Design Manifesto

My first encounter with design was not in an advanced visualisation lab, but rather in a primary school art class, tasked with colouring a picture that depicted the quintessential nuclear family- a heterosexual, Caucasian couple with their children, standing proudly before a terraced house in a nice yard. The pre-assigned colours and numbers guided my hands to fill in their features with a light peachy tone labelled 'skin colour.' I did not see myself in this so-called standard. This was my first brush with the power of design—not just in what it shows, but in what it omits.

Intersectionality and Crafting Inclusive Narratives

This early lesson in exclusion was not just about the colours on a page; it underscored the deeper implications of design in our everyday lives. Design, to me, is never just about aesthetics; it is a profound tool for social discourse and change. It has the power to make the invisible visible and to give a voice to those who often go unheard (Dork et al., 2013). In the realm of data visualisations, this responsibility is magnified—each chart, each map, and each graph carries with it the weight of the narratives it chooses to tell or to silence.

Data visualisations are never just data visualisations. They embody the values and ideologies of those who create them. Although often viewed as objective presenters of information, these visual tools are deeply intertwined with histories and systems of oppression and empowerment (Dork et al., 2013; D'Ignazio and Klein, 2016). They can illuminate truths or obscure them; foster understanding or perpetuate ignorance; promote inclusivity or maintain inequality. They can be instruments of social justice or unwitting accomplices in systemic bias.

The push for the decolonisation of data visualisation is thus not only a technical challenge but a moral obligation. It demands that we dismantle and reconfigure the traditional frameworks that shape how information is conveyed and understood. Influenced by theories of Data Feminism and the principles of decolonisation including acknowledging past and ongoing injustices, my approach seeks to inspire change by highlighting narratives often overlooked. By acknowledging and

addressing the inherent biases in traditional visualisation techniques, we aim to create designs that reflect the world not just as it is, but as it should be. For this reason, my visualisations are not just displays of data but are critical commentaries on the data itself. Below I outline five core design principles I strictly adhere to in order to achieve the goals outlined above.

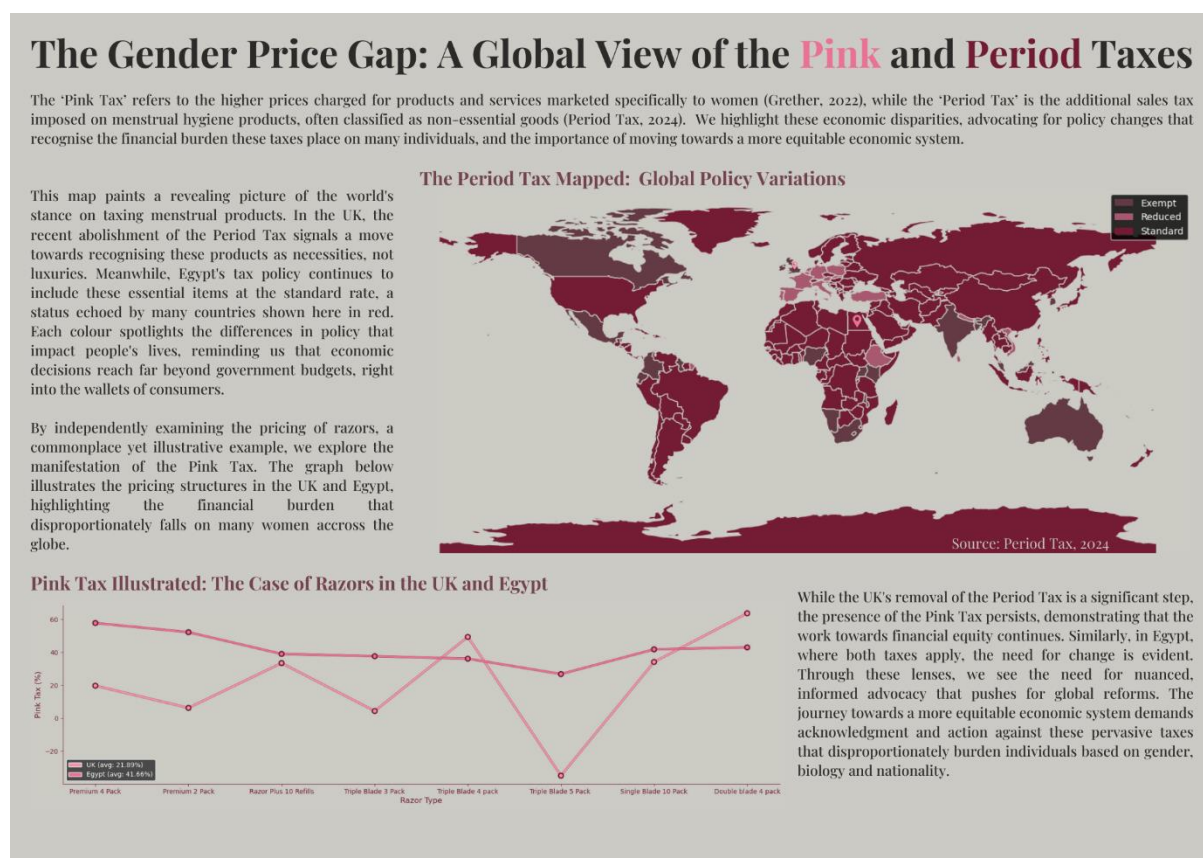# Core Design Principles: A Manifesto for Change

1. Logical Flow

Each visualisation should guide the viewer through a clear, logical progression of information, akin to storytelling, where each element builds upon the previous to forge a comprehensive understanding of the overall narrative. Recognising the importance of human sensory capabilities as detailed by Ware (2012), my designs emphasise a vertical flow of information to minimise the cost of visual searches. This approach aligns with the brain's feature map tuning, such as sensitivity to verticality, ensuring that viewers are easily guided through the visualisation.

In addition to using vertical progression, I consciously minimise reliance on the traditional left-to-right flow that predominates in English-speaking cultures. This design choice acknowledges that such horizontal sequencing is not universally intuitive and may reflect colonial legacies and, thus is not as inclusive (Burgen and Chan Lau, 2012). When designing I continuously replace the English text with other scripts using a right-to-left flow to ensure that the visualisations can easily be translated to increase their reach.

2. Engagement Through Narrative

Data must do more than inform; it must connect. By weaving narrative elements into visualisations, I strive to link abstract statistics to real-world contexts and diverse human experiences. For instance, as shown in Figure 1.0 employing everyday objects like razors to illustrate the impact of the pink tax adds depth to the narrative, grounding complex concepts in relatable experiences. This approach aims to not only keep viewers engaged but also to foster empathy and understanding among audiences.

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Figure 1.0: Data Visualisation Depicting the Gender Price Gap

The Gender Price Gap: A Global View of the Pink and Period Taxes

The 'Pink Tax' refers to the higher prices charged for products and services marketed specifically to women (Grether, 2022), while the 'Period Tax' is the additional sales tax imposed on menstrual hygiene products, often classified as non-essential goods (Period Tax, 2024). We highlight these economic disparities, advocating for policy changes that recognise the financial burden these taxes place on many individuals, and the importance of moving towards a more equitable economic system.

This map paints a revealing picture of the world's stance on taxing menstrual products. In the UK, the recent abolishment of the Period Tax signals a move towards recognising these products as necessities, not luxuries. Meanwhile, Egypt's tax policy continues to include these essential items at the standard rate, a status echoed by many countries shown here in red. Each colour spotlights the differences in policy that impact people's lives, reminding us that economic decisions reach far beyond government budgets, right into the wallets of consumers.

By independently examining the pricing of razors, a commonplace yet illustrative example, we explore the manifestation of the Pink Tax. The graph below illustrates the pricing structures in the UK and Egypt, highlighting the financial burden that disproportionately falls on many women across the globe.

The Period Tax Mapped: Global Policy Variations

Source: Period Tax, 2024

Pink Tax Illustrated: The Case of Razors in the UK and Egypt

While the UK's removal of the Period Tax is a significant step, the presence of the Pink Tax persists, demonstrating that the work towards financial equity continues. Similarly, in Egypt, where both taxes apply, the need for change is evident. Through these lenses, we see the need for nuanced, informed advocacy that pushes for global reforms. The journey towards a more equitable economic system demands acknowledgment and action against these pervasive taxes that disproportionately burden individuals based on gender, biology and nationality.

3. Inspire without Imposing, Empower without Overloading

The balance of information presentation is critical. Drawing on Few's (2017) guidance on data visualisation completeness, my designs prioritise presenting essential information without excess. For example, in Figure 2.0 the electoral outcomes visualisation by sex focuses solely on which party won each state, rather than detailing vote margins in different states across different maps, leaving viewers with a more memorable and vivid bigger picture instead. In my view, there is only so much information a single visualisation can effectively convey and make memorable. Such choices prevent information overload and keep the viewer's attention on the visualisation's central message.

Additionally, my work aims to inspire action and empower viewers by highlighting their power through action rather than inducing fear. While Figure 2.0's narrative might create a sense of urgency or anxiety due to the subject matter, the final lines of text viewers are left with is an empowering reminder of the power their vote carries.

This approach encourages informed participation without the negativity that fear-mongering might bring.

Figure 2.0: Infographic Encouraging People to Vote
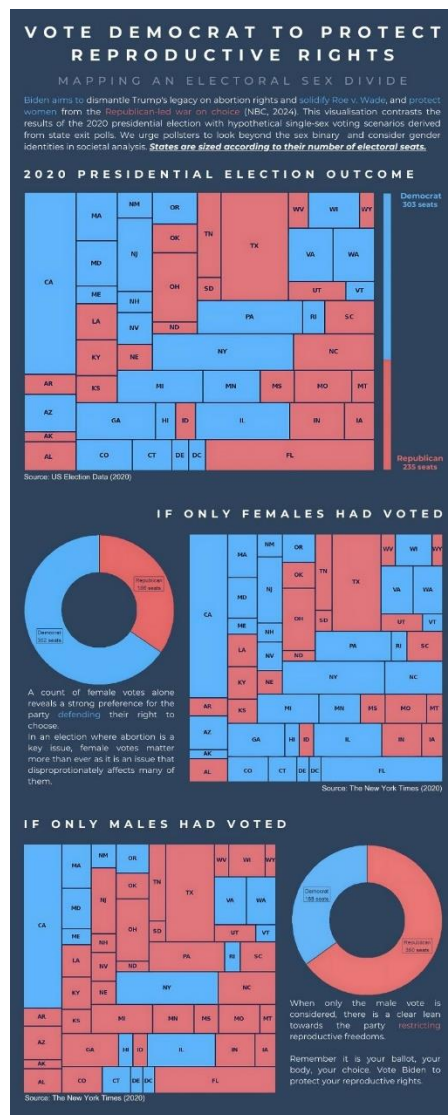
4. Aesthetic Functionality

Aesthetics in my work serve a functional purpose by enhancing data legibility and engagement. Adhering to Tufte's (1983) critique of chartjunk, I avoid non-data elements that do not add value. However, I also acknowledge Few and Edge's (2011) argument that sometimes more than minimal ink is needed to meaningfully convey a message.

For this reason, rather than including decorative elements I leverage text strategically to clarify and emphasise key insights, playing to my strength in using

words to bridge gaps in data literacy. This method helps make visualisations more accessible and understandable to a broader audience, ensuring that each element supports the narrative and enhances comprehension without overwhelming the viewer. It also overcomes the issue of having too much blank space which can make a visualisation look dull and forgettable.

5. Core Feature Spotlight

Effective communication in data visualisation hinges on the ability to direct viewer attention to crucial data points. Drawing on insights from Segel and Heer (2010), my approach involves using visual salience techniques such as colour, size, shape, and asymmetry to highlight the most critical aspects of the data. These elements are deliberately chosen to make key information stand out, ensuring it captures the viewer's attention immediately.

Examples can include employing colours and size to denote significance, and strategic asymmetries to break the visual uniformity and draw the eye. This strategic spotlighting helps communicate the story behind the data more effectively, fostering deeper engagement and comprehension.

Conclusion

Data visualisations are powerful tools that can shape both our knowledge and ignorance of the world. As designers, we wield significant influence over public discourse and perception. This manifesto is a commitment to design practices that strive not only to represent data but to do so in a way that is inclusive, enlightening, and empowering.

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