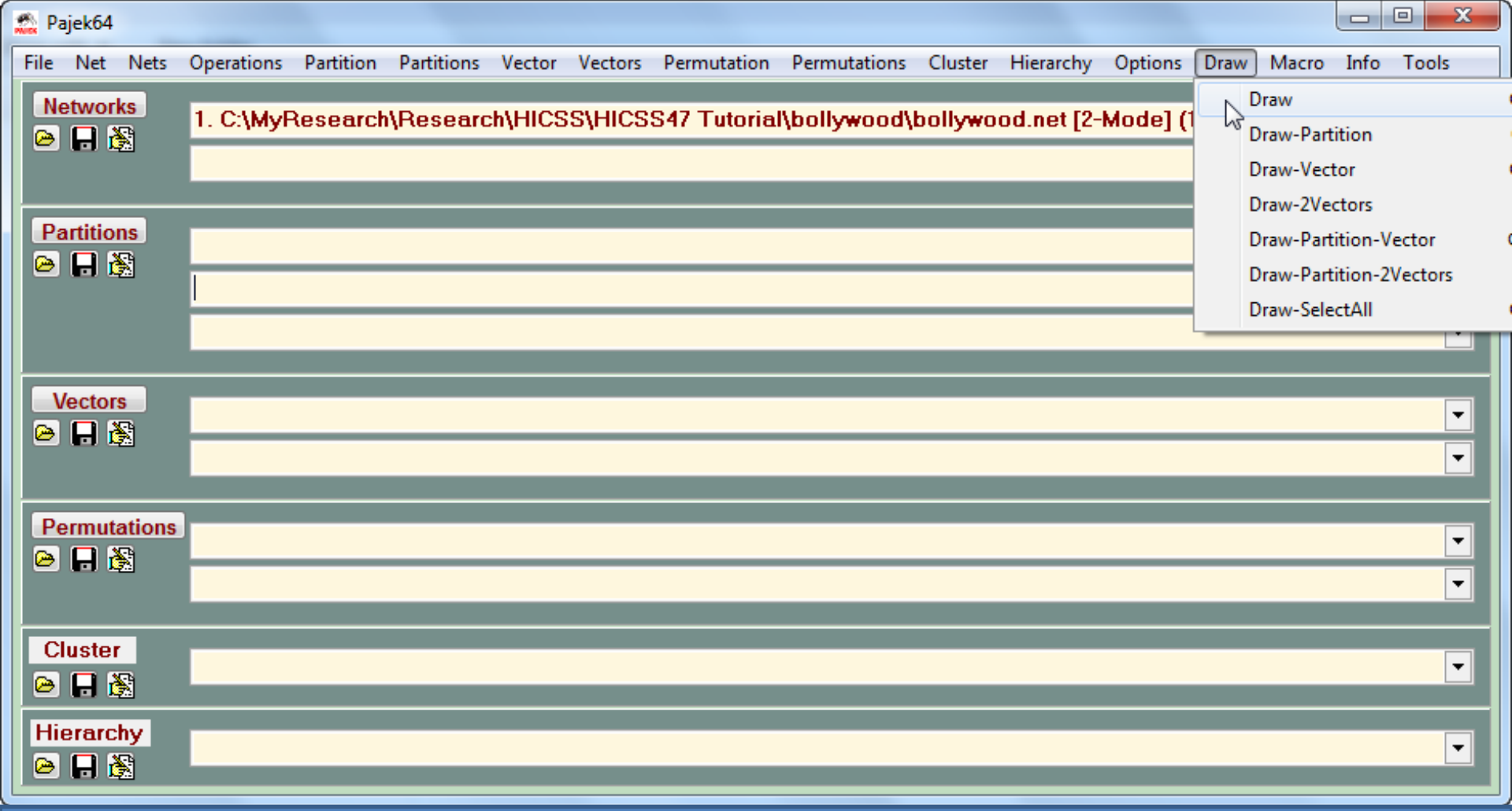
Step 1A: Opening Bollywood.net
2-mode network of movies and actors



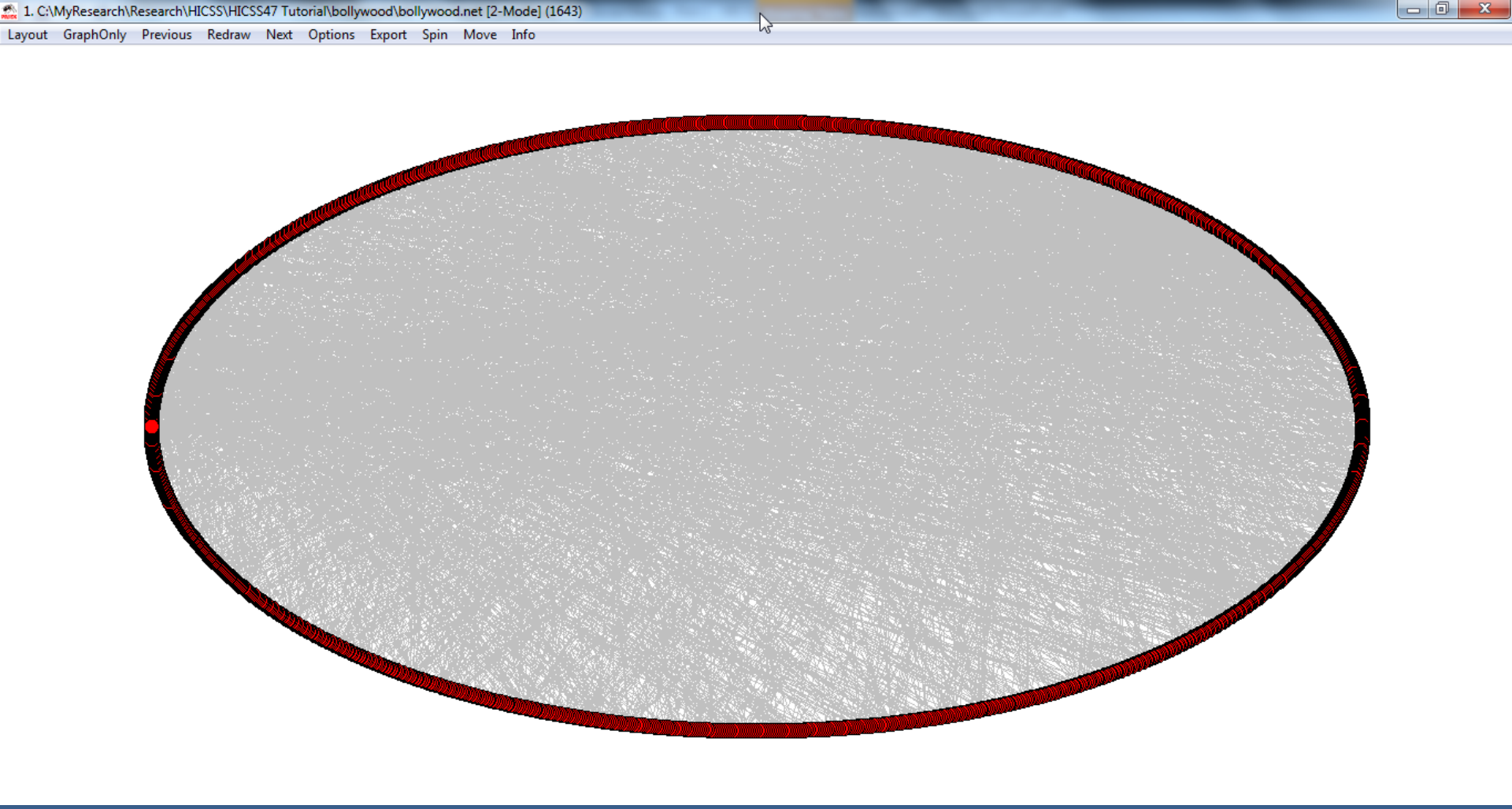
Step 1B: Requesting General Info Report for Network



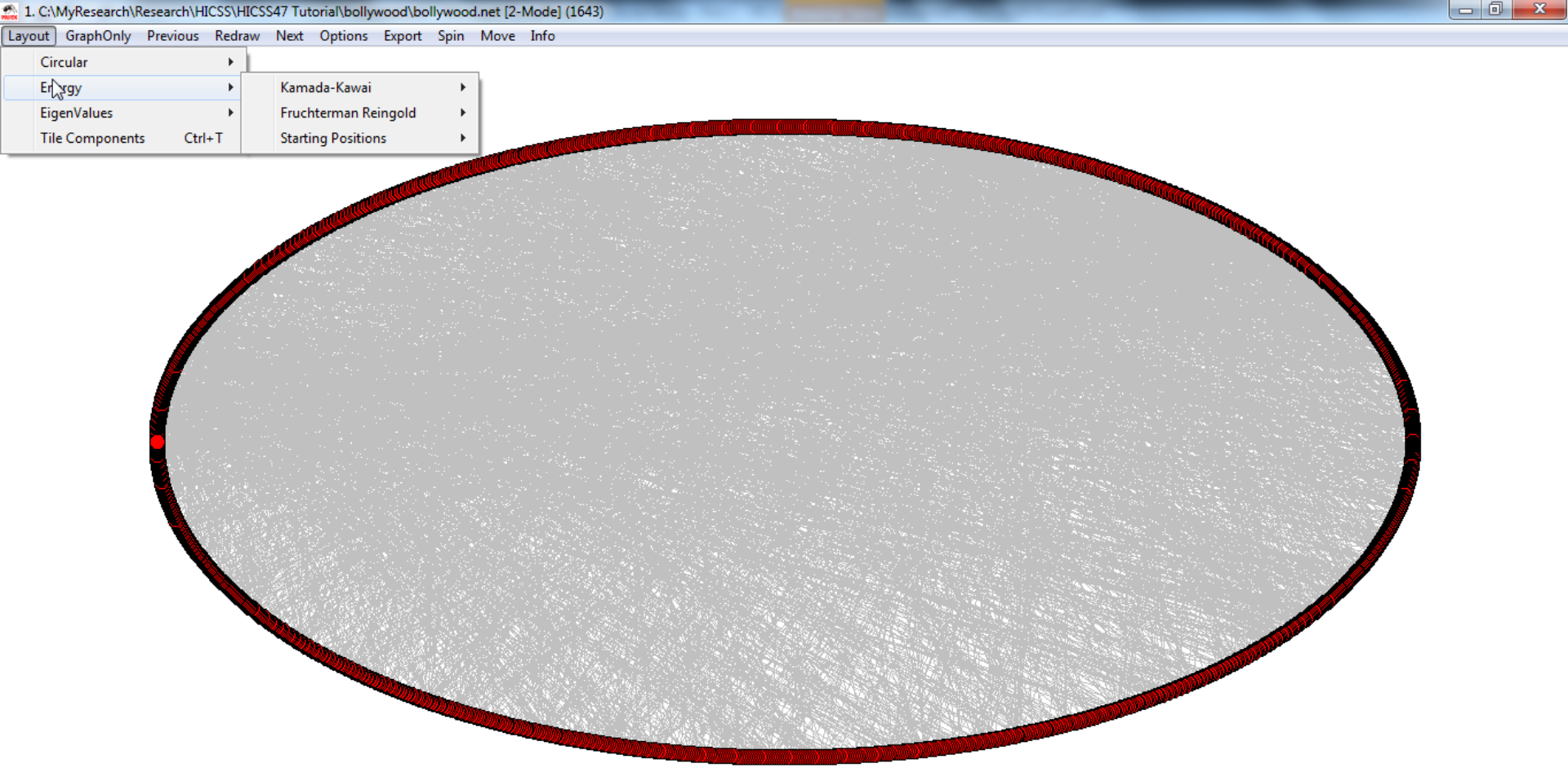
Step 1C: General Info Report for Network



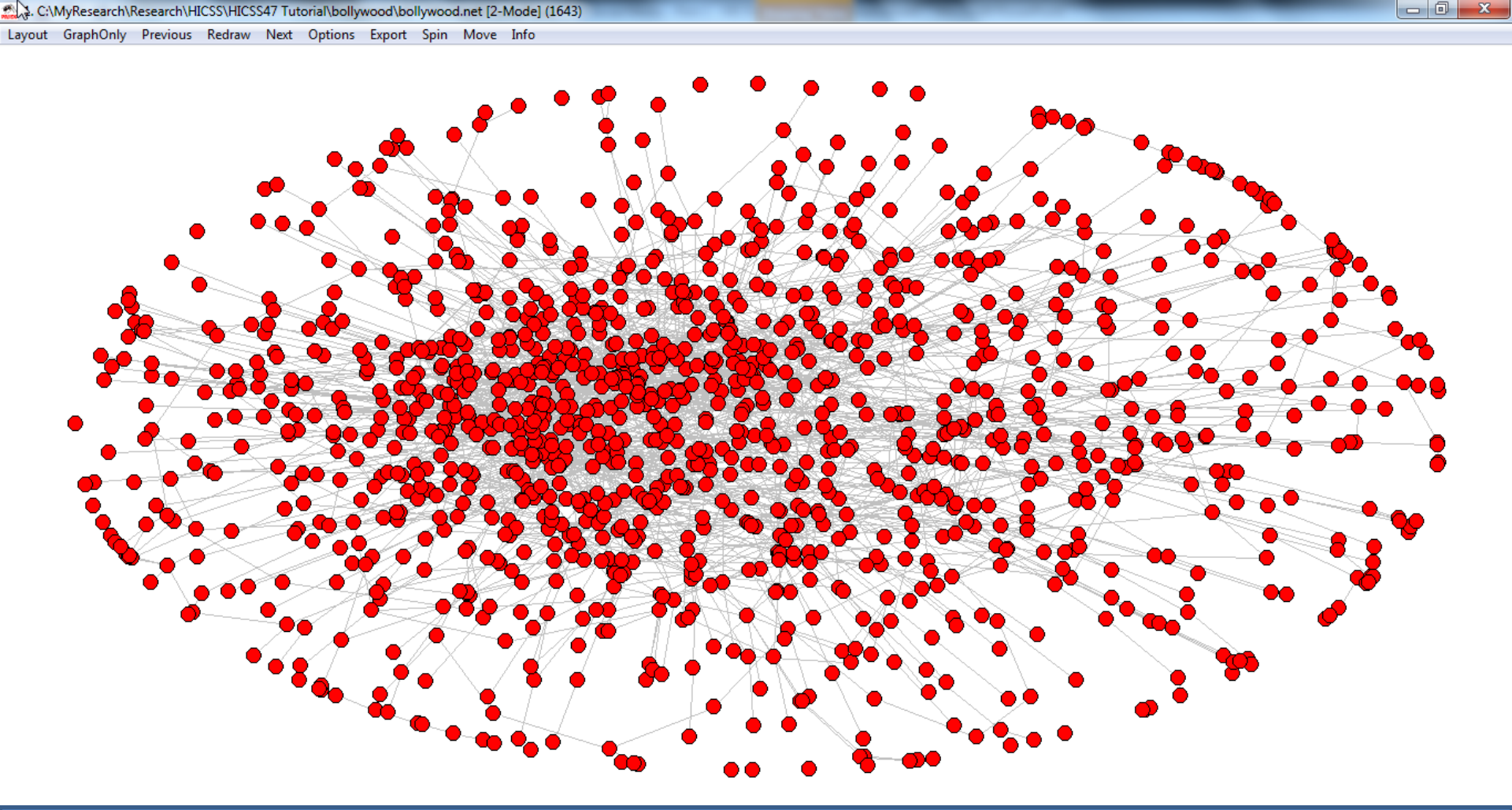
Step 2A: Draw the Network with default Layout



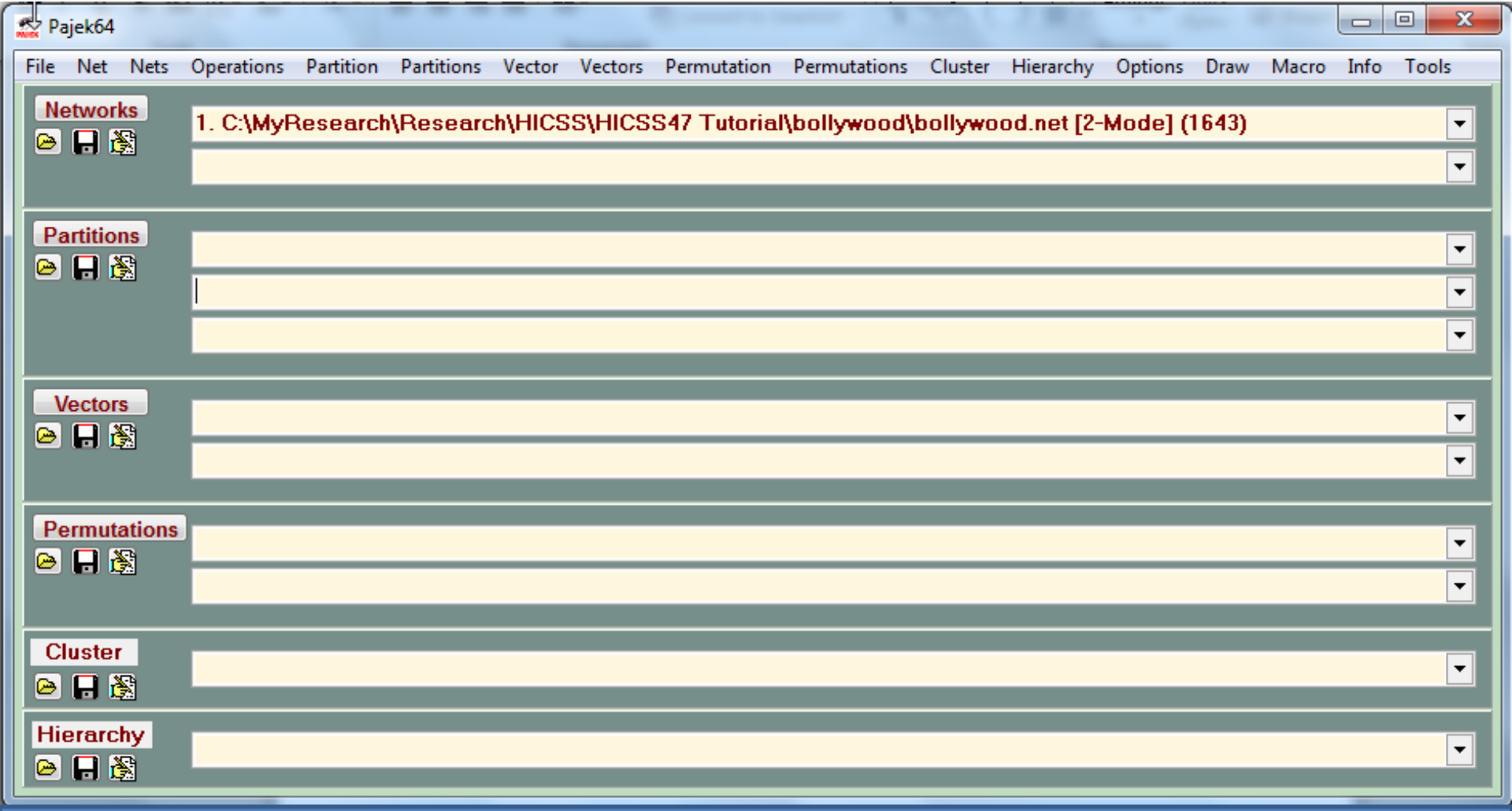
Step 2B: Network with default Layout



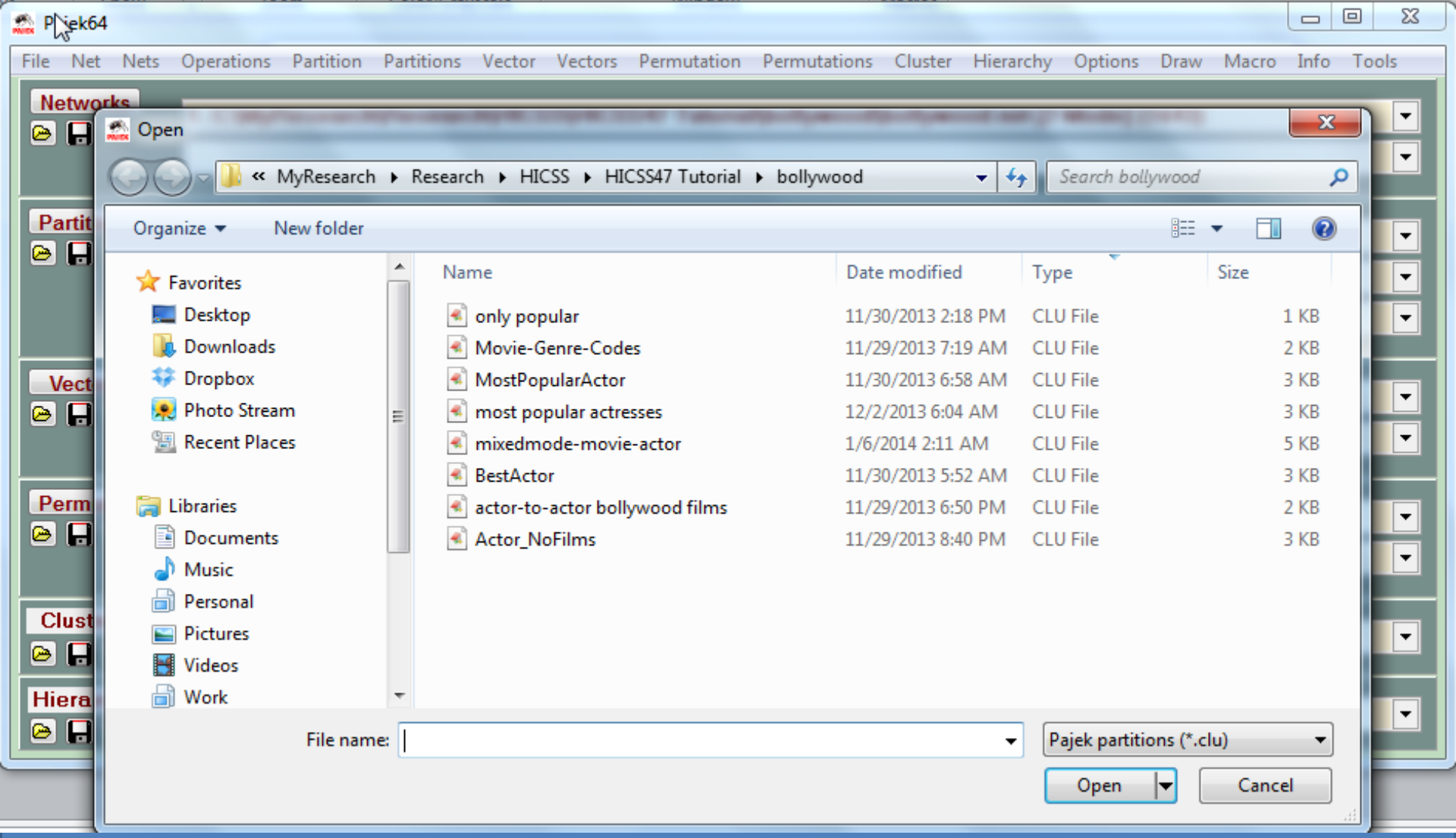
Step 2C: Select new Layout



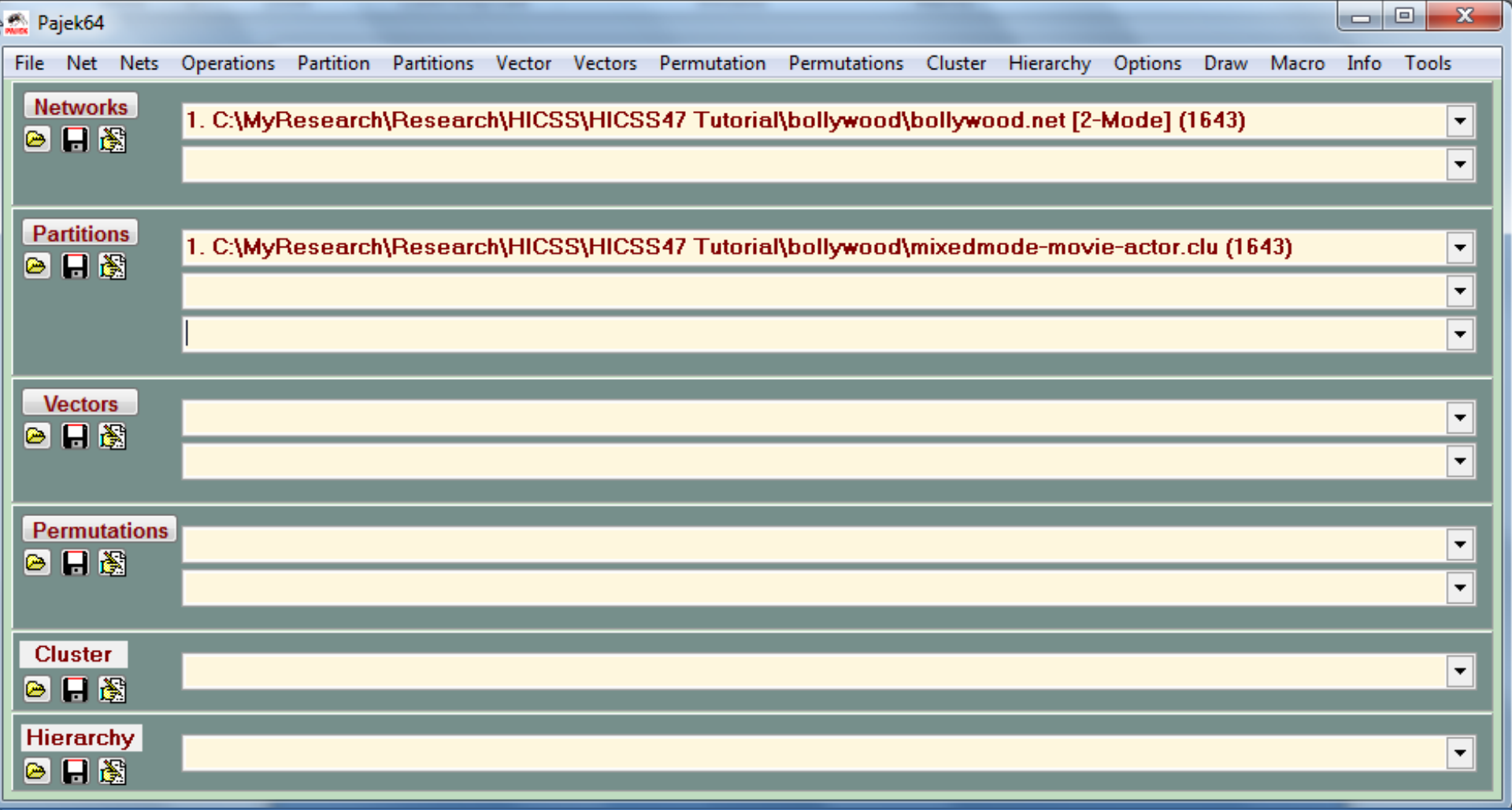
Step 2D: Bipartite Network with F-R Layout



Step 3A: Accessing Partitions (single column with 627 1s and 1016 2s)

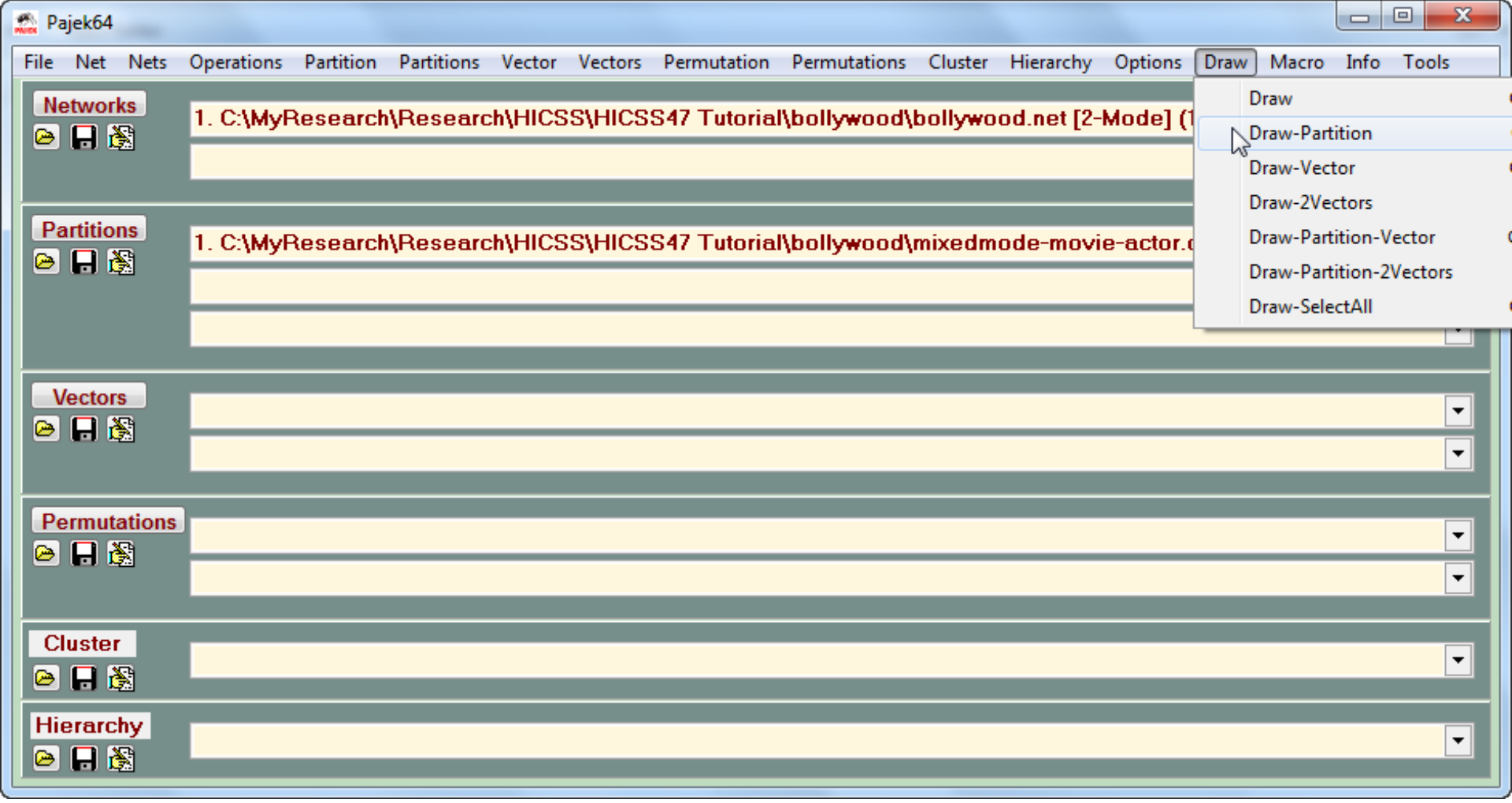


Step 3B: Creating a partition to distinguish movies from actors



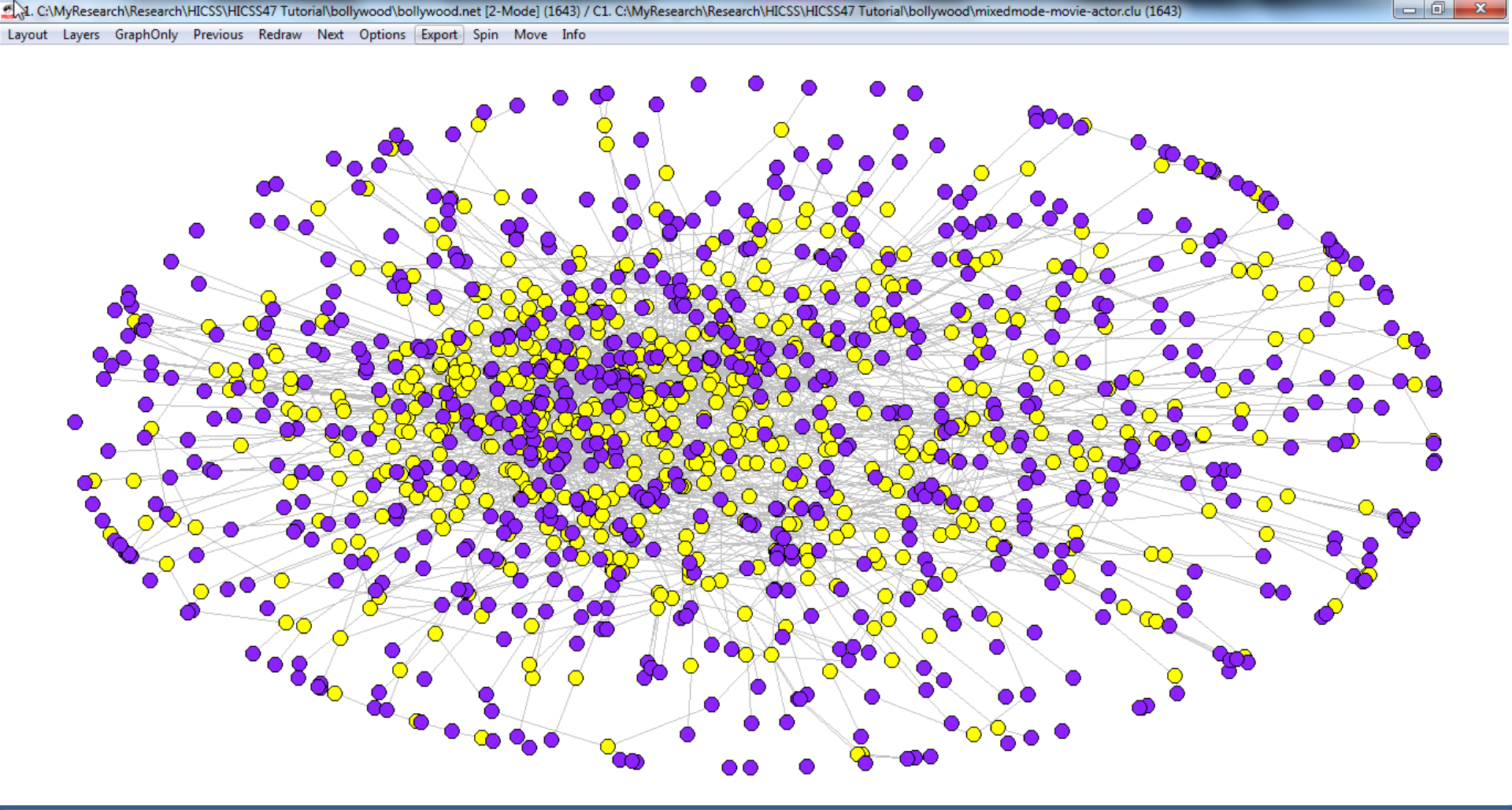
Step 3C: Partition created.

Enables us to distinguish movie and actor vertices.

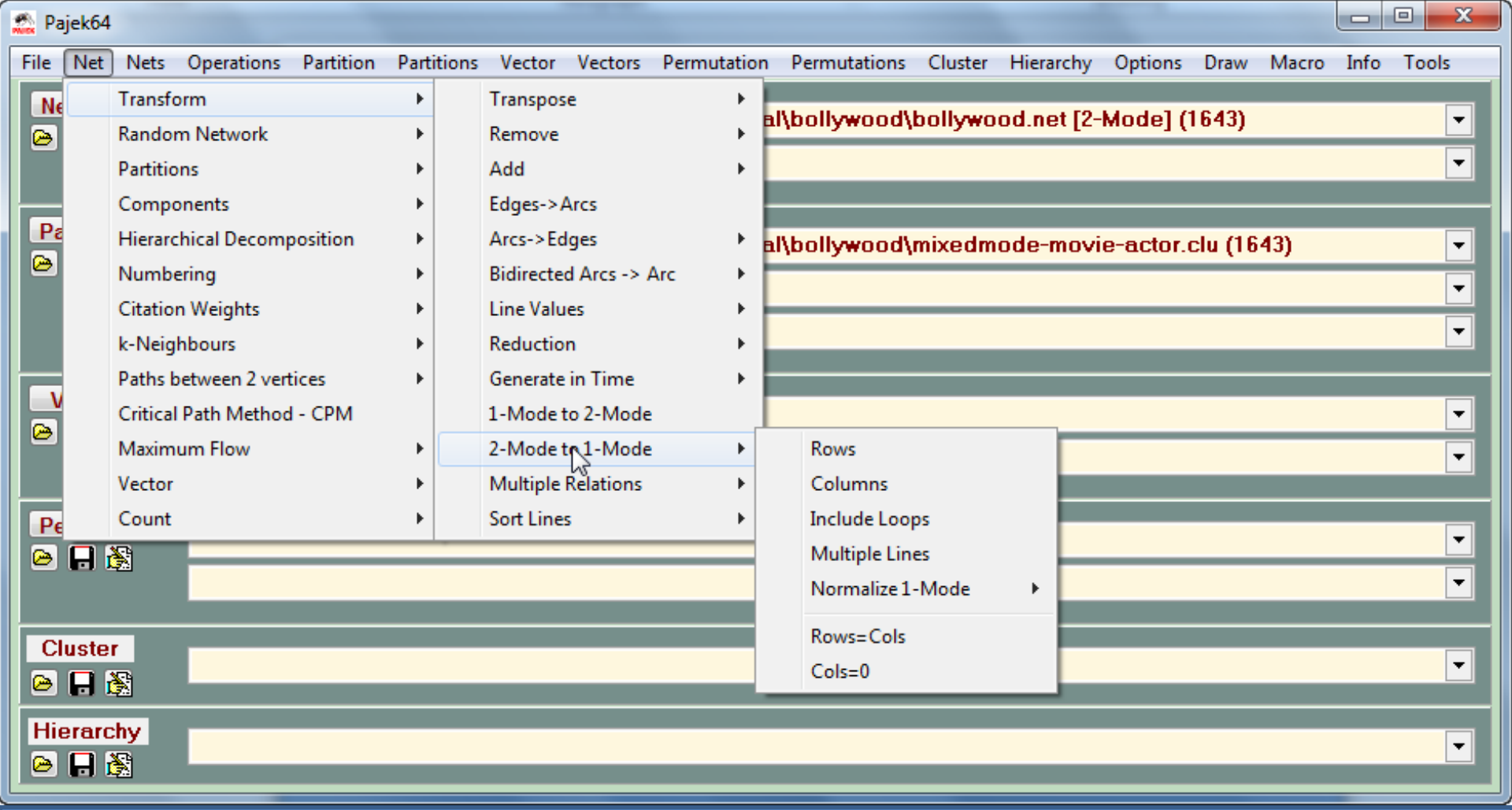


Step 3D: Drawing Partition.

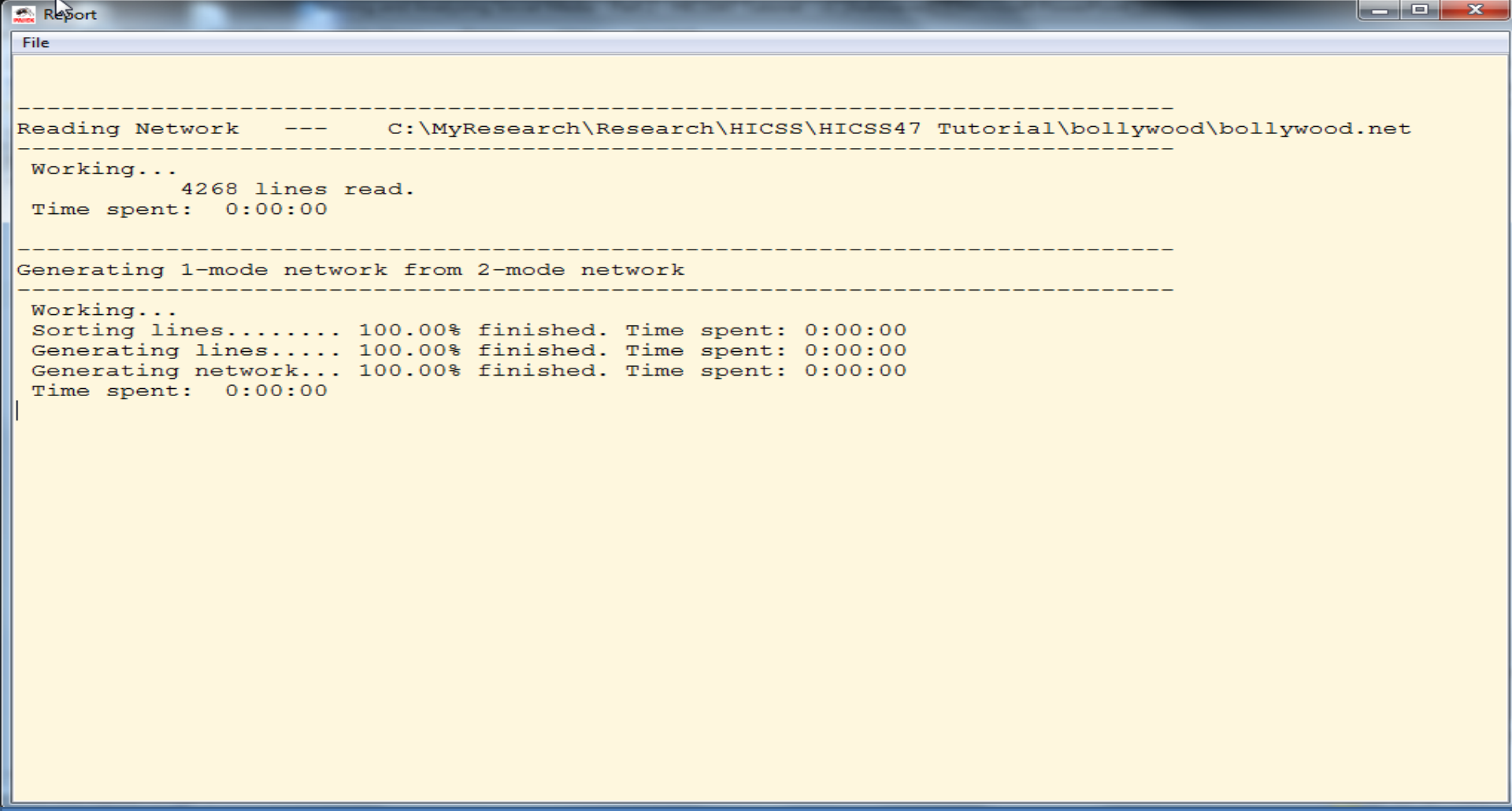
Will distinguish vertices with default colors.



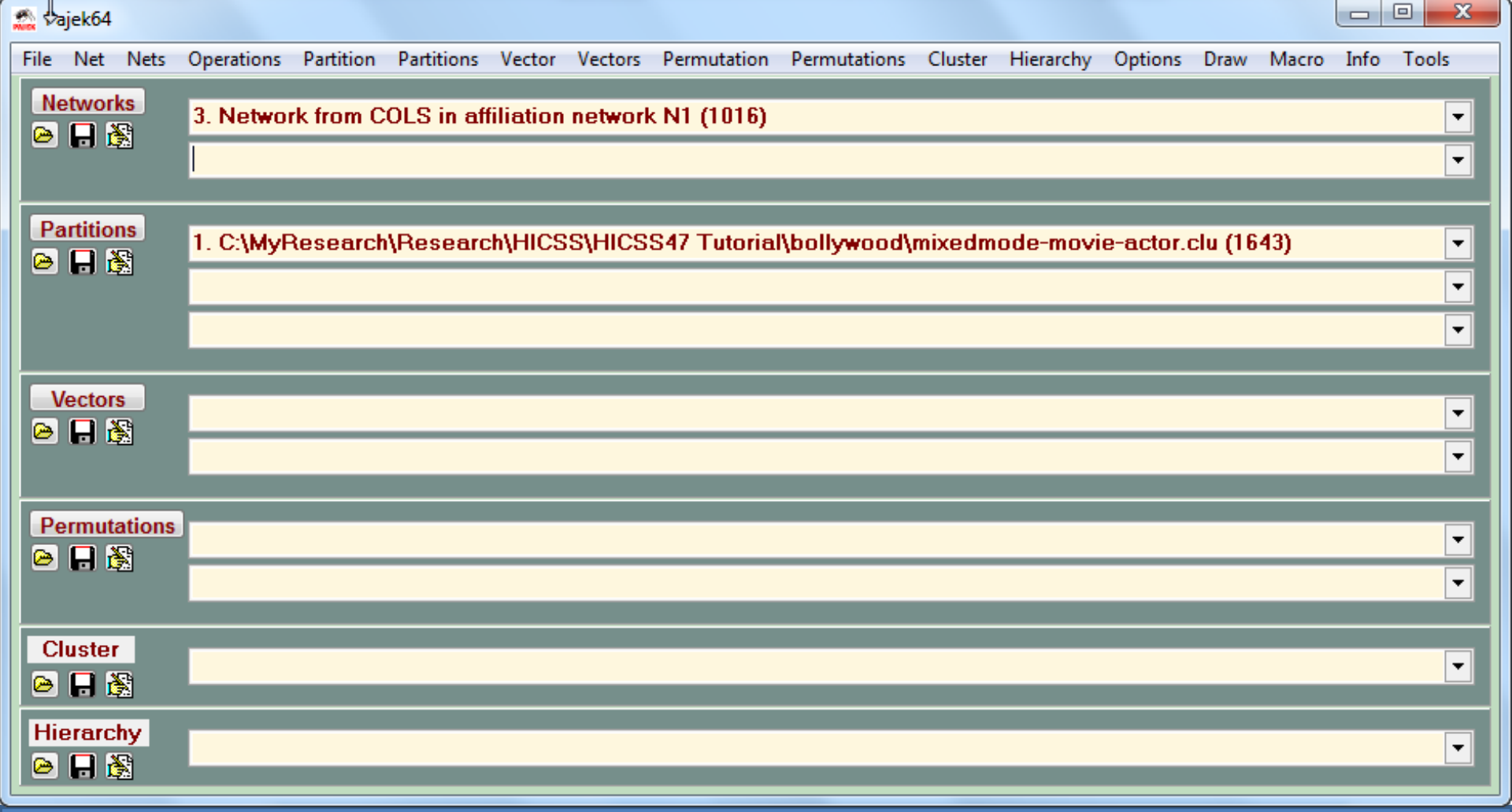
Step 3D: Bipartite network.
Actors are purple and Movies are yellow.



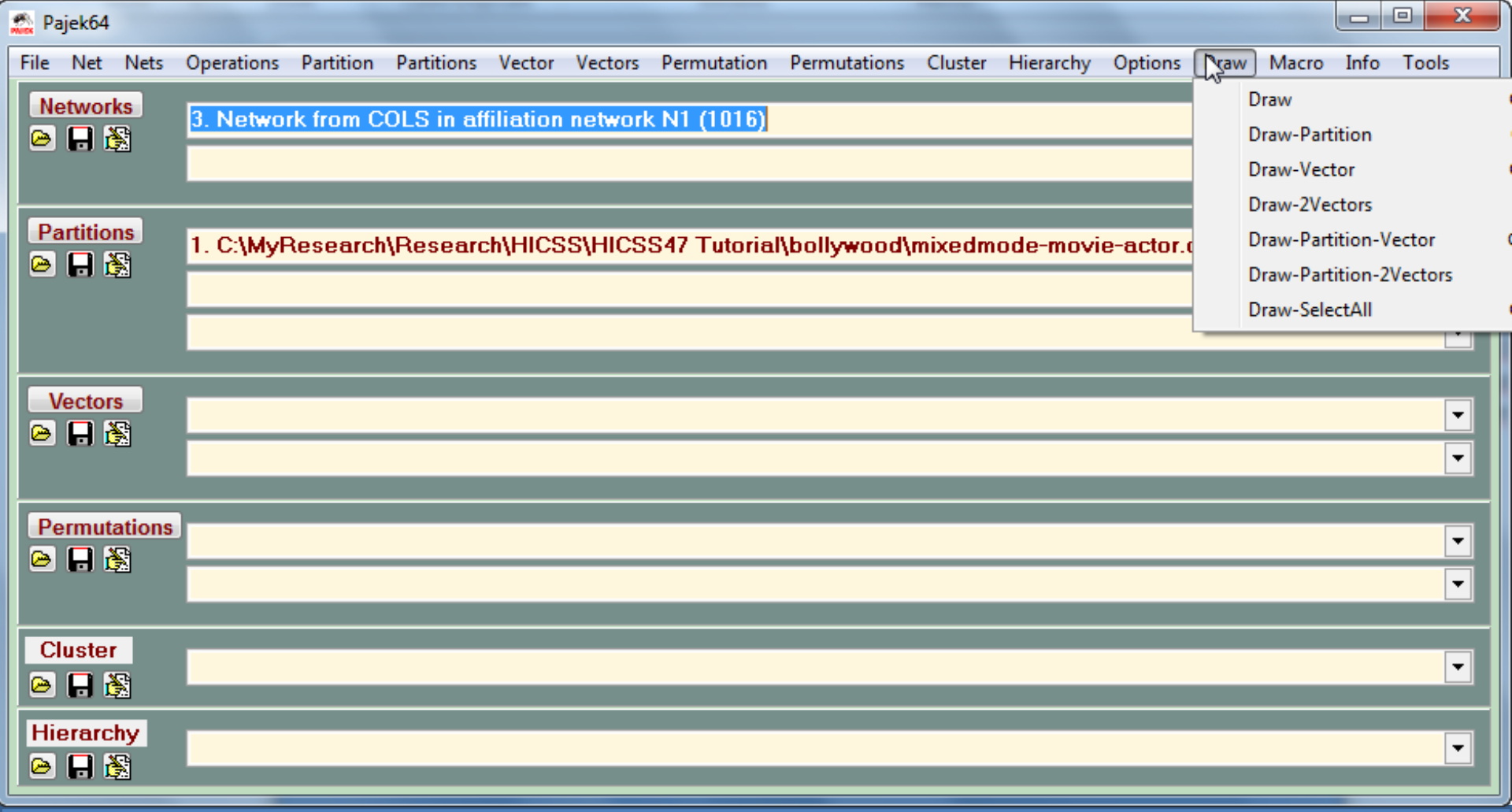
Step 4A: Transforming Bipartite Network into two 1-Mode networks (once for Rows and once for Columns)



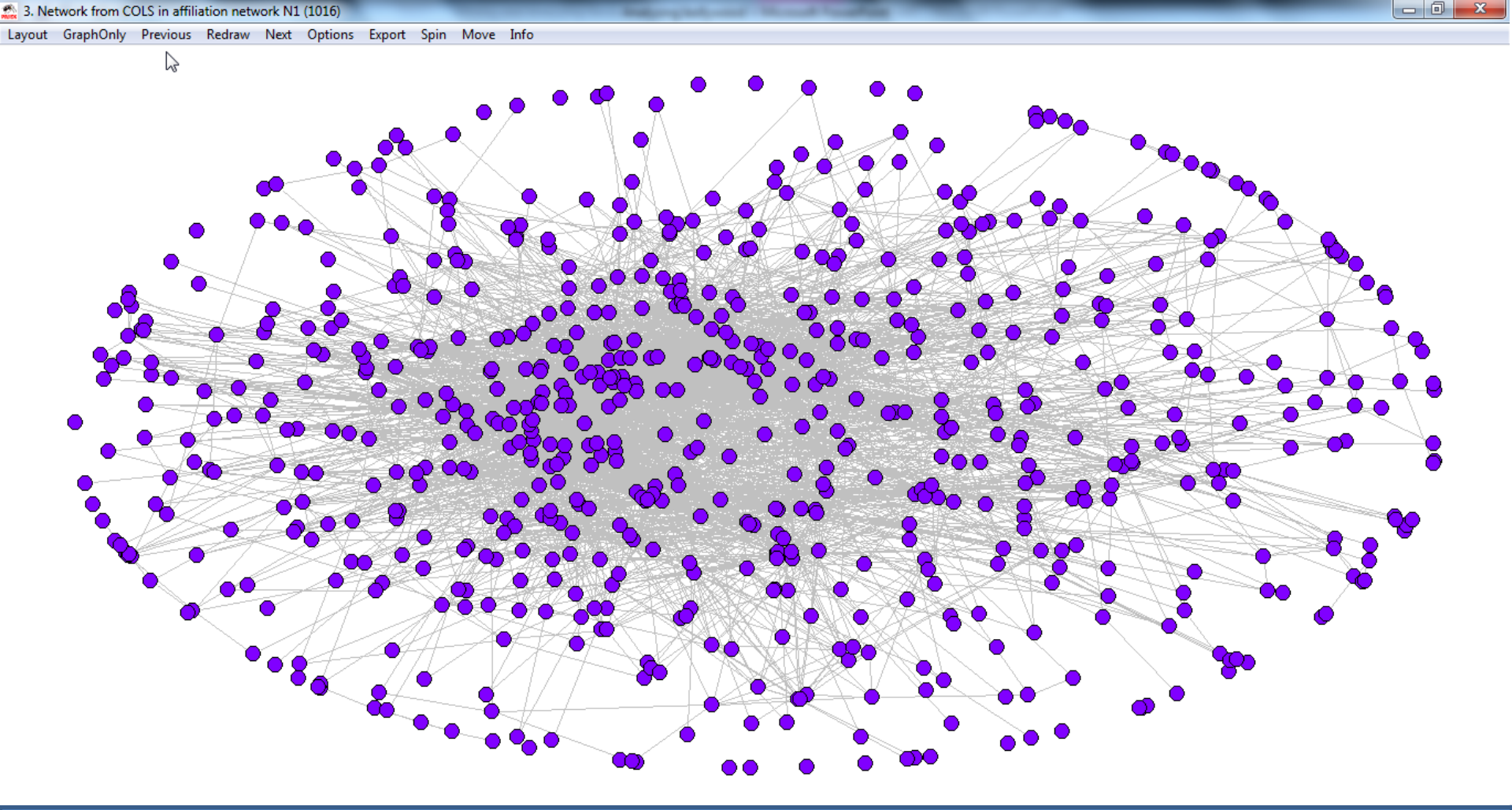
Step 4B:Report confirming transformation.
Again, report generated for each transformation.



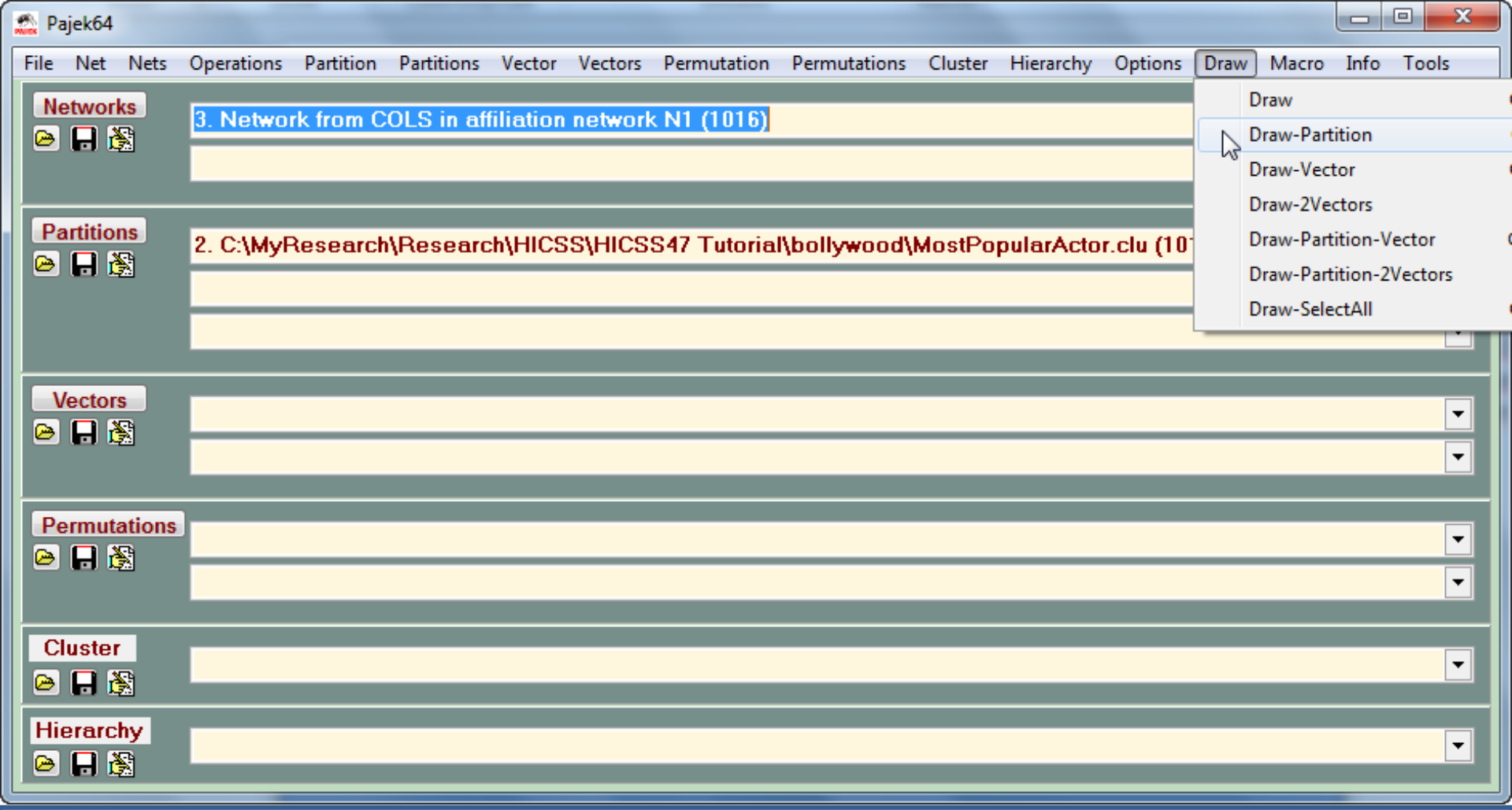
Step 4C: Actor (Column) Network selected.



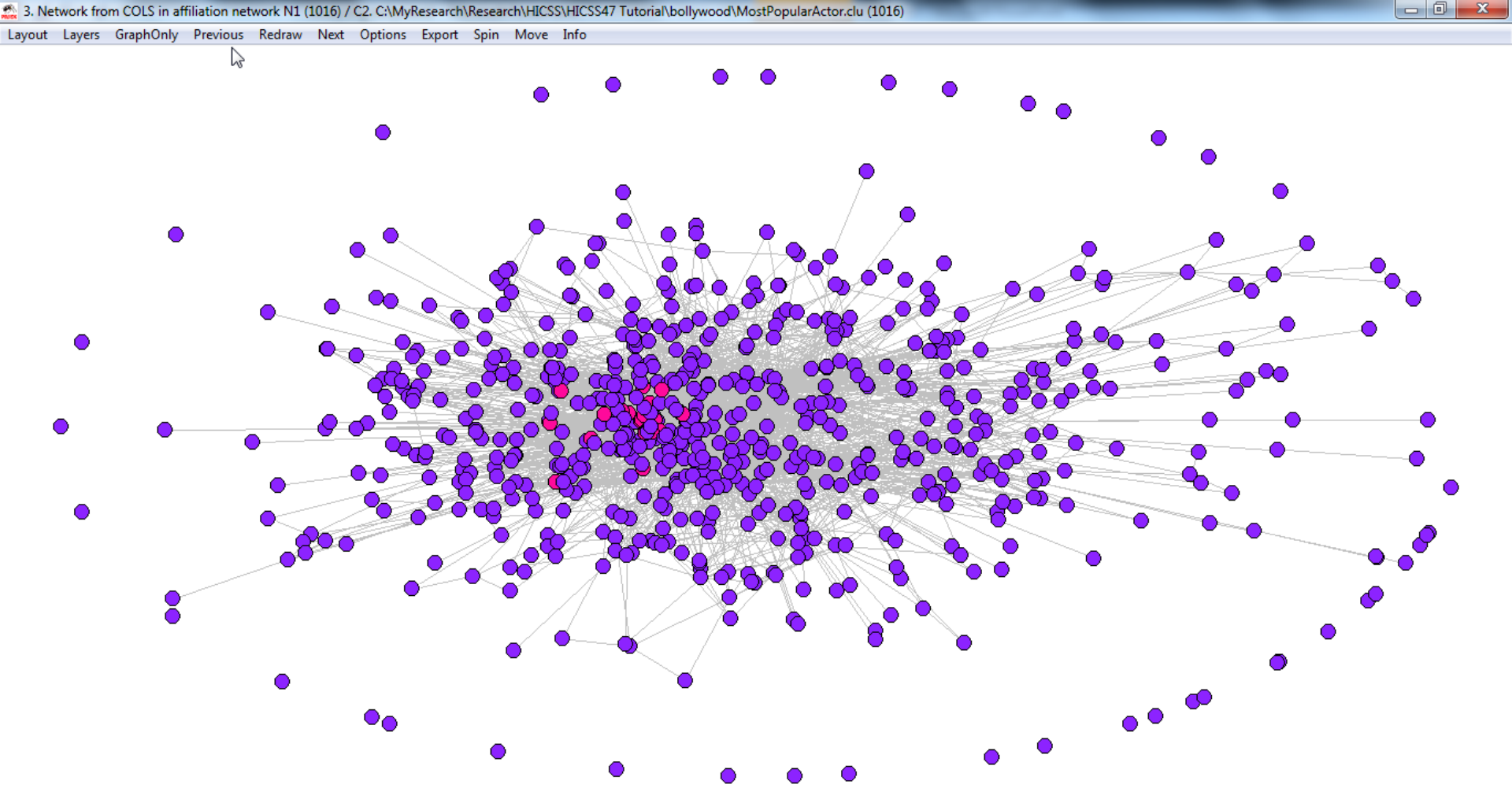
Step 4D: Draw Actor Network



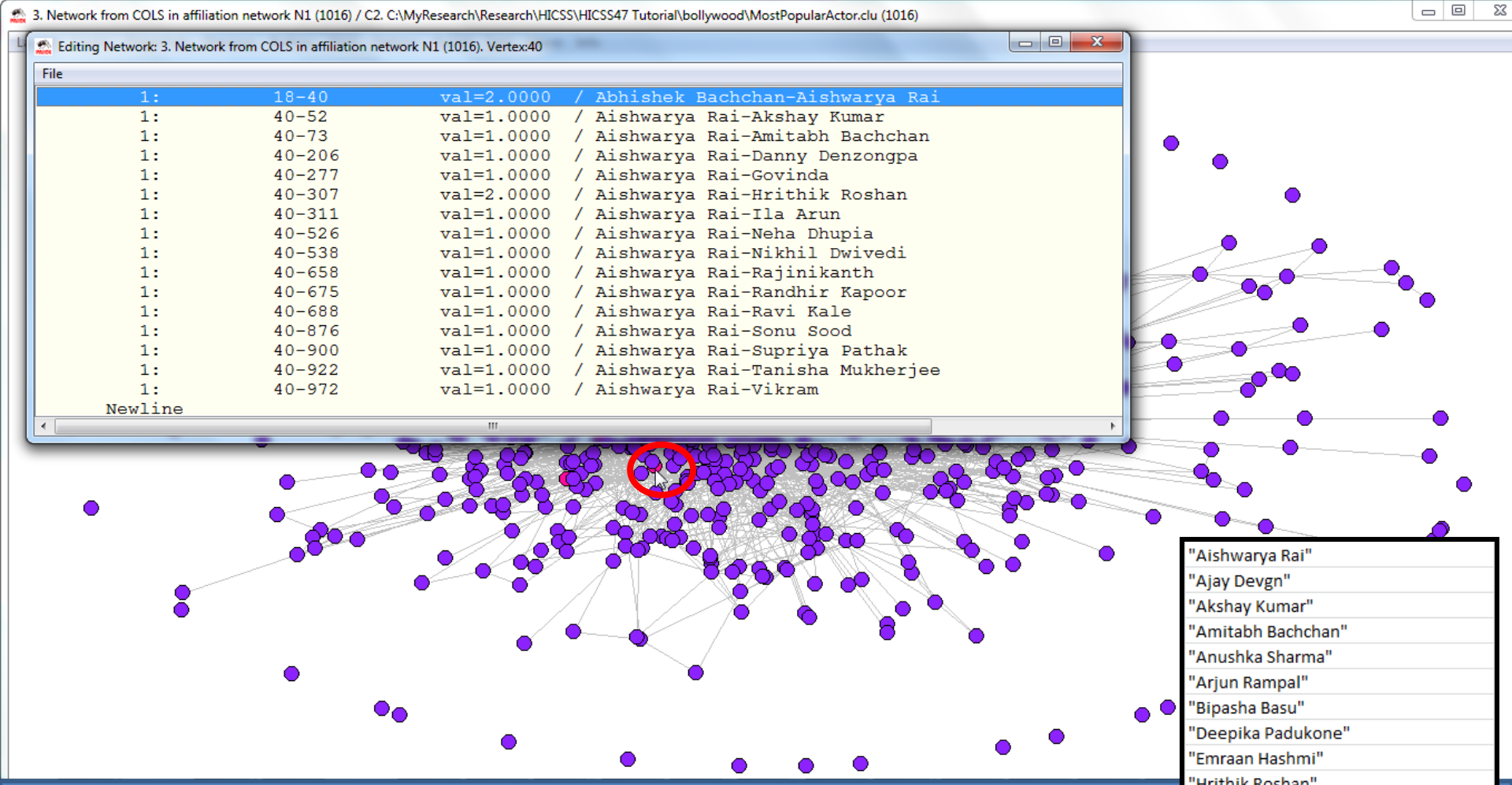
Step 4E: Actor Network with default colors



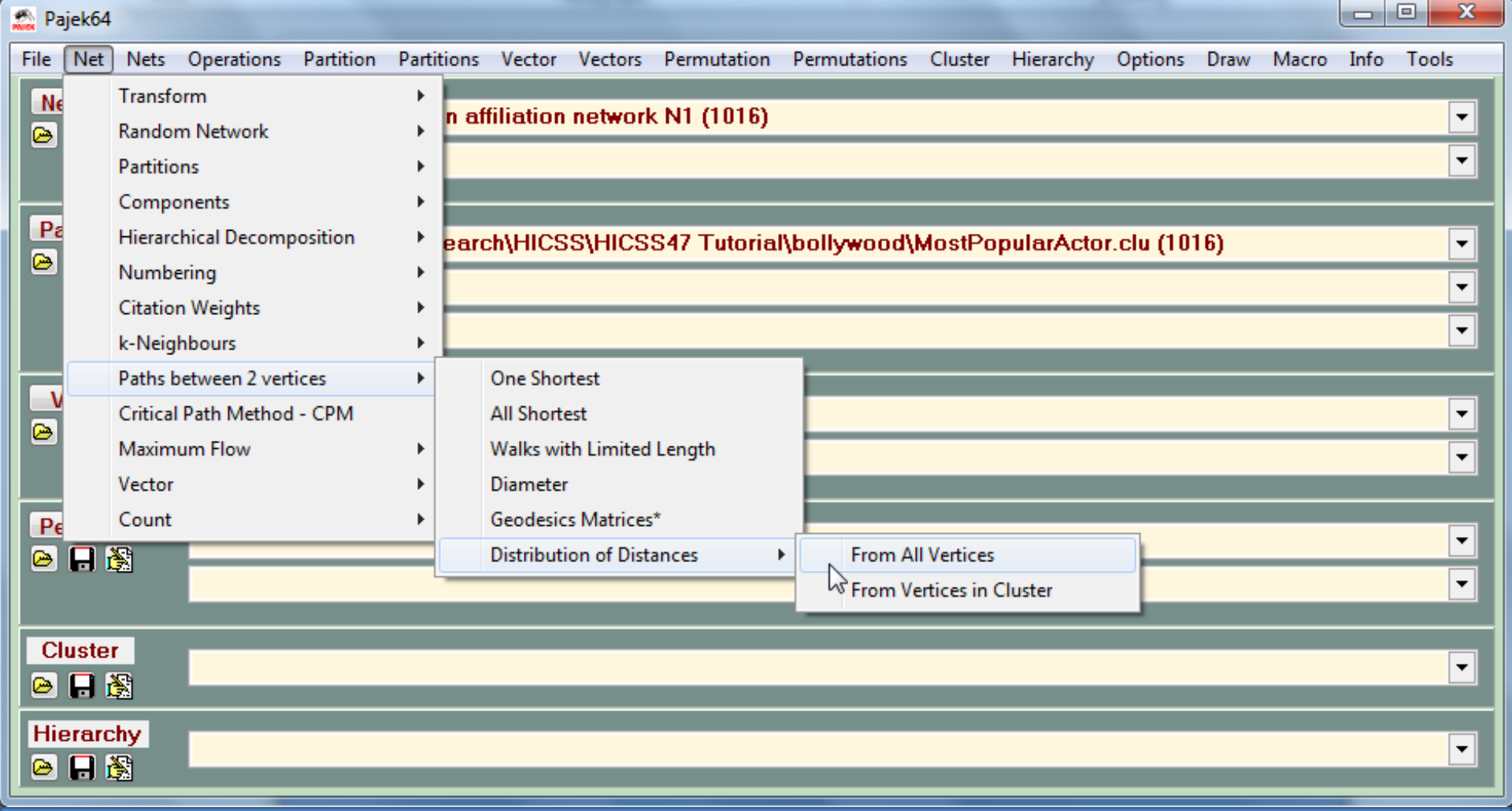
Step 5A: Create a Partition to distinguish “popular” Actors (vector of 0s and 1s with 1s for popular)



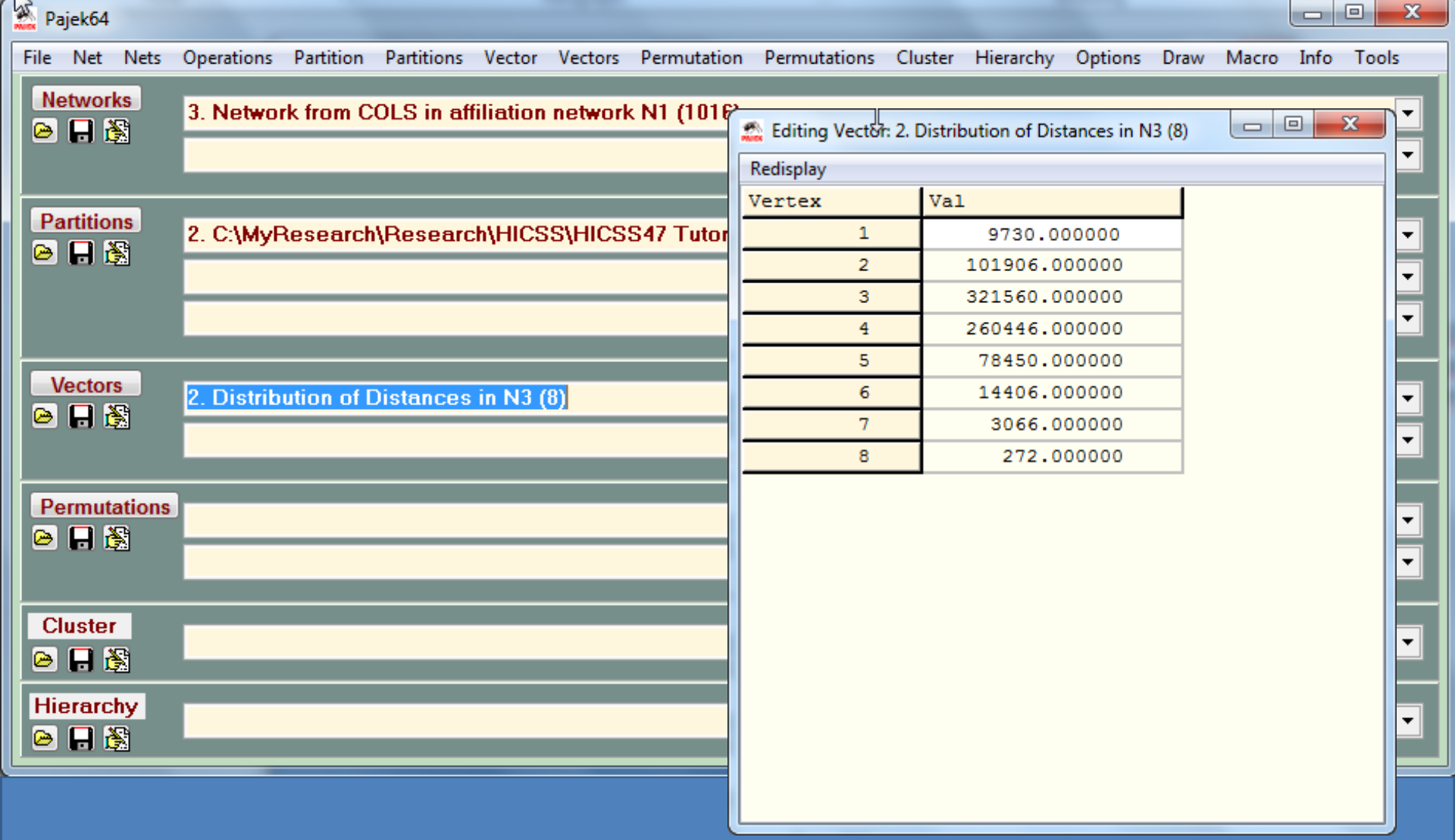
Step 5B: Drawing with most Popular Actors in Pink



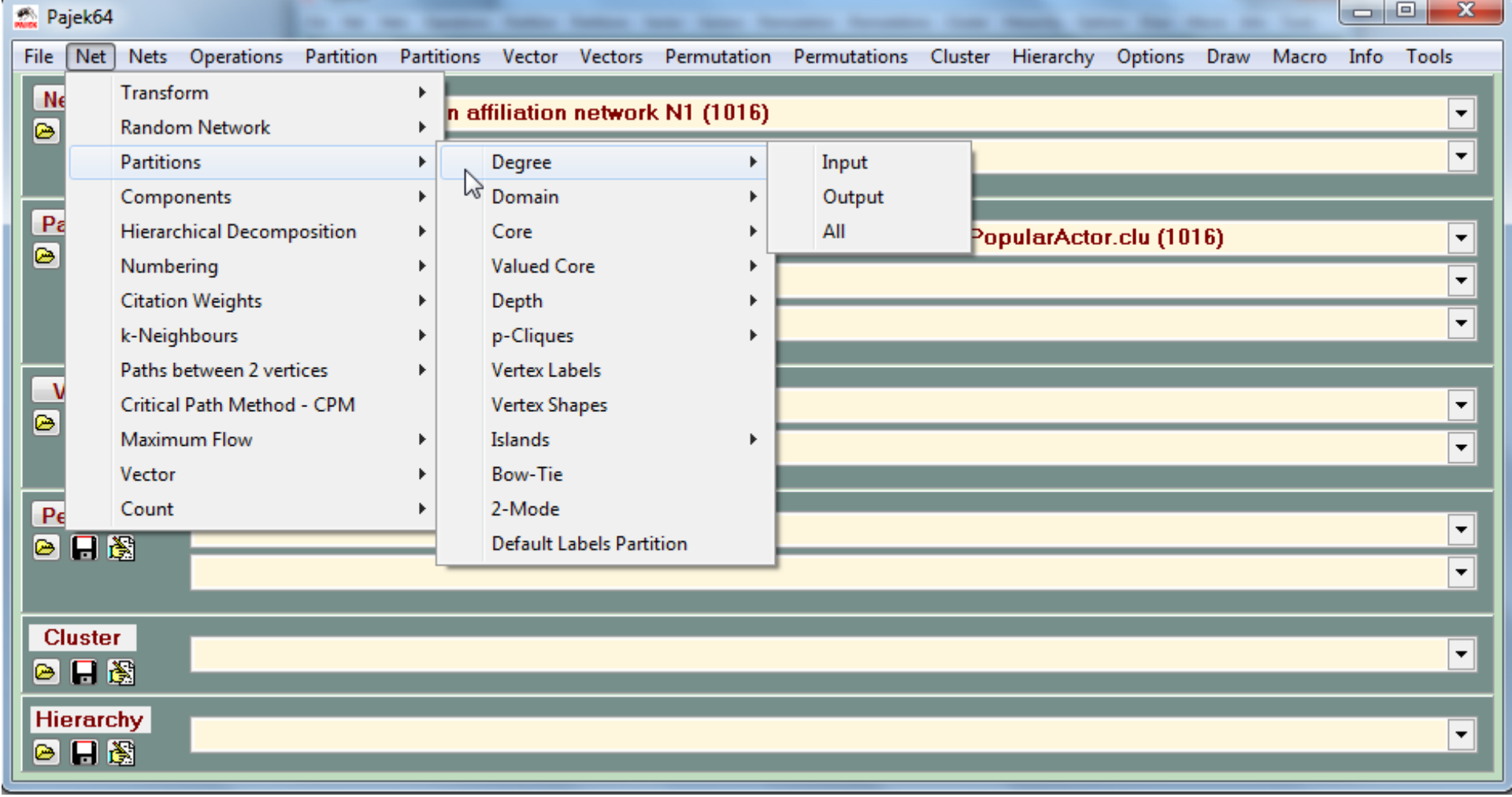
Step 5C: Displaying connections for particular vertex



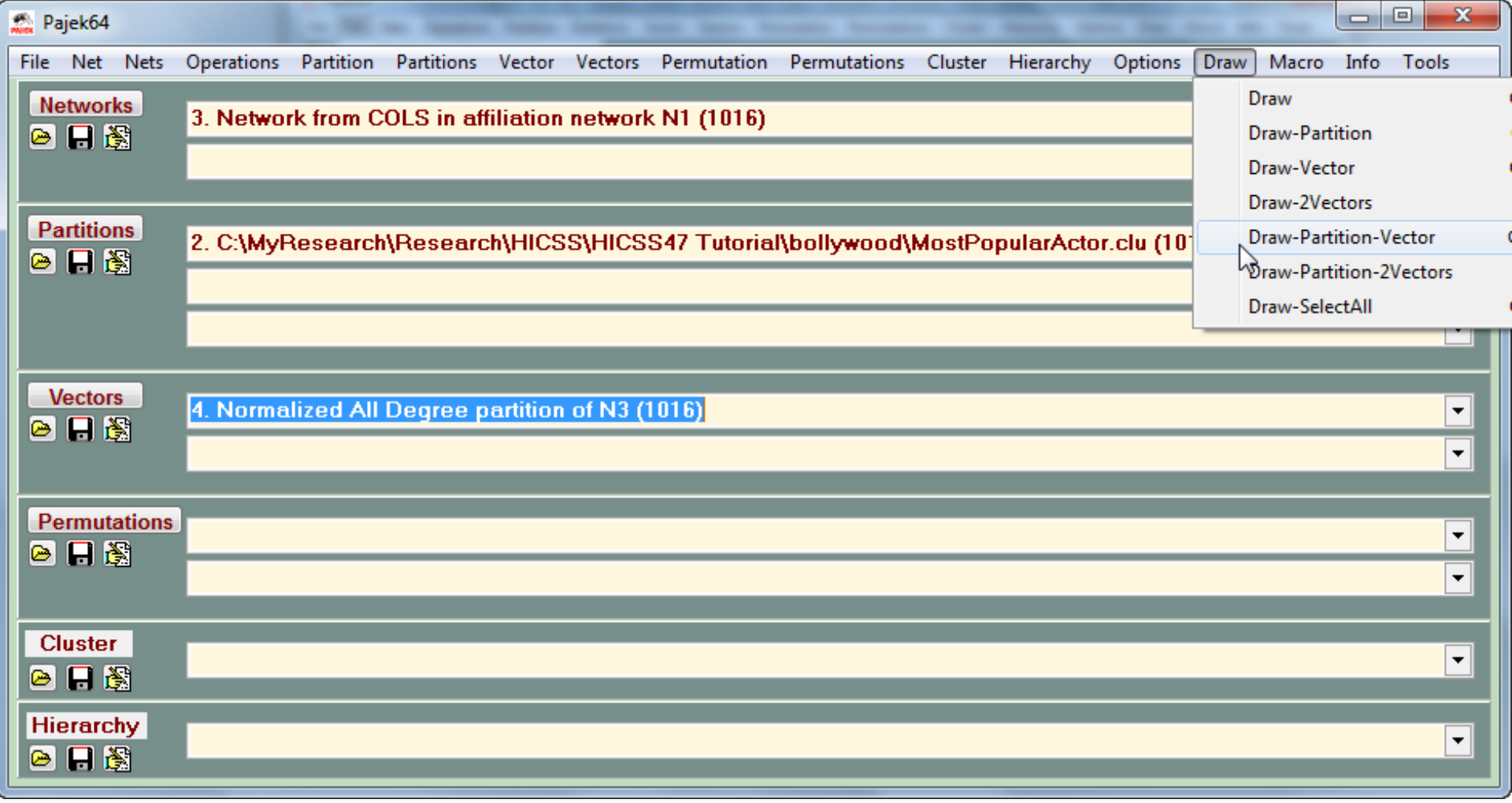
Step 6A: Calculating Distances from All Vertices for every Node



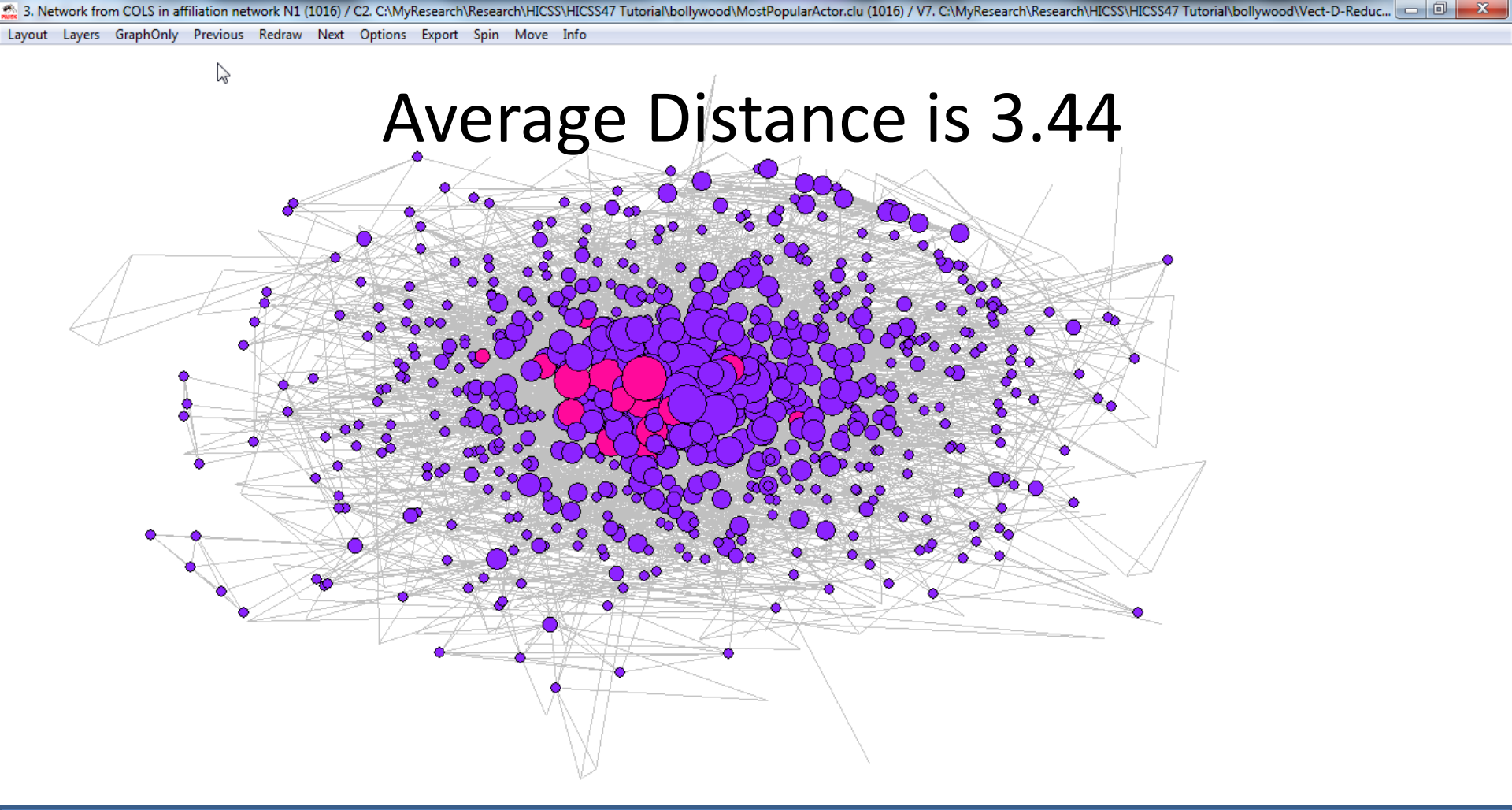
Step 6B: Calculated Distribution of Distances stored in Vector



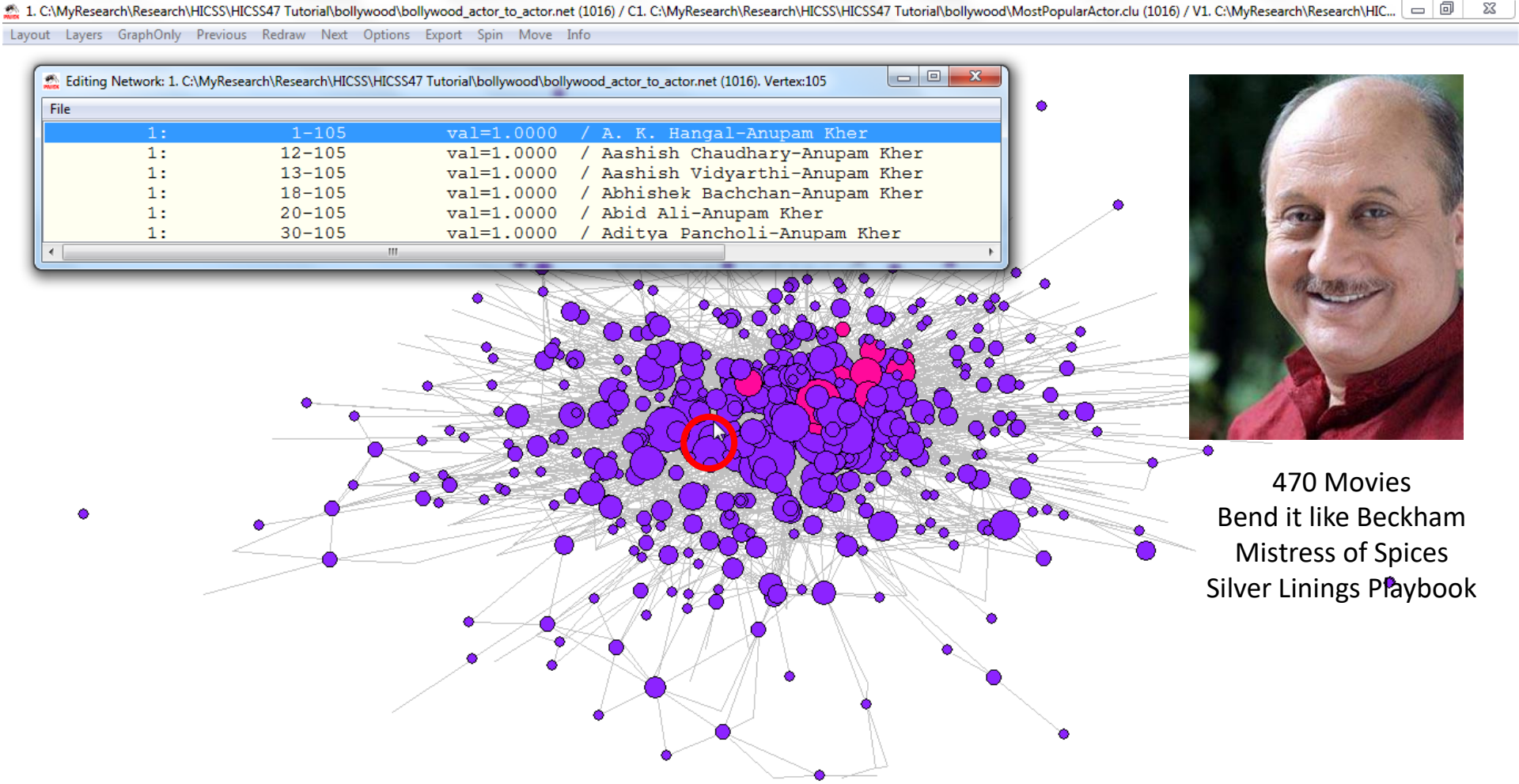
Step 6C: Calculating Degree for every Node



Step 6D: Drawing combination of Most Popular (color) and Degree (Size)



Step 6D: Drawing combination of Most Popular (color) and Degree (Size)



470 Movies
Bend it like Beckham
Mistress of Spices
Silver Linings Playbook

Step 6D: Center of Bollywood