

Visualizing the Al Jazeera News Network

Ziyao Chen • LIBR 514F: Information Visualization and Visual Analytics • Final Project

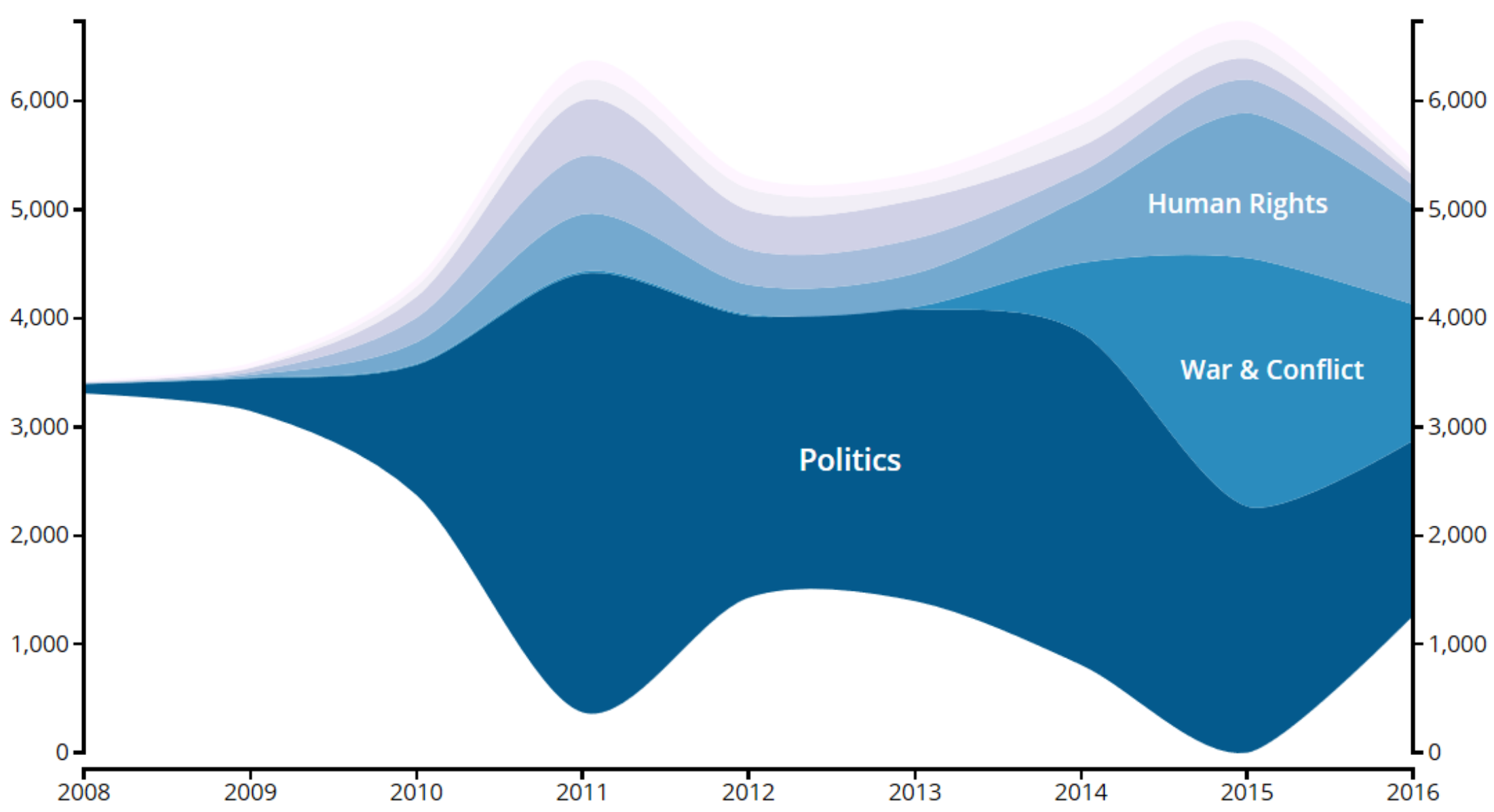
About This Project

The Al Jazeera is a Qatar-based bilingual news network Al Jazeera that provides coverage both in Arabic and in English. It is the most influential news media in the middle east and has emerged as one of the main sources of global news in the last few years. This project drew upon a dataset containing 38,000 articles and their metadata crawled from the Al Jazeera English website (<http://www.aljazeera.com/>), aiming to explore the underlying patterns on its coverage and its user group, and to understand any hidden biases.

Topics Over Time

A streamgraph is created to reveal the change of article topics over time.

It is obvious that the streams experience a slow and steady climb before 2010. However, the number of political topics soars in 2011. This may reflect the massive impact of the *Arab Spring* uprisings to the middle east world.

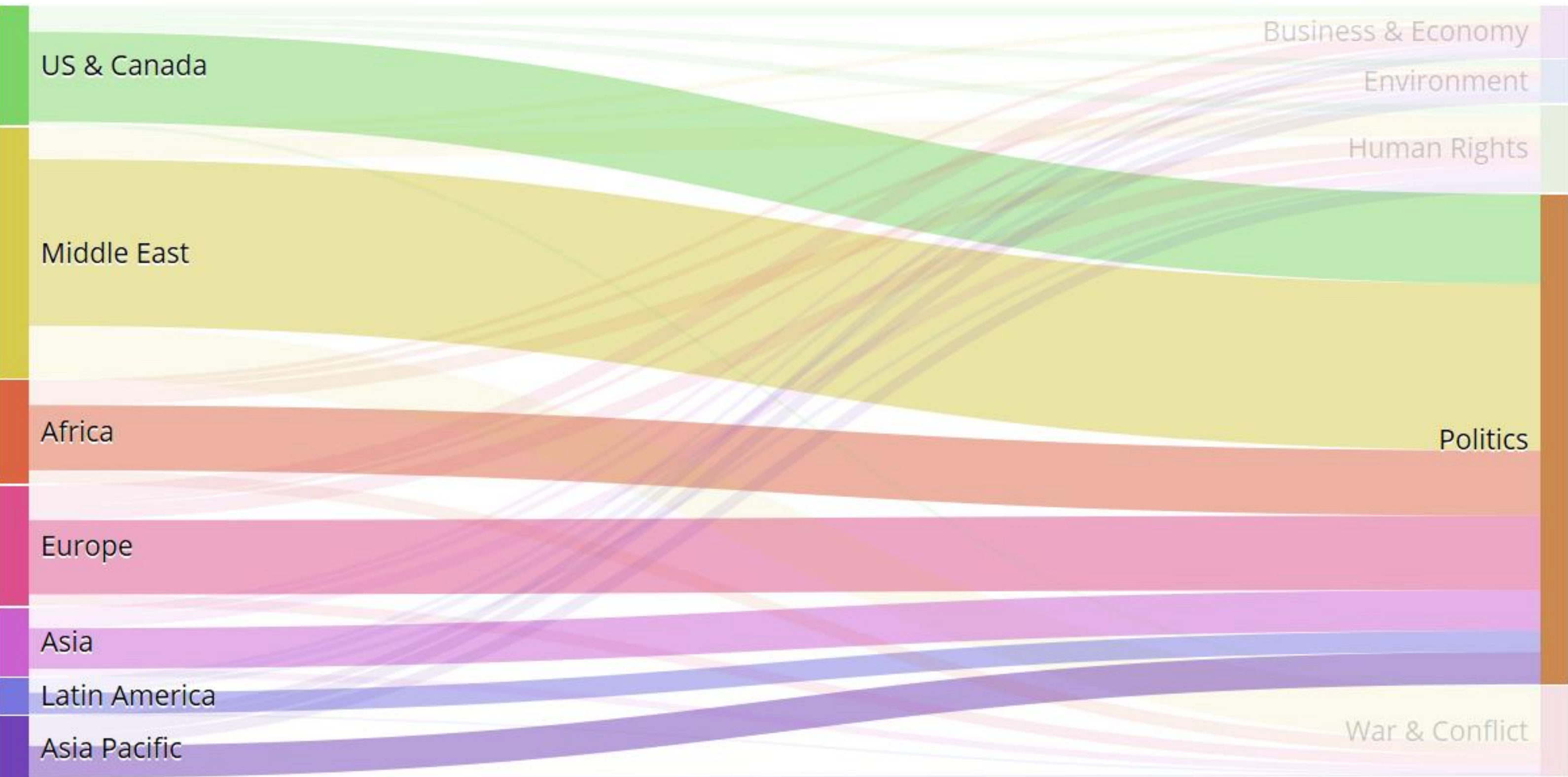


Streamgraph for Topic Tags

The size of a stream indicates the number of articles for that particular topic tag. Only the top 7 topic tags were selected in this chart. It is worth noting that the topic “War & Conflict” was used only after 2013.

Region-Topic Associations

There are generally two types of tags used in an article: region-related and topic-related tags. A Sanky Chart was created to explore these two tag types. It is clear that regardless of the region, political topics always account for the majority, indicating a strong bias towards coverage topics.



Sankey Chart for Region and Topic Tags

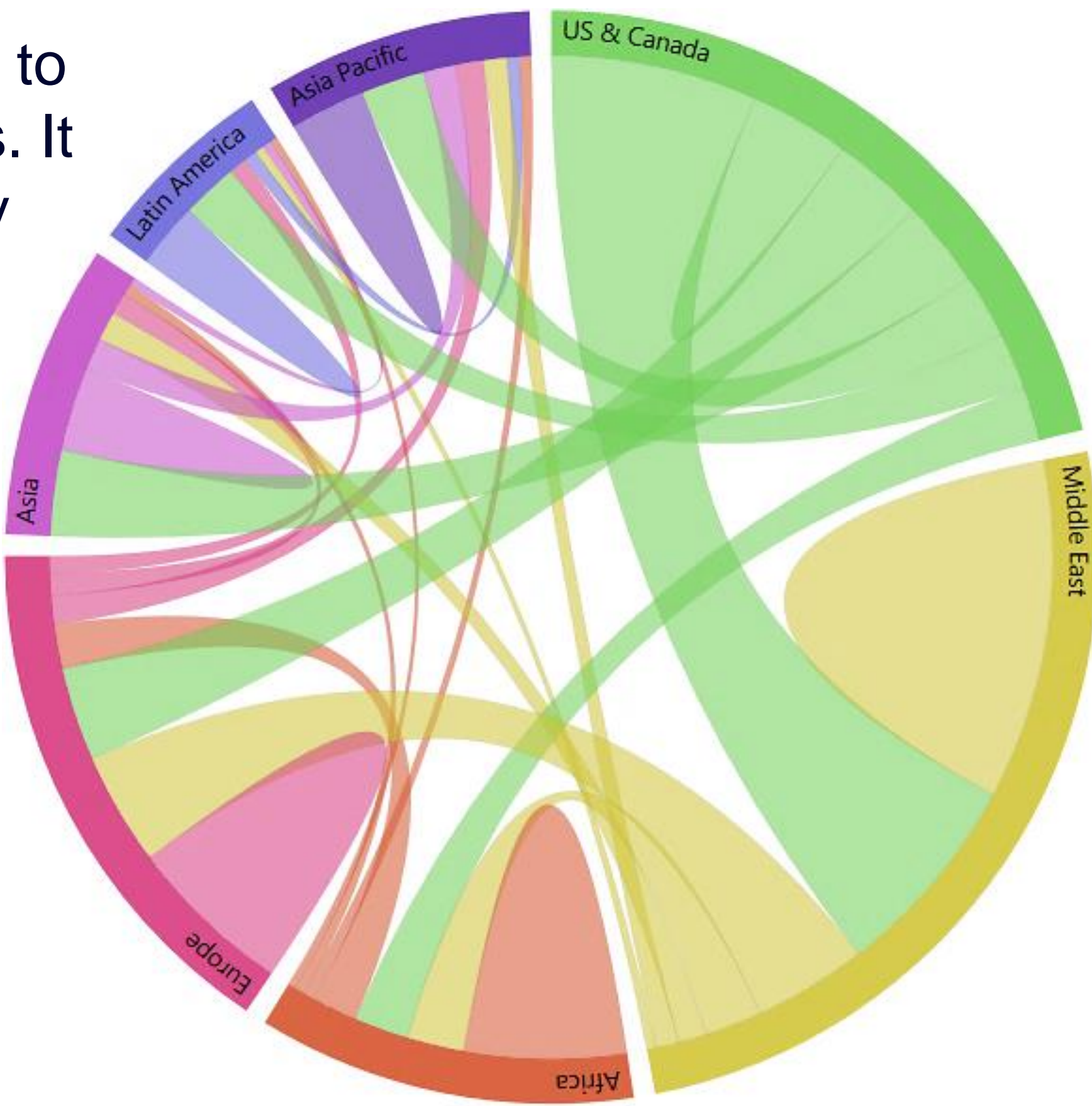
Country tags were normalized to their superordinate geo regions before analysis. Only top five topics were selected in this chart.

Region-Region Associations

A chord diagram was also created to explore inter-regional associations. It is clear that North America (mainly U.S.) has the most active interaction with other regions, followed by the middle east.

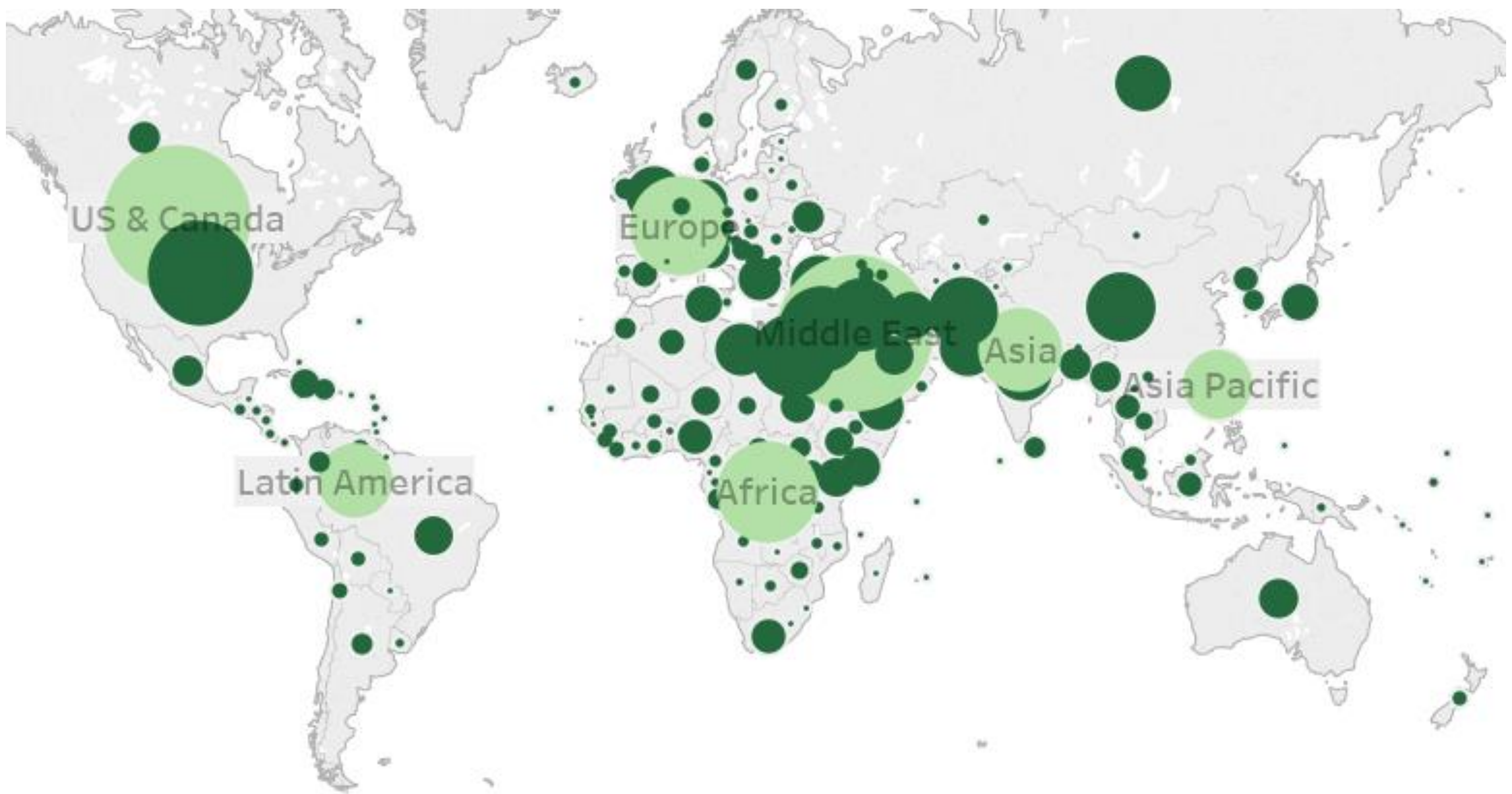
Chord Diagram for Region Tags

Country tags were normalized to their superordinate geo regions before analysis. Please note that intra-regional relations are also accounted for in this diagram, indicated as colored lumps with no end points.



Geospatial Analysis

The number of articles for each region, indicated by marker size, is plotted onto a map view based on the tag data. It is not at all surprising that the middle east world has the most number of articles since the Al Jazeera is a news network based in the middle east. Interestingly, the number of articles concerning North America also has a significantly large number of news coverage. This may indicate a potential bias towards event locations.



A Map View for Number of Articles

Marker size represents the quantity of articles published; Lighter green markers represent greater regions, while darker green markers represent individual countries.

Reference

1. Munzner, T. (2014). *Visualization Analysis and Design*. CRC Press.
2. Amar, R., & Stasko, J. (2004, October) A knowledge task-based framework for design and evaluation of information visualizations. In *Information Visualization, 2004. INFOVIS 2004. IEEE Symposium on* (pp. 143-150). IEEE.

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