Visualization Group Project - Problem Statement

-- Game of Thrones

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Introduction

We are doing our project on the main events from the hit TV show, Game of Thrones, focusing on character deaths and betrayals. This is a useful topic to analyze and visualize because many people who watch Game of Thrones are confused about the many events that occur throughout the show and between seasons, people also tend to forget the events. Visualizing the character deaths and betrayals is an easy way to explain what has occurred over the seasons and also compare characters to each other.

Outside the TV show, it is always interesting to see how the TV show might influence the audiences' lives, as well as how it might affect the social or business networks. For example, a good TV show could save a channel's life by attracting a good amount of subscribers during the showing seasons, so we would like to see how this applied to Game of Throne and HBO. Also, when watching a super popular or interesting TV show, we would sometimes want to relate our personal lives more to it, for example, some new parents might want to name their babies the name of the characters because they want their babies to be as cool as them. So it would be interesting to see how Game of Thrones affect the viewer societies in terms of trends on newborn names during the showing season, etc.

Project Outline:

We would like to explore the number of deaths broken down by season, and also observe trends in death methods. In addition, we will look at the ratio for each character of their betrayals of others vs. times they were betrayed by others, their relationships and the reasons behind those betrayals, as well as their respective houses. We will also conduct network analysis of all the main characters to observe possible patterns in who killed whom, as well as house against house. Further, we will look into the winning rate for different parties in terms of different military power in a battle as attackers or defenders. Then, we will analyze the subscription movement on HBO when during the season show time and other times to see if there's any differences or trends. This analysis will be more business-oriented and we can draw some insights on how the

events and characters in Game of Thrones has impacted its success as a show on HBO. Last, we will analyze the movement of the number of newborns who have the same names as the characters throughout the time. This will help us to gain some insight on how Game of Thrones will impact social activities and viewers' everyday lives.

Sources of background information & datasets:

This website gives every betrayals in the GoT TV show.

https://docs.google.com/spreadsheets/d/1yfzwRZFY08EBgwfMYTY8BojB4GIfsOBLo0PQ2Hs8u5g/edit#gid=0

We found a dataset which includes information on all the deaths for named characters and we updated it to include the deaths in season 7 manually.

https://docs.google.com/spreadsheets/d/1cPjZBqTBMF2JN7RP79fuzq2jGwcrD5mTgrWWi30IYHo/edit?usp=sharing

This website gives baby names in the US after 1950. We are planning to check whether GoT will affect the trending names or not.

https://data.world/stanke/workout-wednesday-week-8/workspace/file?filename=babynames1950%2B.csv

These website gives us the number of subscribers on HBO HBO NOW and Netflix.

https://www.statista.com/statistics/250934/quarterly-number-of-netflix-streaming-subscribers-worldwide/

https://www.statista.com/statistics/329277/number-hbo-subscribers/

https://www.statista.com/statistics/539290/hbo-now-subscribers/

This website gives a good summary of each character's death in the show. In addition to the datasets we currently have, we are also interested in scraping this site for the characters' information.
https://www.washingtonpost.com/graphics/entertainment/game-of-thrones/?utm_term=.57f9ce6d74d6#season-one

Kaggle: Battles and deaths datasets based on books in CSV files.
https://www.kaggle.com/mylesoneill/game-of-thrones

Reference for creating a network analysis:
This part of our analysis requires some deeper math understanding, so we will use this reference as a guide.
https://www.maa.org/sites/default/files/pdf/Mathhorizons/NetworkofThrones%20(1).pdf

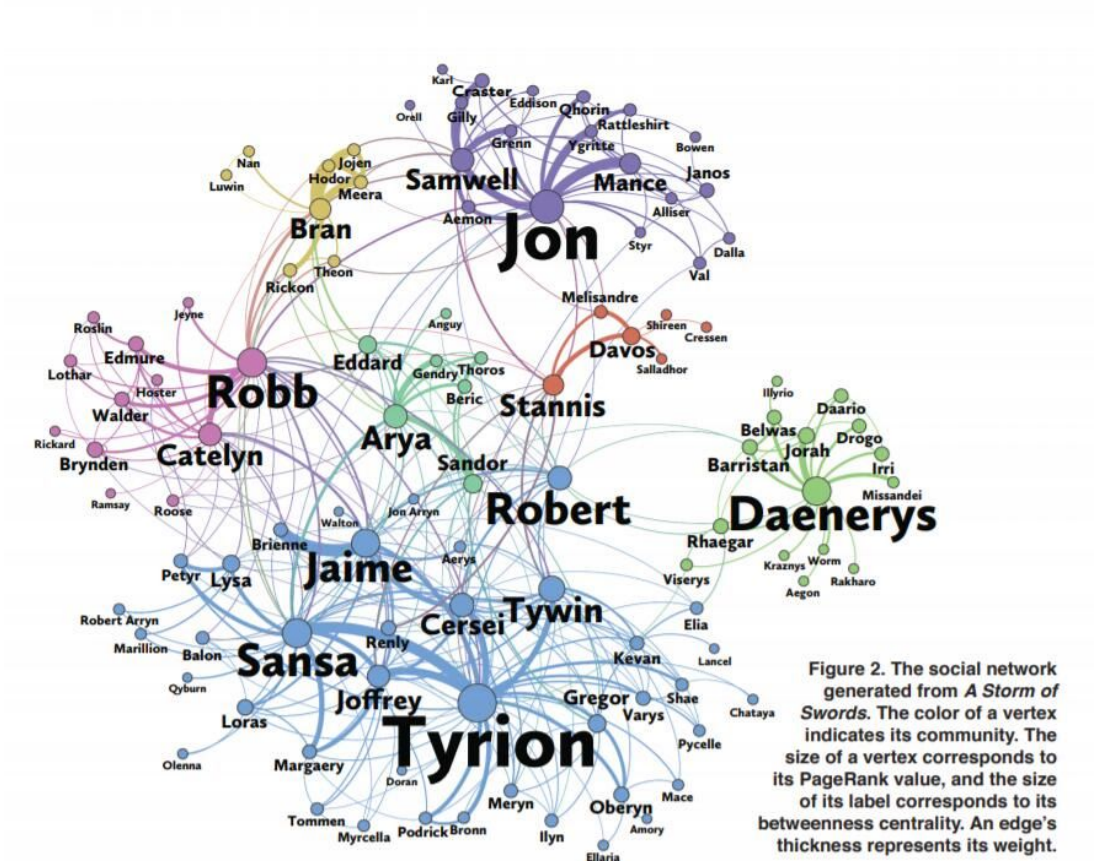

Figure 2. The social network generated from *A Storm of Swords*. The color of a vertex indicates its community. The size of a vertex corresponds to its PageRank value, and the size of its label corresponds to its betweenness centrality. An edge's thickness represents its weight.