



Moving data

Best (and worst) practices to design data videos

SciCAR 2025 – Constanze Bayer, Dr Francesca Morini

In today's presentation:

1. About data videos
2. Genres
3. Structures and key elements
4. Practical tips
5. Practical bottlenecks
6. Goodbye!

About data videos

What is a data video?

A data video is a custom motion graphics that incorporate data visualizations of facts. They are a type of data-driven storytelling.

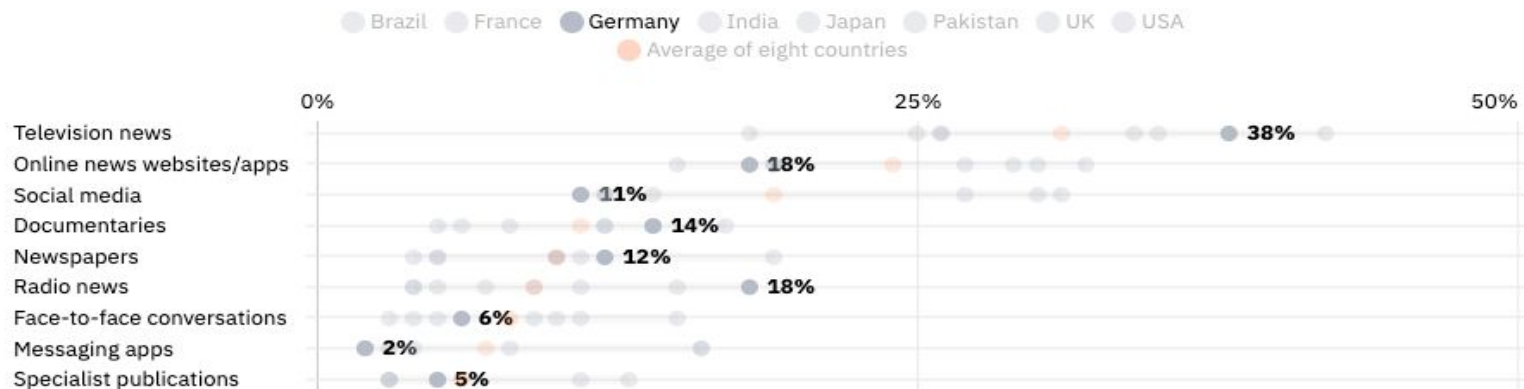
Why should we care about data videos?

- Social media is mostly video driven - static content might be a lost opportunity
- Technical requirements often already there
- Visibility for researches and interactive data stories
- Audience interested in video content

Why should we care about data videos?

Proportion that saw, read or heard news and information about climate change from each in the last week

On average across eight countries, television news and online news websites/apps are the most widely used sources of news and information about climate change.



Q5. Thinking specifically about the news or information about climate change you saw, read or heard within the last week. Where did you see, read or hear this? *Base: Total sample in each country = 1000.*

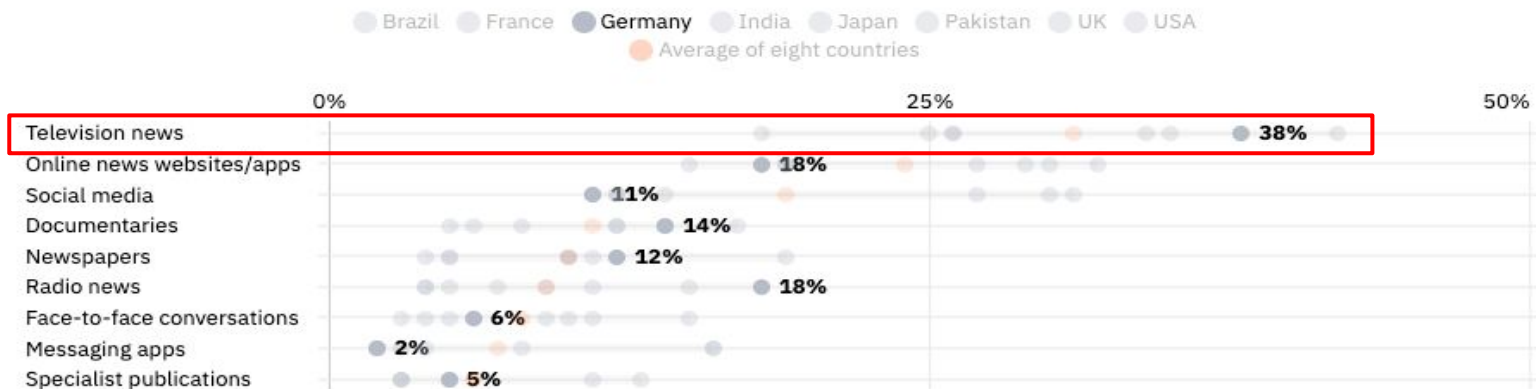
Source: 'Climate change and news audiences report 2024: Analysis of news use and attitudes in eight countries.'

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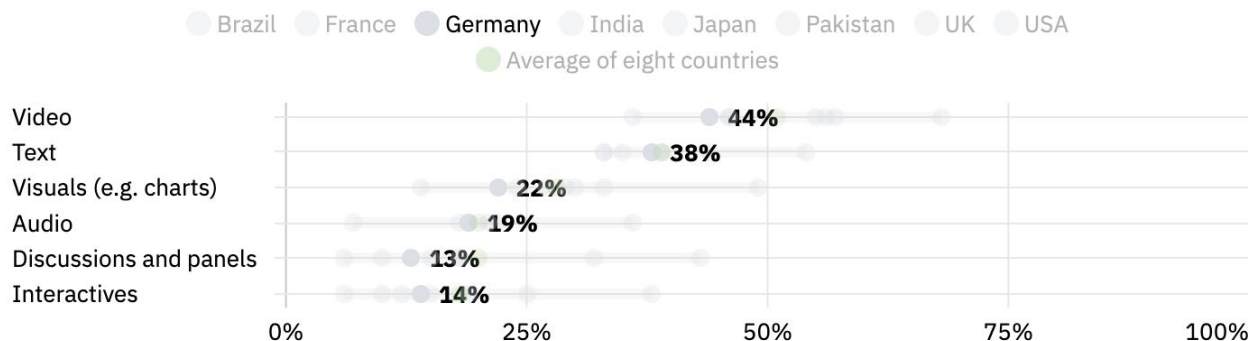
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Why should we care about data videos?

Proportion that say each is among their preferred ways of consuming news and information on climate change

On average across eight countries, people say that their preferred way of consuming news and information on climate change is through videos (e.g. news segments, documentaries). The UK is the only country where people say they prefer text.



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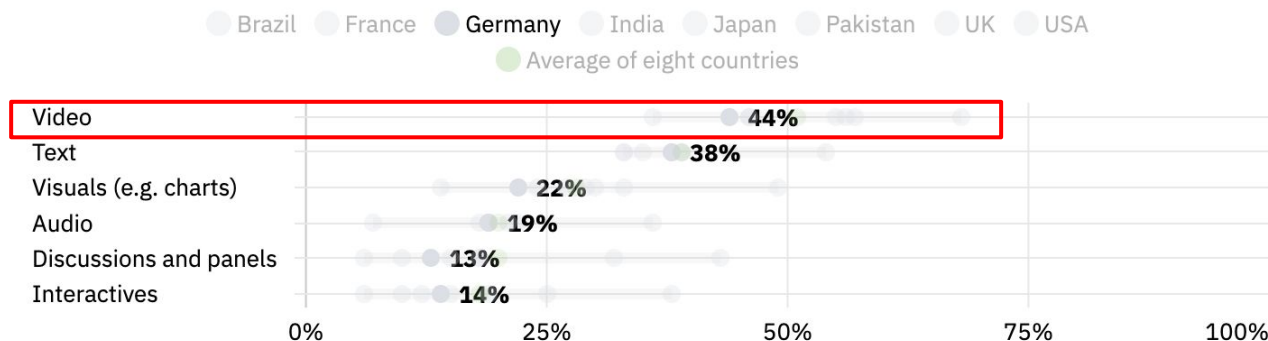
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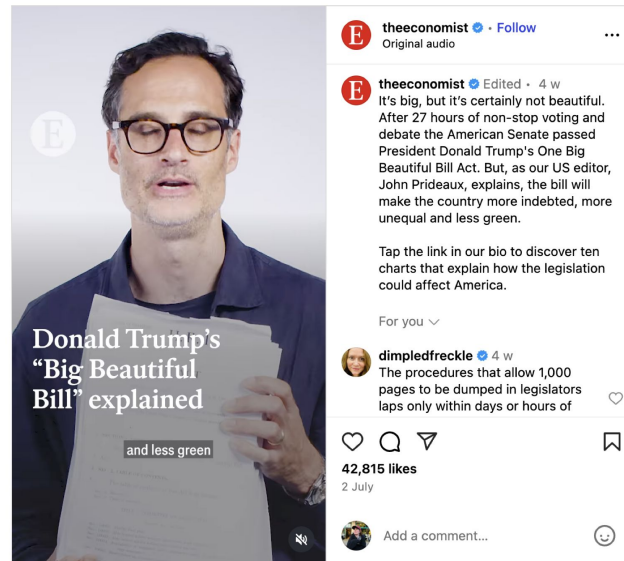
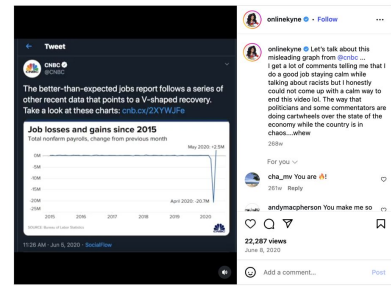
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Genres and formats

1. Genres and formats: Data commentary

Commentary about data: personal, often informal way to discuss data.
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- The person is in the frame and actively narrates the data
- 1 or 2 charts maximum are introduced
- Vertical format

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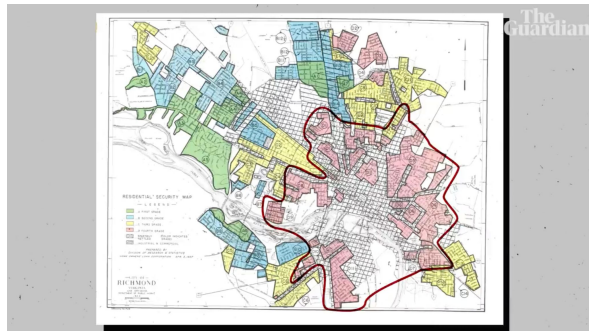
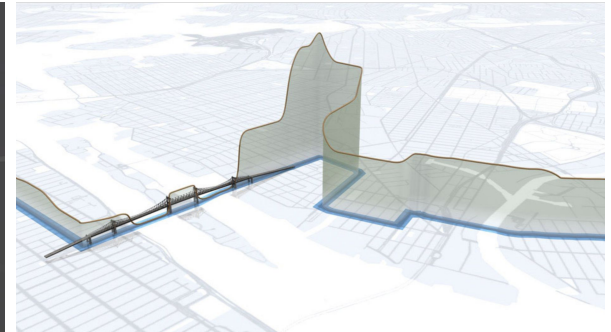
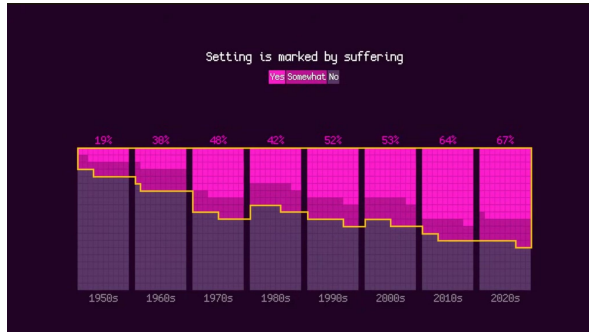
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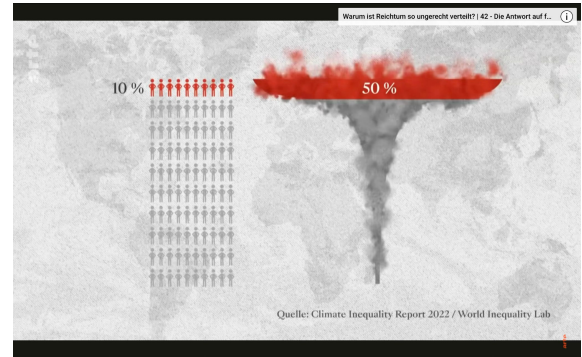
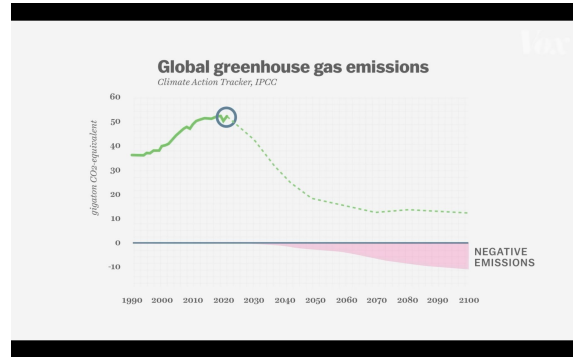
- Narration happens (mostly) off-screen
- More than one chart
- Charts are heavy with transitions and transformations
- The work on data is described as part of the narration
- Similar in web: Scrollytelling, advanced interactive

2. Genres and formats: Data essay



3. Genres and formats: Documentary

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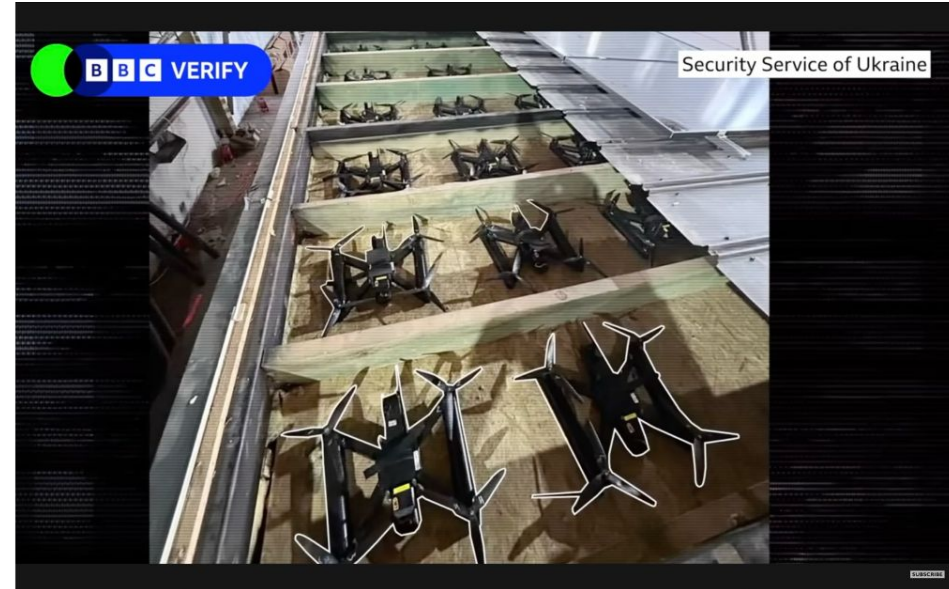
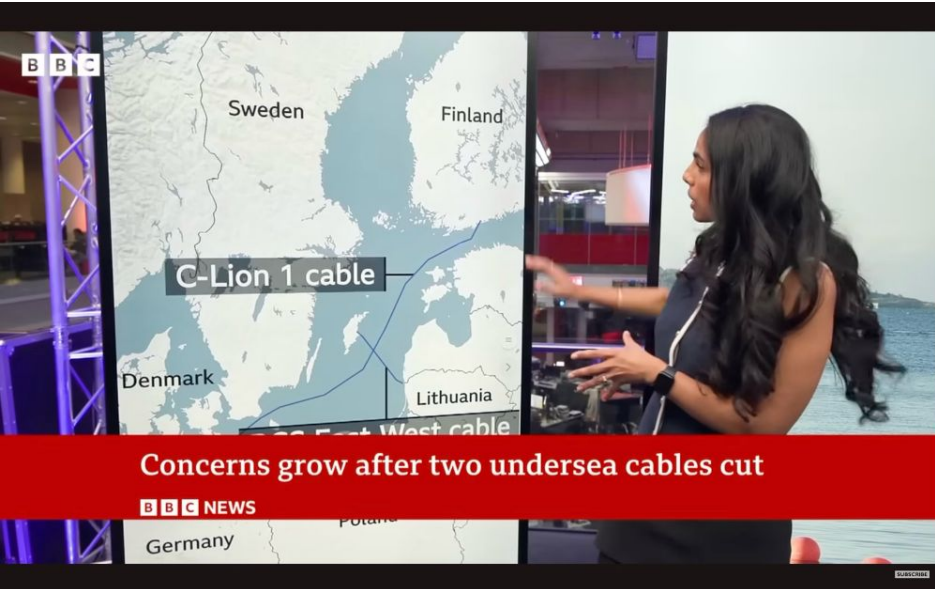
- Narration happens (mostly) off-screen
- More than one chart
- Charts are very sparse compared to other footage (video, images, interviews, etc.)
- Charts tend to be simple and big
- Similar in web: news report with charts included

3. Genres and formats: Documentary



4. Genres and formats: news segment

News **with** data: short segment for live TV, usually following up or contextualizing the anchor-person news beat.



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News **with** data: short segment for live TV, usually following up or contextualizing the anchor-person news beat.

Characteristics:

- Simple charts (often infographics or annotations on static images)
- Sound effects are not so present, transitions and changes are based on visual/narrative elements
- Similar in web: news feed, live ticker

4. Genres and formats: news segment



5. Genres and formats: Data physicalization

Data as narration: Data are represented in real-world objects



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Data as narration: Data are represented in real-world objects

Characteristics:

- Mainly used in social media, short videos, TV: consumer journalism
- Use of pictograms or symbols – the data itself is not seen/no classical data visualisation
- Often no additional narration needed
- Often humorous – no exact data needed to make the point
- Up for debate if you consider this a data video

5. Genres and formats: Data physicalisation



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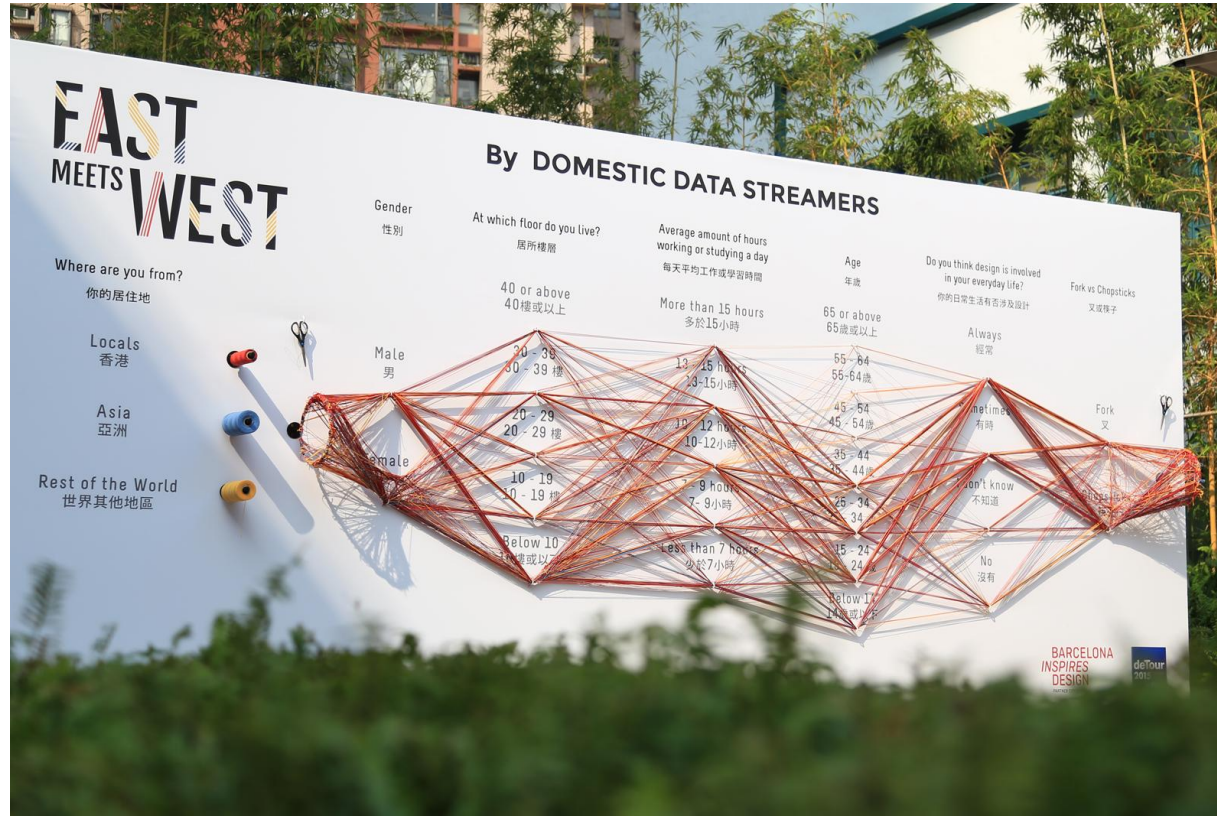
Arlene Birt, Marianne Rosolen

Death by chocolate



Death is like a box of chocolates – you never know what you get.

5. Genres and formats: Data physicalisation

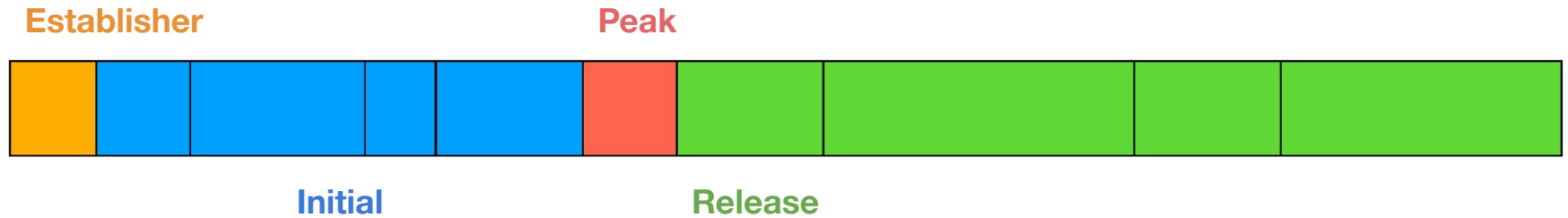


Genres and formats: Recap

1. **Data commentary** - Commentary about the data
2. **Data essay** - Narrative about the data
3. **Documentary** - Narrative with data
4. **News segment** - News with data
5. **Data physicalisation** - Data as narrative

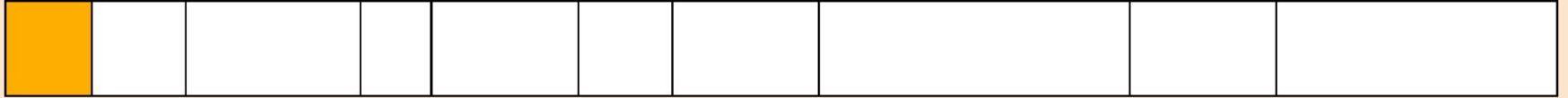
Structures and key elements

Narrative structure



Narrative structure

Establisher



Sequence that provides context to the narrative

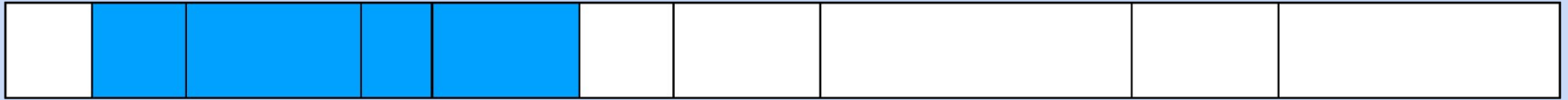


**The
Guardian**



Narrative structure

Sequence(s) that set the action in motion



Initial

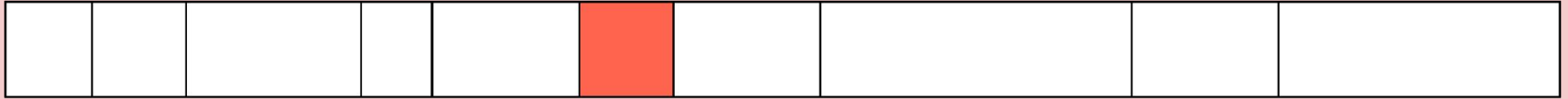


Hot

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Narrative structure

Peak



Usually one sequence where the most important thing happens

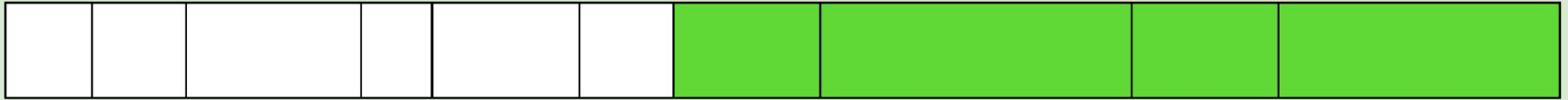


Hot

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Narrative structure

Show the aftermath of the peak



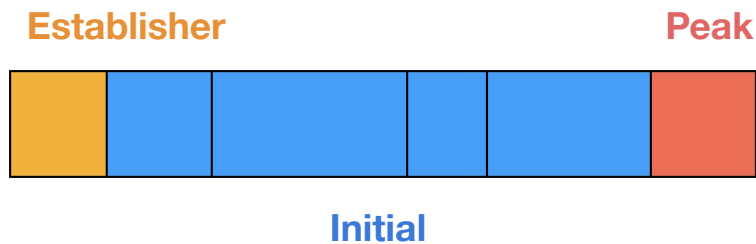
Release



Hot

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Possible variations



A narration without release leave the viewer with questions.

Practical tips





Practical tips - general

- **Clear storytelling**
- **Key messages**
- **Strong beginnings** - especially for social
- Link to an scrollytelling/article/news piece if available - but make sure the style is recognisable

Practical tips - from TV making

Additional dimensions: movement, time and sound

- Build your graph in the video sequence (time, leading focus, understanding)
- Use attention cues – colour, pulsing, audio (sound)





Practical tips - from TV making

Mind the focus

- Don't let your audience read and listen at the same time (different texts!)
- Avoid Text (Narration) Image Discrepancy
- Repetition is your friend



BBC FOUR

BBC FOUR

Practical tips - from TV making

“Moving images”

- Move your graph – or your anchor
- Similar to scrollytelling
- Anticipate findings - what should people pay attention to?





Practical tips - from web

- **Clear visual language** – in terms of chart types, color, fonts etc
- **Tell them what to see and understand** – lead focus – even simpler because you can literally stuck their nose on what you want them to see
- Leading the view with **font size&colour - and camera movements**







Practical bottlenecks

Practical bottlenecks

- Expectation from audience
- Gap between data knowledge and animation knowledge - makes communication challenging
 - Need for a common language
- Missing non-technical tools
- Style guides/ traditional structure for certain (TV) formats
- Often an afterthought

Last slide - you made it!

- Use data videos, they are cool!
- Learn from your experience - if that might be web/TV/social content!
- Use the best of both worlds!

Thank you

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