Beyond Social Networks:

Advanced Uses of Gephi in Humanities Research

Session 1 Handout

Brian Tsz Ho Wong

Ph.D. Candidate, Asian Studies CDCS Training Fellow University of Edinburgh

In today's session, we will use the example of British and American news coverage of the death of Adolf Hitler between 30 April and 1 May 1945 to illustrate the use of Gephi to visualise the processes and networks of transnational information transmission. As we now know, Hitler committed suicide in his Berlin bunker on 30 April. However, the Nazi government did not announce Hitler's death until the evening of 1 May, which meant that the official announcement could not be reported by British and American newspapers until 2 May (or 1 May in the US). Even before Hitler's suicide, rumours had spread across the European continent and the Atlantic Ocean that Hitler was seriously ill. Between 30 April and 1 May there were news reports that Hitler was dead, some said he had been shot along with Joseph Goebbels, and some said he died of medical reasons, but no one can prove it. Beyond the authenticity of this information, it will be more intriguing to examine its transmission. How could the information escape the Soviet army surrounding Berlin? How could the news be transmitted from Germany to the UK and the USA? These are the questions we will be addressing today.

Activity 1: Analysing News Reports

The content of news reports at that time was usually a combination of several telegrams and radio reports. In this activity, we will try to identify the sources and origins of news reports.

Go to the BeyondSocialNetworks repository on github. Downloaded the pdf with the titles:

- 'Hitler died raving, says Neutrals'
- 'More reports of Hitler's death'
- 'Hitler "shot", Goebbels, too'.

Your task is to identify the different sources of the news reports. Discuss the following questions with your group:

- Where were the newspapers published?
- How many telegrams, radio reports or other sources are included in a news report?
- Where did the telegrams, radio reports or other sources come from?
- Do you know the sources of these materials?

Each group has 10 minutes for discussion. To find out where the newspapers were published, you can Google them or visit Gale Primary Sources (through the university library system) and the Chronicling America database (https://chroniclingamerica.loc.gov/).

Activity 2: Building Information Transmission Networks

2.1. Importing the dataset into Gephi:

- 1. Go to the BeyondSocialNetworks repository on github.
- 2. Download The death of Hitler.xlsx and open Gephi. Do not open the spreadsheets in Excel, if you have opened them, close them before opening Gephi.
- 3. Click on 'New Project' and then go to 'Data Laboratory'.
- 4. Click on 'Import Spreadsheet', then select The death of Hitler_Gephi.xlsx and press 'open'.
- 5. Import the 'Nodes table', then go to 'Import spreadsheet' and import the 'Edges table'.
- 6. Select 'Double' for the 'latitude', 'longitude', 'lat', and 'lng' column.
- 7. Select 'Directed' for the 'Chart type' and then select 'Append to existing workplace'.

2.2. Visualising the Networks:

Please install the Gephi plugins. Go to the Tools menu and install Geo Layout and Export
To Earth, and Map Of Countries.

Tools > Plugins > Available Plugins > Geo Layout

Tools > Plugins > Available Plugins > Export To Earth

Tools > Plugins > Available Plugins > Map Of Countries

There are two ways to visualise the news transmission networks:

- 2. Select 'Geo Layout' for the layout.
- 3. Select 'lat' for the 'latitude' column and 'lng' for the 'longitude' column.
- 4. Go to 'File', then choose 'Export', and export it as a 'Graph file'.
- 5. A kmz. file will be downloaded. Click on it and open it in Google Earth.
- 6. Select 'Map Of Countries' for the layout. (*At this stage, it is normal for the networks to be incorrectly positioned on the map)
- 7. Select 'Geo Layout', select 'lat' for the 'latitude' column and 'lng' for the 'longitude' column.

2.3. Identifying the Transmission Hubs:

- 1. Select 'Label Adjust' for the layout.
 - (The visualisation before did not have a thousand nodes and edges because the 'Geo Layout' function converged all the nodes with the same coordinates into one node. If we use the 'label adjust' function, it will split these nodes)
- 2. Go to 'Appearance', select 'colour' next to 'nodes', then choose 'publication place' under 'Partition'.
- 3. Click the 'Palette' at the bottom right and select the first palette.
- 4. Go to 'Appearance', select 'Label colour' next to 'nodes', then choose 'publication place' under 'Partition'.