## COST-ARKWORK CA16204 WG2 Training School 2018, Galway, 5-7Dec 2018

Gephi session, Thursday, 6 Dec 2018, 15:30-17:00

**Session Facilitator: Meliha Handzic** 

# **Instructions**

#### Before session: Installation and Familiarisation

- Download and install Gephi: <a href="https://gephi.org/users/download/">https://gephi.org/users/download/</a>
- Familiarise yourself with Brown Corpus: http://clu.uni.no/icame/manuals/BROWN/INDEX.HTM

## **During session: Network Analysis and Visualisation**

- Start Gephi
- Choose New Project
- Import spreadsheet PROSE
- Choose Layout
- Calculate Degree Centrality
- Visualise network according to degree (select colour and size)
- Interpret results
- Calculate Diameter (betweenness& closeness centrality)
- Visualise network according to betweenness centrality (select colour and size)
- Interpret results
- Visualise network according to closeness centrality (select colour and size)
- Calculate Density
- Interpret results
- Calculate Modularity
- Visualise network according to modularity (select colour and size)
- Interpret results
- Apply Filter (Giant component)
- Calculate Modularity (after filtering)
- Visualise network according to modularity (select colour and size)
- Interpret results

### **After session: Metadata Extraction and Creation**

- Access Voyant: <a href="https://voyant-tools.org/">https://voyant-tools.org/</a>
- Upload selected text from (Brown Corpus) text files general fiction, mystery, adventure,
   science fiction, romance, humour
- Identify N most frequent words
- Create spreadsheet with 1 column for text type (e.g. A01-R09) and N (e.g. 50,100) columns for identified words
- Repeat steps for analysing and visualizing networks in Gephi performed during session
- Explore other features of Gephi

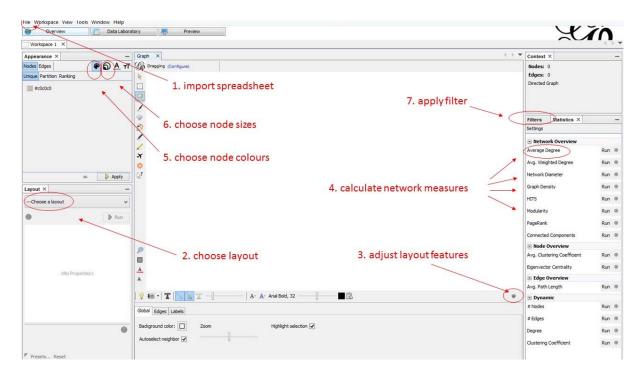


Figure: Gephi screenshot with instructions