

For the empirical memo, due September 23, you will:

1. Formulate at least one hypothesis about international security, and explain why it is interesting. You can cite some of the existing international security literature if you want, but this is not necessary.

You should express an association between two variables in the world, but you do not need a full-fledged causal theory. Your hypothesis might posit changes in international security phenomena over time, or a difference in the international security behavior of different subgroups. For example, you might hypothesize that international conflict has decreased over time, or that international conflict is more prevalent among poorer states (don't use either of these examples for your memo).

2. Find a data source that will help you investigate your hypothesis. Good options are listed in the syllabus for 9-2-16, and include:

The Correlates of War Project: www.correlatesofwar.org

International Crisis Behavior (ICB) Project: www.cidcm.umd.edu/icb/

Armed Conflict Data (UCDP): www.pcr.uu.se/research/ucdp/datasets/

World Development Indicators (World Bank): databank.worldbank.org

You are not limited to these data sources. Think about what kind of data you are interested in, and then Google it—it probably exists somewhere. Contact me if you want suggestions for particular kinds of data.

3. Analyze the data to see whether it supports or contradicts your hypothesis. This can be as simple as examining the trend over time in a spreadsheet. You might also try looking at your data by subgroup. Does this trend in international security apply to all states, or just to democracies? Do all wars generate many casualties, or just those involving territorial disputes?

This is the hardest part of the assignment! Give yourself plenty of time to find and analyze the data. If you are having trouble understanding what the data means for your hypothesis, try graphing the data over time or by other factors. Sometimes a picture can help you see patterns that you might have missed otherwise.

No statistics are required, but you are welcome to conduct more advanced analysis of the data if you wish. All of the analysis I'm looking for can be conducted using Excel or Google Sheets. If you want to give more advanced software a try, I recommend the free *RStudio*, available at <http://www.rstudio.com/>. Many resources for learning *R* are available on the web (popular options include <http://tryr.codeschool.com/> or <https://www.datacamp.com/>); ask me if you have any questions.

4. Describe your findings. Include a chart, graph, or table that shows how the data bears on your hypothesis.

If you create a graph, label the axes. If you create a table, use a header for the rows or columns. In any case, title your chart, graph, or table and provide enough of a description that I can understand it. Do your best to follow the guidelines for effective visualization from the 9-2-16 reading.

Your empirical memo should be no more than 5 pages of double-spaced text, using a standard 12-point font, not including the chart, graph, or table. Please number your pages. You can use whatever citation style you prefer, but don't forget to cite the source for the data you employed. Submit the memo via Blackboard before class on September 23.