What is the geographical story behind a chosen set or sets of data?

An account of how numbers write history...

A story provides the means to transport readers with words. A *geographical* story is told with numbers, and tells the tale of realities of people around the world. Data is a crucial element of the geographical story. The set of policies, deals, social movements and investments led by a nation are what will shape that country's (hi)story when looking back in retrospect. Thus, we are living today in a historic era. Examining countries' policies against climate change today is seeing the storyline unfold before our eyes (hopefully one with a happy ending).

The dangerous beauty of crude data is that it is left up to interpretation. This is what fuels the climate change argument and leads to climate skeptics: data misinterpretation. Although 97% of scientists agree that climate change is an issue, 3% nourish misleading data to support climate change deniers.

International cooperation against climate change has led to the creation of world summits with the aims of reducing carbon emissions. A prime example of this is the Paris 2015 COP21 summit, where countries collectively set targets to prevent global rising temperatures from reaching 2°C. Following the COP21 conference, the UK will be hosting the consequent COP-26 summit in 2021, stating the aim "**to increase climate ambition, build resilience and lower emissions**".

To evaluate the success of the UK's COP-26 summit in 2021, it is important to understand the meaning of the stated aim in a quantifiable fashion. Climate ambition is the collective will to cut global greenhouse emissions. Thus, ambition is measured by the consequent policies implemented to remain below this 2°C goal. To increase climate ambition would require investment in clean energy and the removal of fossil fuel subsidies for developed countries, but political interests offer conflicting views (Cameron, 2012).

A recent survey by the Pew Research Center shows that just "42% of registered US voters said climate change was very important to their vote in this year's election"; 79% said the same about the economy (Hook, 2020).

If a flaming (literally) crimson map of global temperatures looking like this won't incite action, then perhaps the monetary value of environmental damage will speak to investors and politicians.

Figure 1: Global map of record surface temperatures in August 2020 (Hook, 2020)



A study led by the Carbon Disclosure Project (CDP) estimated that almost \$1trillion is at risk in the next five years as the consequences of climate change continue to worsen. The report then states the opportunities that could arise regarding adaptation strategies, which could amount to a total of US \$2.1 trillion, preponing to the idea that growing the economy and the environment is possible (Ellsmoor, 2019).

Yet, while the UK is preparing to host the COP-26 summit in 2021, its current budget spending patterns do not align with the goal of increasing climate ambition. Whilst one might expect the UK to be pioneering for renewable energy, £6 billion are spent on fossil fuel projects abroad (BBC Newsnight, 2020). Moreover, when MP Michael Gove, Chancellor of the Duchy of Lancaster, is asked if the UK will stop financing these projects in developing countries, the latter answers negatively. Thus, the public questions how dedicated the UK really is to increasing its aforementioned 'climate ambition' (Gove, 2020).

Climate resilience means preparing for the worst. Paradoxically, lower income countries with less financial resources have done a better job at this. Alarmed by data that indicates rising sea levels, coastal countries in Southern Asia such as Thailand and Bangladesh have put forth mitigation plans to delay coastal damage and future costs.

Figure 2: Map showing areas at risk of flooding in Bangladesh in 2050 (Amos, 2019)



Areas at risk of flooding in Bangkok in 2050

Thailand has put forth a Mangrove for the Future Initiative (MFF) as it realises the benefits of mangrove plantations to prevent coastal erosion and promote an integrated approach for a balanced relation between the economy, the environment and society (Mangroves for the Future, 2011).

Likewise, with prolonged flooding seasons in rural Bangladesh, subsistence farmers have adapted to a changing climate and begun the cultivation of aquatic animals rather than traditional grains. Some have even gone as far as purposefully flooding their land to embrace this new reality (Forneck, Hassan, Noulekoun and Frey, 2015).



Figure 3: Map showing Bangladesh affected flooding areas

(Forneck, Hassan, Noulekoun and Frey, 2015)

This series of adaptation strategies shapes Asia's story. The cost of these preventive measures could be the beginning of Asia's dominance as it races behind the Western world to become the prevailing hub of global influence.

On the other hand, the United States, a global superpower, is confronted with annual fires on the West coast, and hurricanes on the East coast (Irfan and Resnick, 2018). Though this last point is also used by climate skeptics: data does not point to a rise in the *incidence* of hurricanes, therefore, hurricanes are not a consequence of anthropogenic climate change (Spencer, 2018). Yet, it is easy to construct a story through cherry-picked data.





Figure 4b: Legend for Figure 4a above (IPCC, 2017)



With the current United States' president denying the reality of climate change, no mitigation strategies at the national level have been undertaken. Houses burned down by Californian wildfires are rebuilt with the same materials year after year, city planners preferring cheaper wooden houses rather than the alternative: fire-proof infrastructure, only to rebuild in the most vulnerable neighborhoods the following year.

As large carbon emitters are not seen as leading the fight against climate change, many countries are hesitant to increase their role in the investment of clean technologies as they

are discouraged by the lack of collaboration. Although data can be misinterpreted to paint an entirely new story, data is irrefutable. The story of humankind is at numbers' mercy, and unless we adopt an integrated approach to society, the economy and the environment, our species' story will have a gruesome ending.

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