Data Visualisation Final Project Documentation

War

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Topics of Visualisation

1. WW1 - *Luca Andrei*
- https://de.statista.com/statistik/daten/studie/1113732/umfrage/flugzeugproduktion-im-ersten-weltkrieg/
- https://de.statista.com/statistik/daten/studie/1143322/umfrage/veraenderung-des-realen-bruttoinlandsprodukts-waehrend-des-ersten-weltkriegs/
- https://de.statista.com/statistik/daten/studie/1143375/umfrage/anteil-der-staatsausgaben-am-bruttoinlandsprodukt-vor-im-ersten-weltkrieg/
- https://www.statista.com/statistics/1208625/first-world-war-fatalities-per-country/
- https://de.statista.com/statistik/daten/studie/416496/umfrage/kosten-des-ersten-weltkriegs-nach-staaten/

2. WW2 - *Denis Lisovskij*
- http://www.statista.com/statistics/1342462/wwii-share-male-mobilization-by-country/
- http://www.statista.com/statistics/1261435/post-wwii-gender-ratios-in-select-allied-countries-age/
- http://www.statista.com/statistics/1342260/wwii-mobilization-by-country/

3. Vietnam War - *Dimitar Yolovski*
- https://www.statista.com/statistics/1334328/vietnam-war-us-public-opinion-mistake/
- https://www.statista.com/statistics/1333974/annual-us-protests-against-vietnam-war/
- https://www.statista.com/statistics/1336944/vietnam-war-military-personnel-deployed-battle-deaths/
- https://www.statista.com/statistics/1334878/vietnam-w ar-key-inflation-budget-deficit/
- https://www.statista.com/statistics/1333806/us-military-expenditure-vietnam-war/

4. Iraq War - *Valeriu Culinca*
- https://www.statista.com/statistics/269731/civilian-deaths-per-day-by-suicide-bombings-in-iraq-war/
- https://www.statista.com/statistics/269729/documented-civilian-deaths-in-iraq-war-since-2003/

- https://www.statista.com/statistics/271526/us-war-costs-in-iraq-and-afghanistan/
- https://www.statista.com/statistics/263798/american-soldiers-killed-in-iraq/

5. Modern Global Military Spendings - *Martin Adelbert*
- https://milex.sipri.org/sipri

6. Ukraine-Russia War Equipment - *Emilia Pavel*
- https://www.statista.com/statistics/1303344/ukraine-infrastructure-war-damage/
- https://www.kaggle.com/datasets/piterfm/2022-ukraine-russian-war
- https://www.kaggle.com/datasets/piterfm/2022-ukraine-russia-war-equipment-losses-oryx?resource=download&select=losses_ukraine.csv

1. WW1

Aircraft production, GDP% allocation to government expenditures and GDP% change in WW1, major powers


Country
- France
- Germany
- United Kingdom
- United States of America

Lost productivity costs per civilan death in WW1, main powers
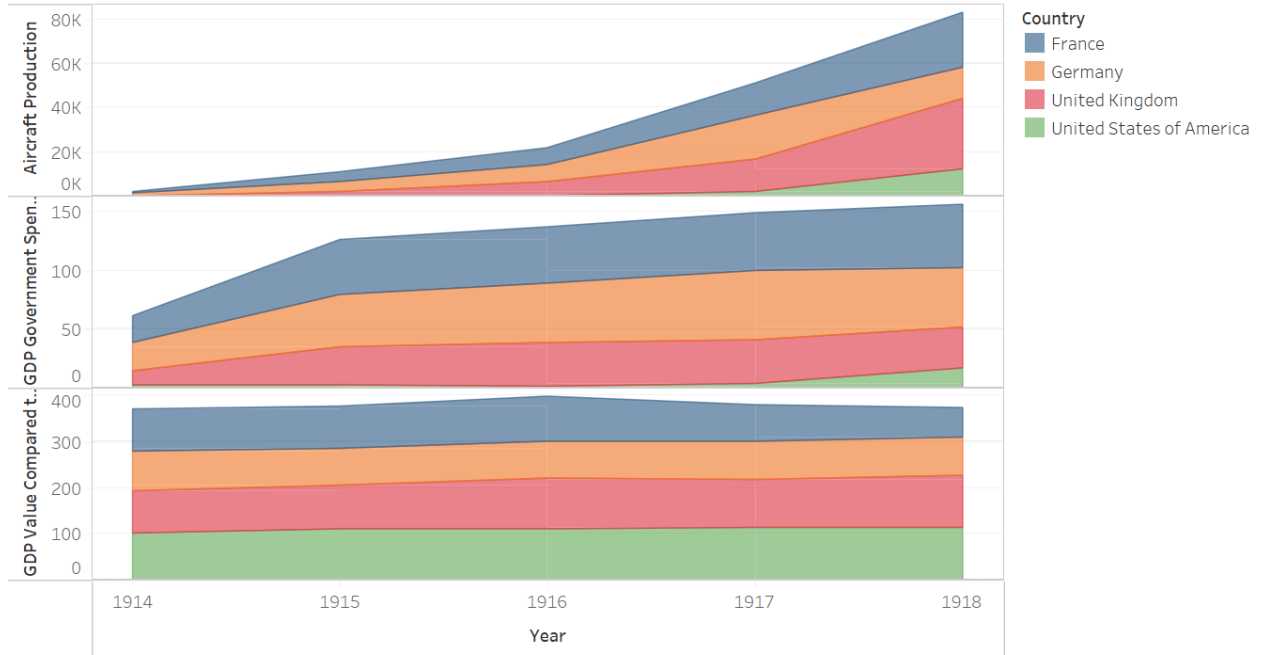
Cost per death
714   14.167

^This is the visualization used in the presentation, but unfortunately it is not the correct version. Here, the cost per death calculated field is used for representing both the size of the boxes and their color.

Lost productivity costs per civilan death in WW1, main powers
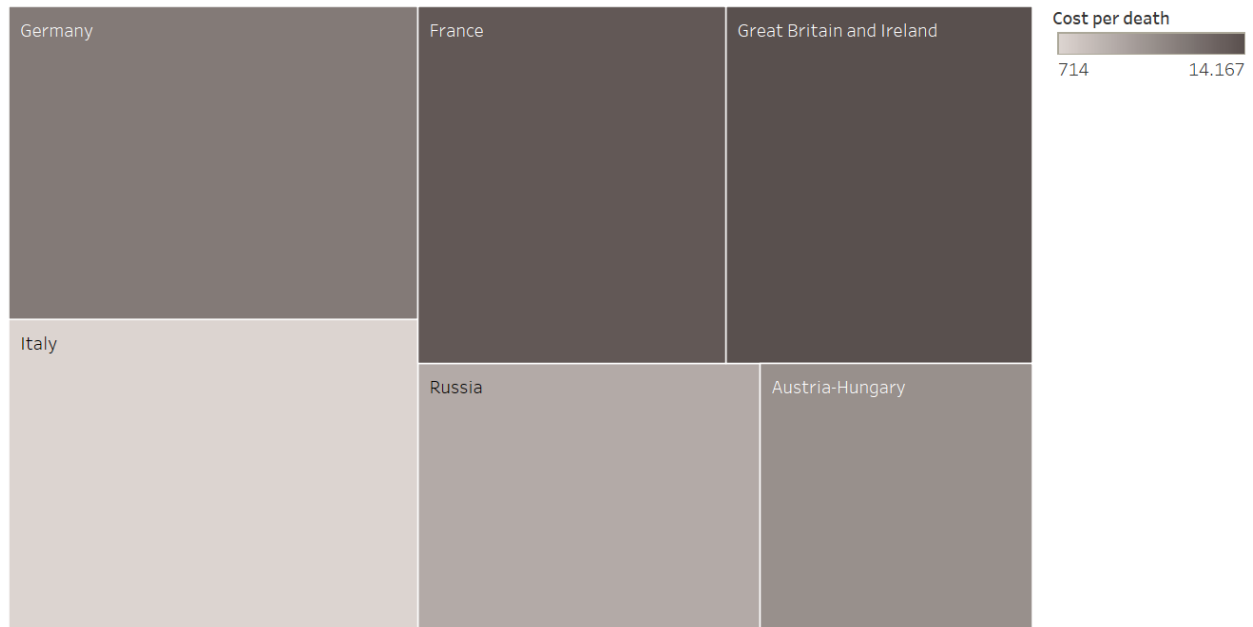
In the correct version of the visualization, the colors represent a custom calculated field of cost per death: "Productivity Lost in $ / Civilian Deaths". Darker colors mean bigger cost per civilian death, while lighter ones show less cost per civilian death. This might be due to differences in technological levels and industrial efficiency of various countries, where in more advanced countries each civilian can produce more value than in less developed countries. The sizes of the boxes represent the total number of civilian casualties in WW1 for each respective country.
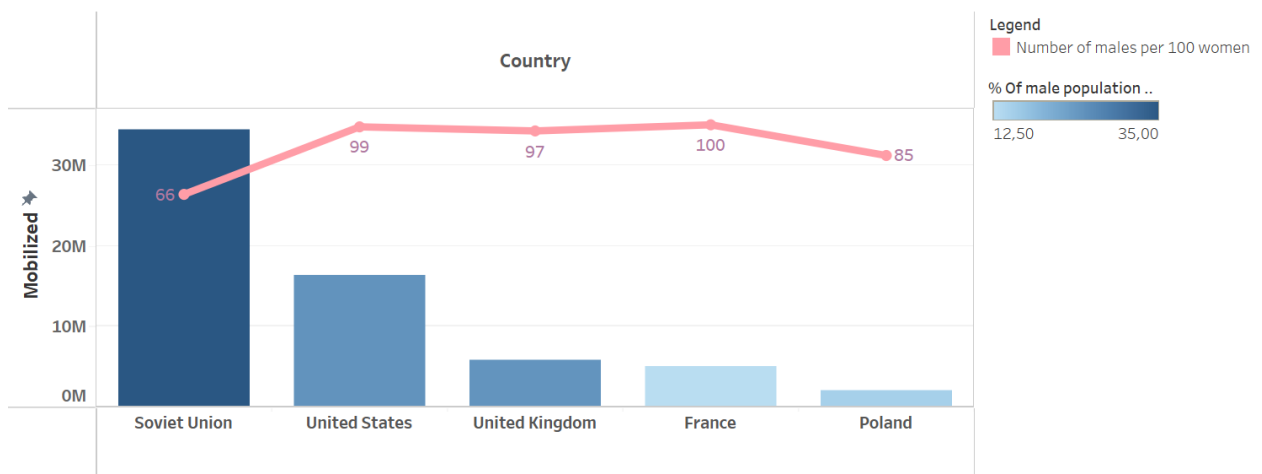
2. WW2

Superpowers during WW2 radar chart.

Negative values should be treated as positive, all values represent percentage.
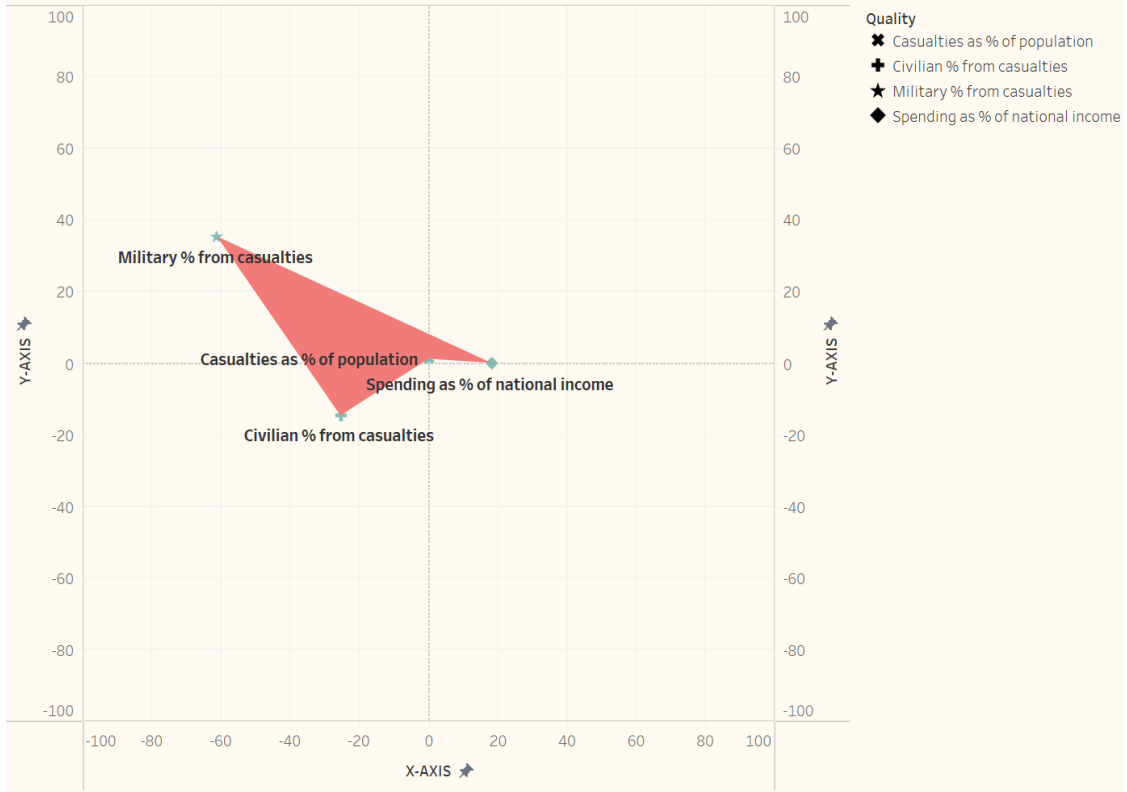
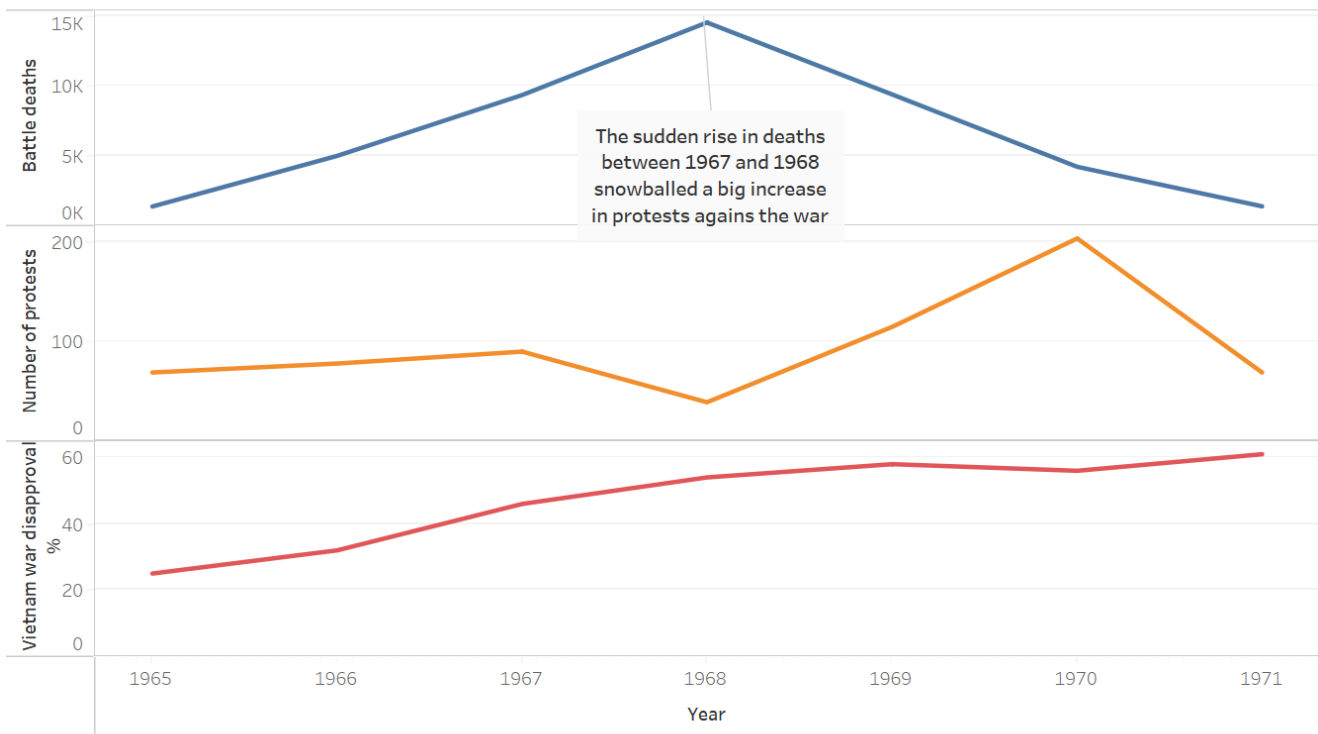*Interaction - Selection of the year and country.*

**Number of mobilized personnel during WWII, as proportion of total male population and
proportion of men to 100 women in post WWII period (1950).**

3. Vietnam War

Vietnam war deaths' effect on US population's perception

The sudden rise in deaths
between 1967 and 1968
snowballed a big increase
in protests agains the war

Battle deaths

Number of protests
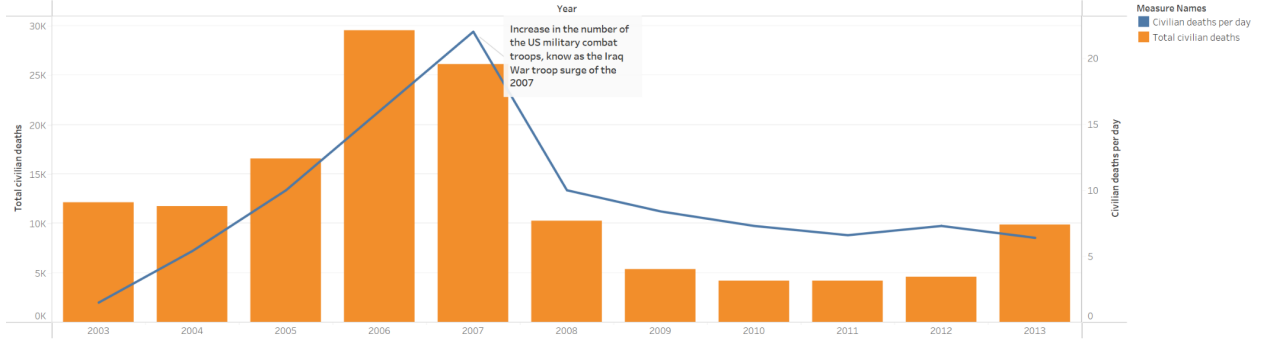
Vietnam war disapproval %

Year

Military expenditure's effect on US inflation rate and government budget deficit during the Vietnam war (1964-1975)
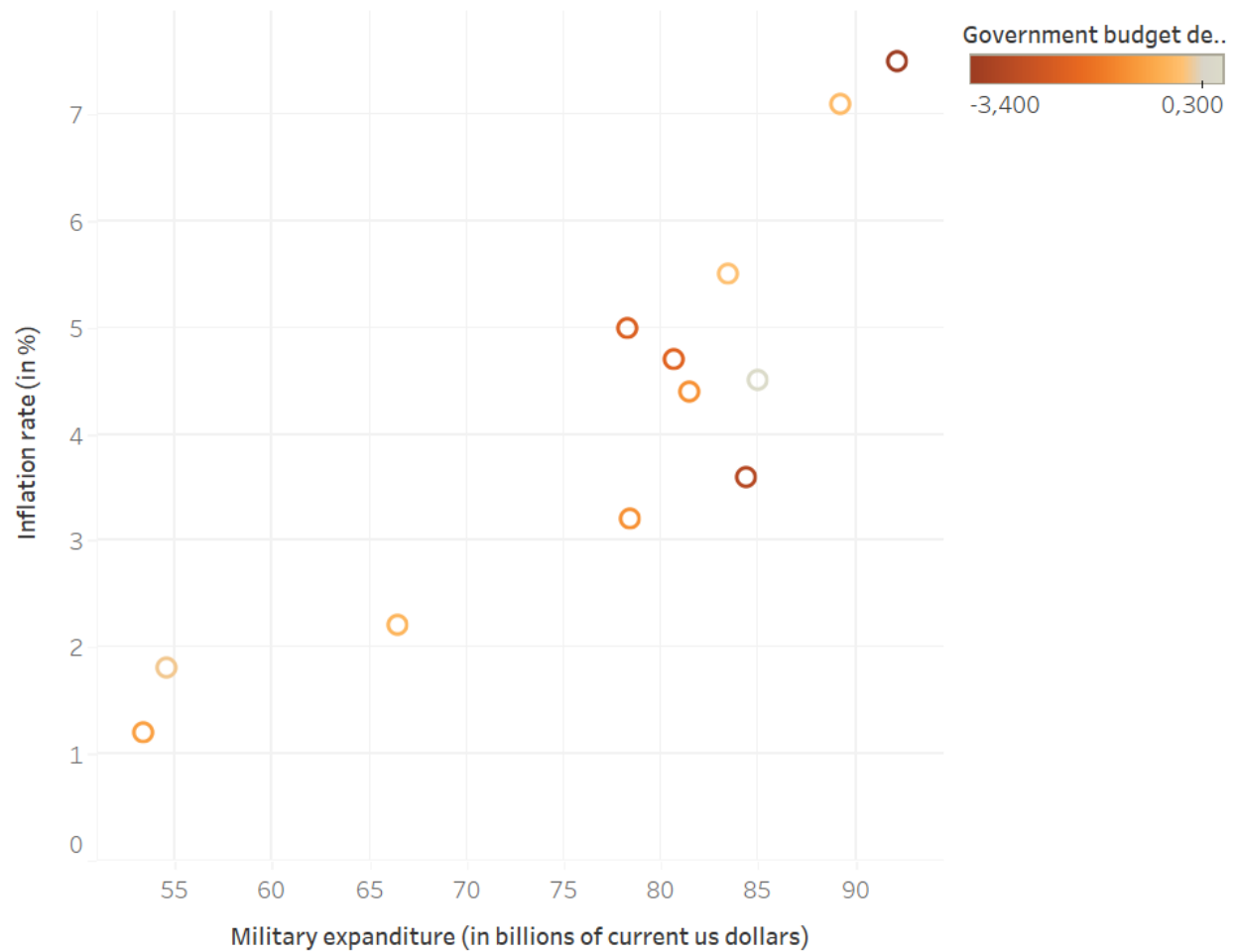
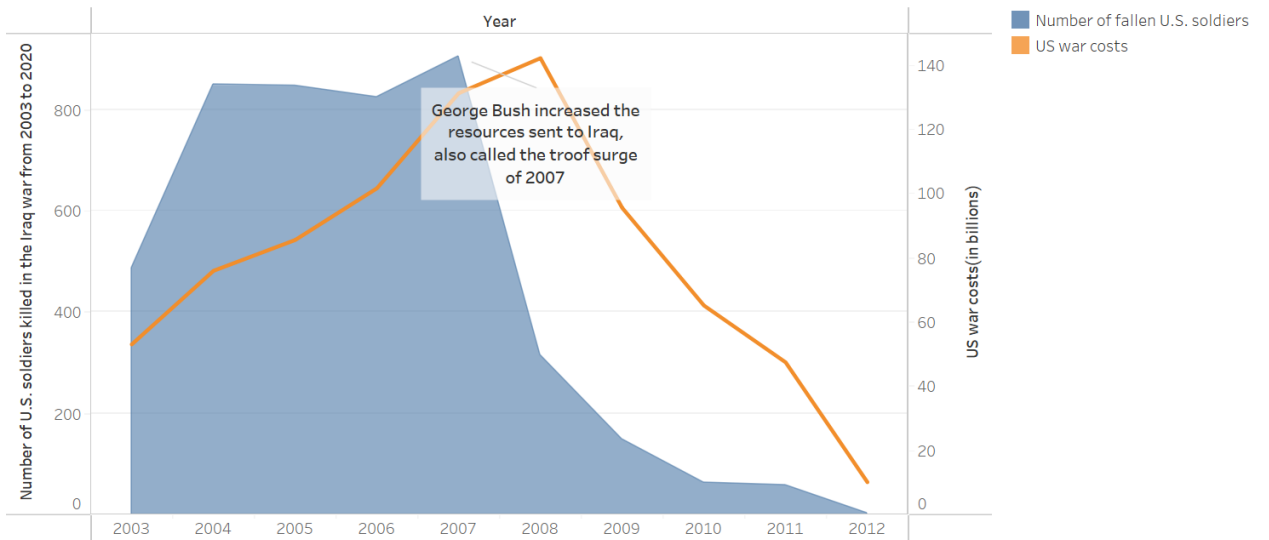*Interaction: Selection of year and inflation rate.*

4. Iraq War

Documented civilian deaths in the Iraq War from 2003 to 2013

The blue line represents the amount of civilian deaths per day for the corresponding year.
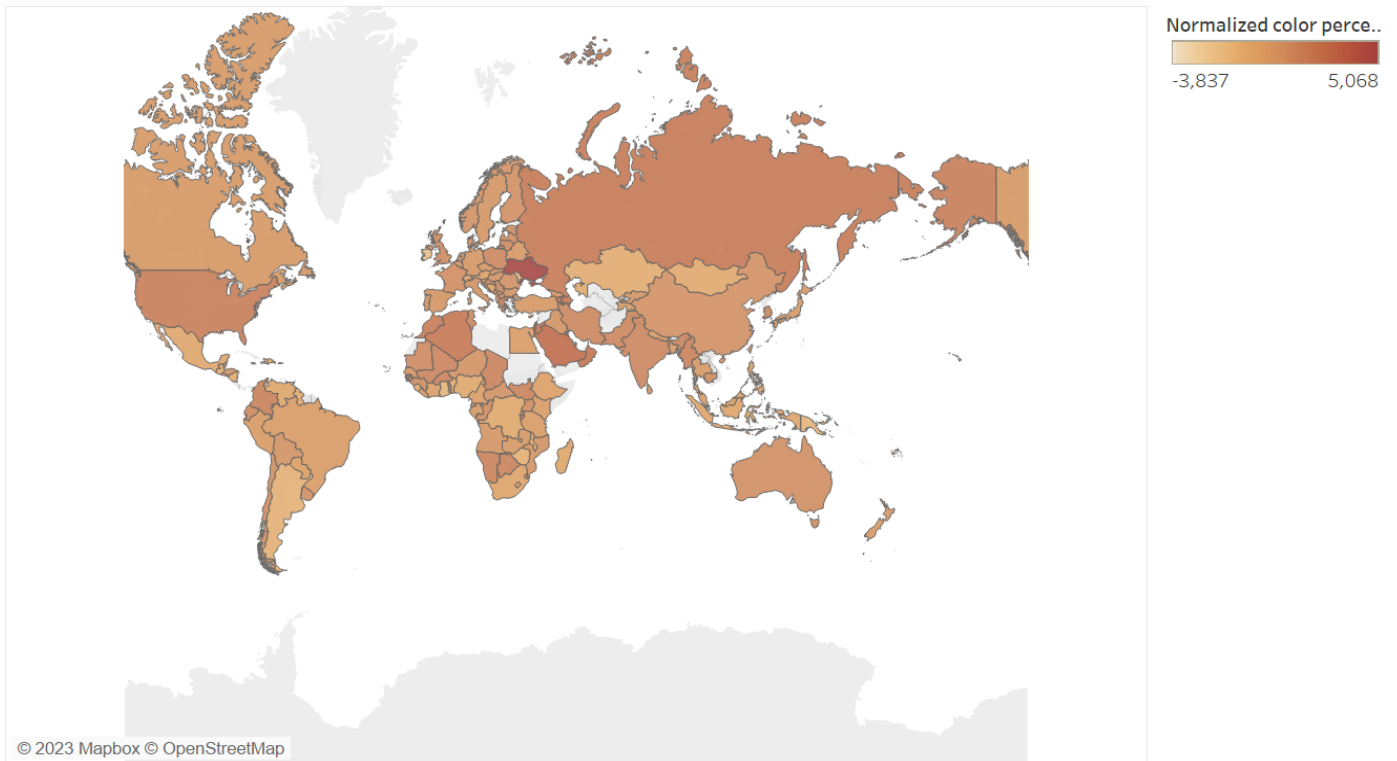
Fallen US soldiers and the US war costs in the Iraq War between 2003 and 2012

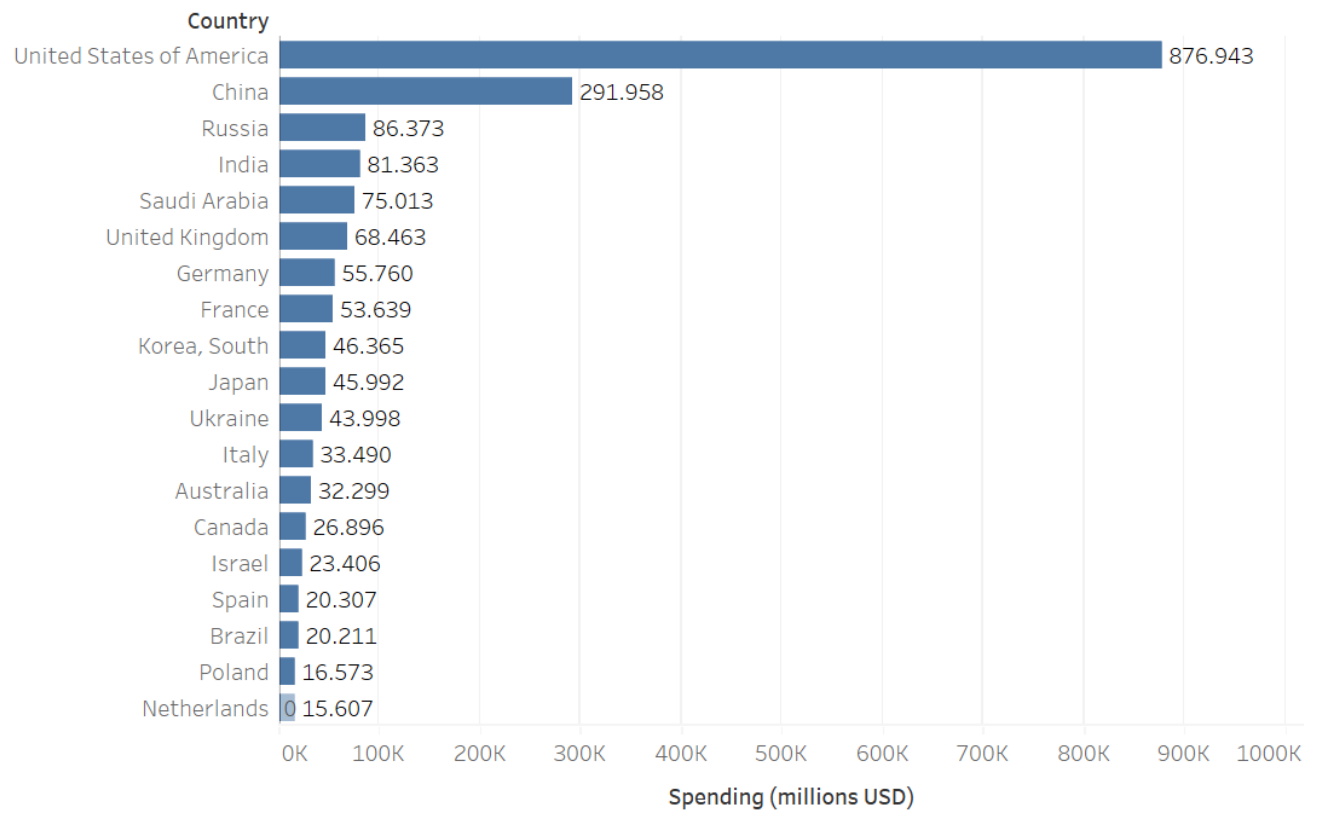*The orange line displays the US costs of the Iraq War in billions of dollars.*

5. Modern Global Military Spendings

Military Expenditure percentage of GDP per country in 2022

The colors of the map were made by taking log_2 of the Military Expenditure, to map the big range of values from the dataset to a smaller one, for clearer distinction between areas.

Military Spending in current USD (millions) per country

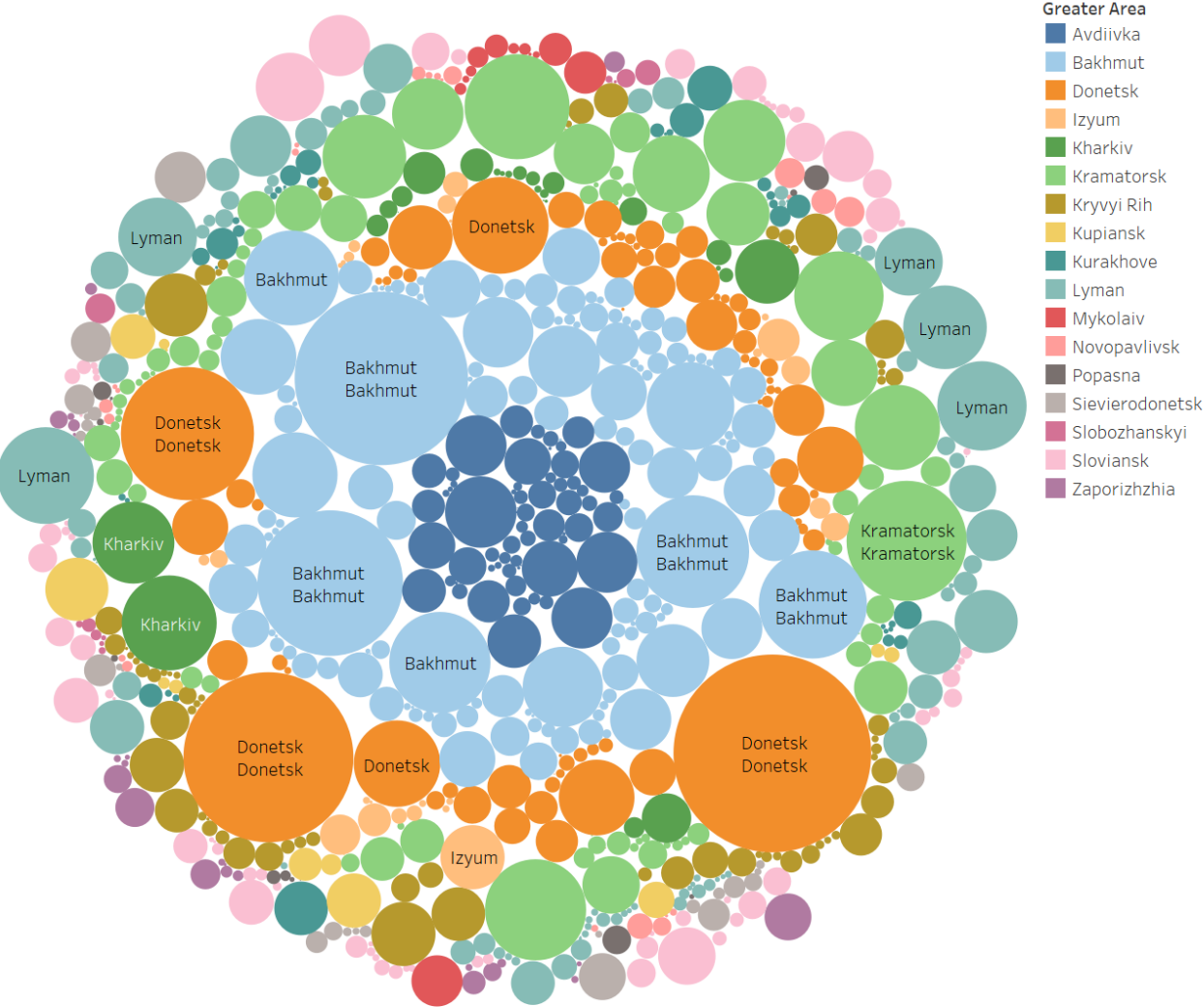| Country	Spending (millions USD)
United States of America	876.943
China	291.958
Russia	86.373
India	81.363
Saudi Arabia	75.013
United Kingdom	68.463
Germany	55.760
France	53.639
Korea, South	46.365
Japan	45.992
Ukraine	43.998
Italy	33.490
Australia	32.299
Canada	26.896
Israel	23.406
Spain	20.307
Brazil	20.211
Poland	16.573
Netherlands	15.607

Interaction: Selection of country.

6. Ukraine-Russia War Equipment

Number of equipment destroyed by Ukraine and respectively Russia since the start of the war by type and model of vehicle
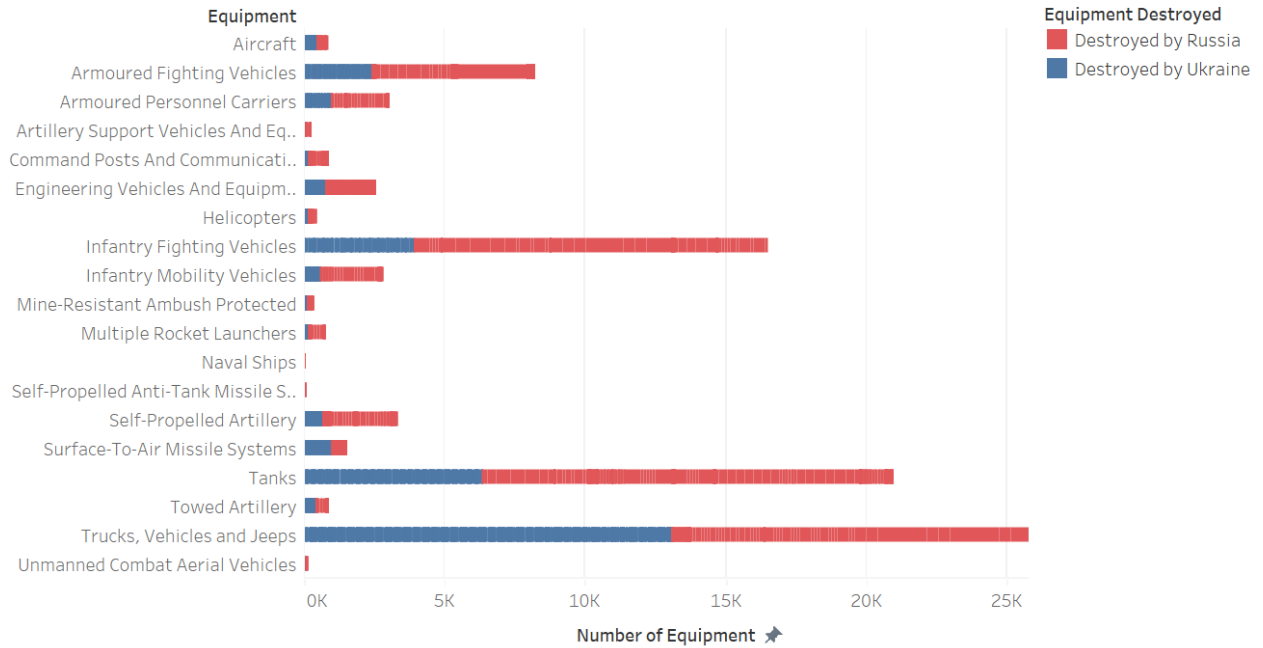
Hovering over the bars shows the type and model of vehicle or military equipment destroyed by Ukraine/Russia.

Equipment lost by the Russian military in the main zones of conflict of Ukraine sorted by the most used types of artillery and vehicles

Greater Area
- Avdiivka
- Bakhmut
- Donetsk
- Izyum
- Kharkiv
- Kramatorsk
- Kryvyi Rih
- Kupiansk
- Kurakhove
- Lyman
- Mykolaiv
- Novopavlivsk
- Popasna
- Sievierodonetsk
- Slobozhanskyi
- Sloviansk
- Zaporizhzhia

The bubbles marked by colors represent the greater areas of Ukraine where the Russian army lost various military equipment. The size represents the directions on which the equipment was lost(in between greater areas) and the type of equipment lost(Drones, APC, Helicopters, Etc.).