CIS 310 01

Project 1

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With this project we are looking at some data collected about connections between people that attended specific meetings to determine important people within the colonial group that were influential. I used Netzer, a converted data file that contained the people and connections between them and excel to work with the data. I have also included printouts that support what I have as well. The graph is split into main community groups but there are some interconnections as well. The rawComm data is not shown properly on the graph printout due to some issue with the program when loading a saved data file. The original graph placed them properly.

When I ran an influence test on the data the top 5 influences included Nathaniel Barber, Joseph Warren, Samuel Adams, Benjamin Church and Paul Revere. When compared against “Big Fish” and “Ambassadors” All five were in the Ambassadors column. There were 4 more additional people that were also in the Ambassadors column that didn’t make the top 5 list. Those four were Henry Bass, Thomas Chase, Benjamin Edes, and Joseph Greenleaf.

If we look at the number of meetings/communities, the people belonged to all the top five influences belonged to 3 or 4 meetings/communities. All the others in the Ambassadors group except for Benjamin Edes belonged to two communities. Mr. Edes only belonged to one community.

When we look at the clustering Coefficient, this looks at how closely someone is linked to their neighbors we can look at the top 5 people in order. These people include Joseph Warren, Samuel Adams, Paul Revere, Nathaniel Barber, and Joseph Greenleaf. If we compare this list to our original list of top five, we have Nathaniel Barber, Samuel Adams, Paul Revere, and Joseph Warren in both groups.

We can look at the Betweenness between the connections and in this case our top five in order would be Paul Revere, Joseph Warren, Nathaniel Barber, Samuel Adams and Benjamin Church. Of these five the first four are also in the top five of the other two groups.

When we look at the Closeness Value for the links between people, we see in order the following people, Joseph Warren, Nathaniel Barber, Samuel Adams, Paul Revere, and Benjamin Church. These are the same top five in our Betweenness inspection and share the same top 4 as our other inspections.

Our last inspection of the data we will use is the Degree which is a count of the number of associations with others. The people with the most connections in order are, Joseph Warren, Nathaniel Barber, Samuel Adams, Benjamin Church and Paul Revere. Again, these are the same top 5 of our last two inspections and share 4 with the other inspections.

This inspection of the people and their connections tell us that the top four influences of this investigation would be Nathaniel Barber, Samuel Adams, Paul Revere and Joseph Warren. Since they seem to rank differently in different inspections no one comes out as the top person but seem to have different responsibilities.

When trying to research the four participants Samuel Adams was a very important part of the revolutionary movement and the others played their parts in the original patriot movement. Paul Revere was a business man and ended up creating a bunch of things to help with the war effort such as new ways to process steel for building ships and such. Samuel Adams became one of the first rulers during the revolutionary period. Joseph Warren ended up becoming a General but died during a battle fighting as a private in the battle helping to slow down the advance allowing many of the patriot soldiers to retreat safely. Nathaniel Barber also participated and carried out several positions within the military.

When looking at this data and how we were supposed to analyze it there were certain things that became apparent. You could see that several the same metadata were somewhat related and helped to focus on the most important and influential people of the group. The methods used in this project seemed a bit labor intensive and could probably be reduced to an automated system but for the most part seemed to be reliable in what their outcome was.

Other people showed up as influential at different points as well and seemed a bit odd as they were not ranked across the board. But over all when you looked at all the data a set group continually rose to the top, so this would lead one to think that you can’t just look at one piece of the data but a combination of the data to inspect what is important and what is not. It was obvious that the importance of the data could change dependent on the observations used.

This type of information could be ripe to be attached to an AI engine to be able to predict what people might be influential and important.