**Reflections**

Initially, I faced some difficulties when deciding on the **research question** to explore for the networks project. My original idea was to focus on school shooters in the United States (<https://github.com/washingtonpost/data-school-shootings>); however, I soon realised that it would be an uphill task as the dataset only contained nodes (i.e., locations where the school shootings happened). There was no way to draw edges between different school shootings, resulting in a lack of directionality. Eventually, I decided to pivot towards political psychology, specifically focusing on Singapore’s context, as I was most familiar with it. While browsing Singapore’s Parliament website ([http://www.parliament.gov.sg](http://www.parliament.gov.sg/)), I came across Parliamentary Order Papers (OPs), which contained all Parliamentary Questions (PQs) asked in Singapore’s 14th Parliament. Finding this document sparked my interest as I realised that I could construct a network from this information as there were different questioners and answerers for all PQs.

The main difficulty I had typically arose during the **data collection** period. Singapore’s Parliamentary website does not keep an accessible archive of past order papers; only the most recent one is posted on the webpage. This reality meant I had to be more innovative to access past OPs. One method I tried to access past OPs was to edit the website URL (i.e., changing the date), and this initially worked for a couple of OPs. However, I soon found out that Parliament Sessions did not happen on the same day every month, and changing the website URL became a time-consuming trial and error process. The most optimal method I discovered was to utilise Singapore’s Parliament Facebook page as they regularly share the URL of previous OPs, helping to cut down the time spent searching for these OPs.

For the **data wrangling** process, I also encountered some difficulties. Given that I had to scrape through 1,608 PQs manually, there was undoubtedly some human error. I ended up having to utilise certain excel functions and macros to ensure that the names of all Members of Parliament (MPs) were standardised, with no typos or additional blank spaces. I only realised this problem when I received an error message in R when I tried constructing the network in R for the first time. From this data wrangling process, I learned that R is super sensitive, and extreme meticulousness is necessary to ensure the code runs smoothly. In hindsight, I thought of one possible improvement to lessen the data wrangling workload - utilising R functions to read these .pdf files and mine the text we want accordingly.

The **network construction and analysis** process were not difficult as I utilised external resources and course materials to assist me. What I enjoyed most about this entire project was seeing how an initial research idea came to life through network visualisation. Finding out important results pertaining to political partisanship and accountability was the icing on the cake. Initially, I wanted to improve the current project by scraping the questions’ content and running sentiment analysis on the extracted text to determine the cognitive and affective states of the Members of Parliament. However, I eventually scraped the idea due to how it would be outside the scope of the course’s content and a lack of presentation time.

**As a whole**, I thoroughly enjoyed taking this module and embarking on an independent networks project, which taught me so much about conceptualising research ideas, troubleshooting my code and eventually having a final product that I am genuinely proud to submit as an assignment. To me, social network analysis (SNA) is neither a theory nor a methodology. Rather, it is a perspective or a paradigm. It takes as its starting point the premise that social life is created primarily and, most importantly, by relations and the patterns they form. From a practical standpoint, with the recent COVID-19 pandemic, we witness how SNA can also have widespread public usage, specifically regarding contact tracing and determining the pathway of infection. One key theoretical takeaway from this module would be that the SNA approach strongly emphasises the interactions between individuals and their social context. Individuals make and enact social structure by their agency. However, their choices are strongly conditioned by their locations in the texture of the larger social fabric in which they are embedded.