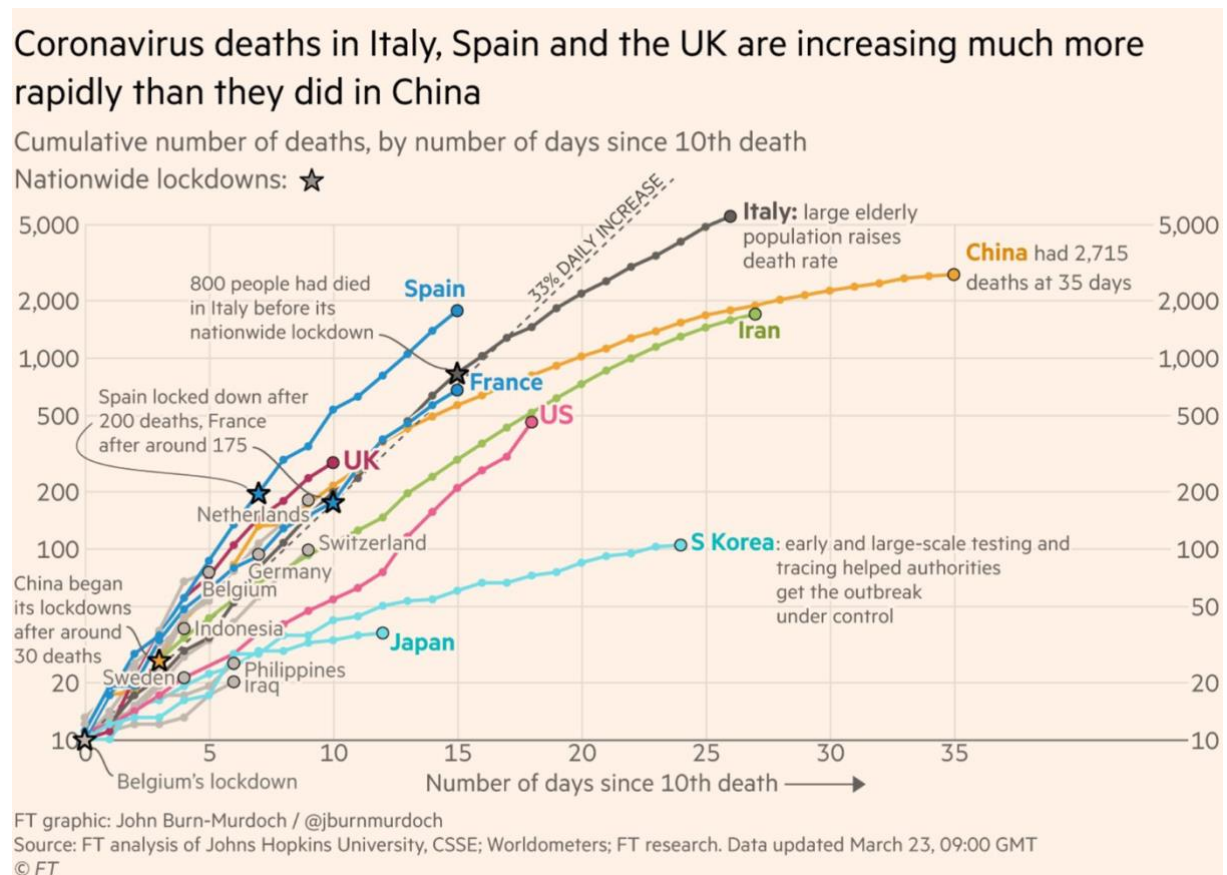Part 1. Graphic inquisition

Figure 1

Coronavirus deaths in Italy, Spain and the UK are increasing much more rapidly than they did

in China

Note. John Burn-Murdoch [@jburnmurdoch]. (2020, March 23). You asked, we answered:

The @FinancialTimes coronavirus death & case trajectory trackers are now 🔥 FREE TO

READ 🔥 outside the paywall: Http://ft.com/coronavirus-latest In this morning's update, the

US has gone above 470 deaths, bringing it just behind where Iran was at the same stage

Https://t.co/NBA7FMYlmC [Tweet]. Twitter.

https://twitter.com/jburnmurdoch/status/1242048518908502016

A relatively simple graph gets messy with all the information about the other countries that are not in focus. It is hard to see which parts of the graph correlates to the stated objective of the graphic. Proximity of the lines, possibly due to the interwall choice makes it hard to read. Similar colors e.g., Spain & France makes it difficult to track each nations specific progress.

The position of specific points on the lines is hard to see, especially between x=5 and y=50. Bad color saturation e.g., Japan/S Korea & Spain/France, but it is good between the four *main* observations (UK, US, Spain, Italy). Decent use of grid lines. The scale is consistent, and the dual y-axis is helpful. Reader is not informed of the log-scale. Decent projection, some superimposing is needed in the bottom-left of the graph.

Decent data-ink-ratio. Some unnecessary comments on nations such as S Korea, France, and Belgium. Notes on when lockdowns were enforced are not necessary due to the star annotation that is stated under the title. It could be said that since the only four countries that we want to observe are UK, US, Spain, and Italy, all other should be removed. Good use of grid lines, easy to differentiate between grid lines and countries in grey.

Good graphical integrity, but the y-axis is a log-scale, and this means that the scenarios that look similar, like China and S Kora are far from equally comparable, even though they look so similar. Due to the non-specified log-scale, the graph is not in comply with this factor.

Unnecessary comments decrease readability e.g., comments on lockdowns and comments on countries other than those in the title. No indication of log-scale, can´t see "50" on the left y-axis. Annotations on the graphic are somewhat informative. It is difficult to immediately find specific datapoints, but with some time you can interpret the graphic by itself. Good stand-alone readability. The claim that covid is more rapidly increasing in Italy and Spain, compared to China is clear, but we cannot say the same for the UK.

Part 2. Graphic design

Figure 2

Fuel consumption, possible indicators of very fuel efficient cars

Fuel consumption, possible indicators of very fuel efficient cars
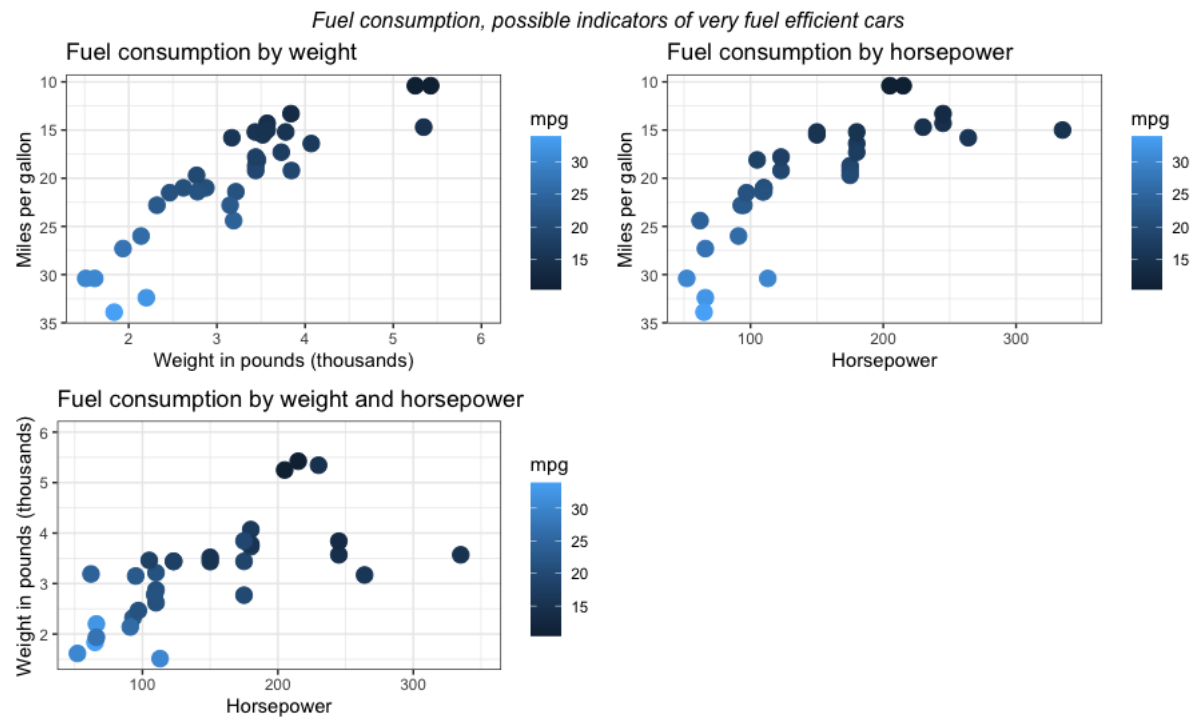
The graph intends both to educate and explore which common measures of a car has the most impact on the car being very fuel efficient. When looking for a car, two easily available statistics are the weight of the car and the amount of horsepower it produces.

In panel 1 we can see that there is a clear correlation between the weight of a car and its fuel consumption. The higher the weight, the less distance it can travel per gallon of fuel it consumes. The panel shows us a general trend, but there are around the 2000-lbs-mark several cars with quite different mpg. On the other side of the spectrum, the three cars above 5000 lbs have a low mpg, but the variance between them are still noteworthily high. Based upon this, we can conclude that while weight can give us a general indication about cars fuel consumption, there seems to be other differences that also play a large part in the calculation.

Looking at panel 2 we can see that a high amount of horsepower correlates to having low fuel consumption. This gives us a general understanding of horsepower being a factor in the cars fuel efficiency. The variance in mpg compared to horsepower is very large and there are cars with a low amount of horse power that have both a very low, and quite high fuel consumption. As with the conclusion in panel 1, this shows us that horsepower alone cannot determine to a significant level whether or not a car is fuel efficient or not. But contradictory to panel 1, horsepower seems to be a worse indicator than weight.

Panel 3 explores the fuel efficiency of cars by looking at both the cars horsepower and its weight. This would give us an insight into weather a combination of both variables could give us a good indication on whether or not a car is very fuel efficient. While this produces a somewhat generalizable trend, there are both cars with low weight and high horsepower, and high weight and low horsepower that have similar mpg. A combination of both variables does not seem to give us any new insights other than both weight and horsepower having an impact on the cars fuel efficiency.