A Survey of Data Journalism During COVID19

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The past 10 weeks:

- Explored what types of data journalism exist
- Explored what makes “good” data journalism
- Studied data journalism in the scope of COVID19
- Attended Northwestern’s Computation+Journalism Symposium
- Read about the moral and ethical dilemmas journalists face

What is Data Journalism?

When you combine the ability to tell a compelling story with the sheer scale and range of digital information now available.

Data journalism can help a journalist tell a complex story through engaging infographics, it can help explain how a story relates to an individual with interactive models, and it can validate narratives with supporting quantitative evidence.

Data can be the source of data journalism, or it can be the tool with which the story is told—or it can be both.

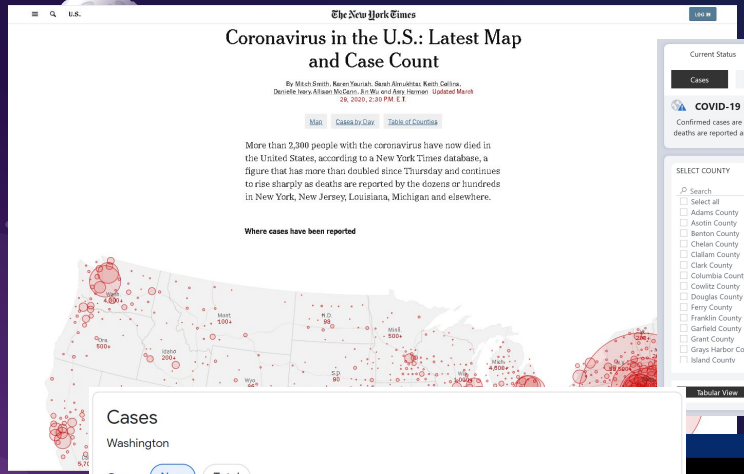
The role of a data journalist

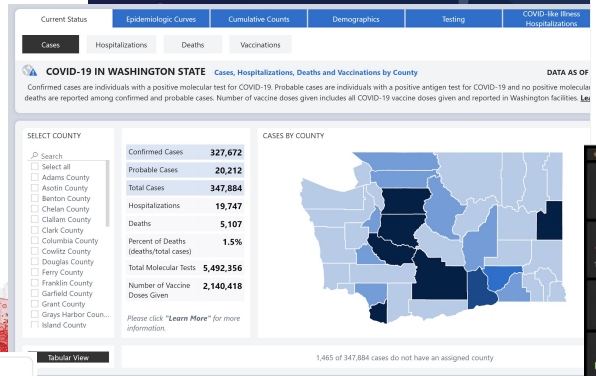
We are moving towards a world where data is integrated into media, more so than just quoting and linking to data sources in an article. Charts, interactive models, and statistical language are becoming more common in modern communication.

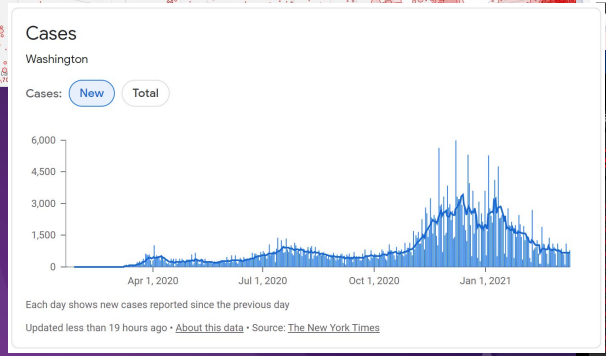
By enabling any user or reader to process big data in a way that is informative and relevant to them, and by allowing individuals to challenge assumptions and approach problems in an evidence-based manner, data journalism “effectively represents the mass democratization of resources, tools, techniques, and methodologies that were previously used by specialists; whether investigative reporters, social scientists, statisticians, analysts, or other experts... Data journalists have an important role in helping to lower the barriers to understanding and delving into data, and increasing the data literacy of their readers on a mass scale." - *Liliana Bounegru, European Journalism Centre*

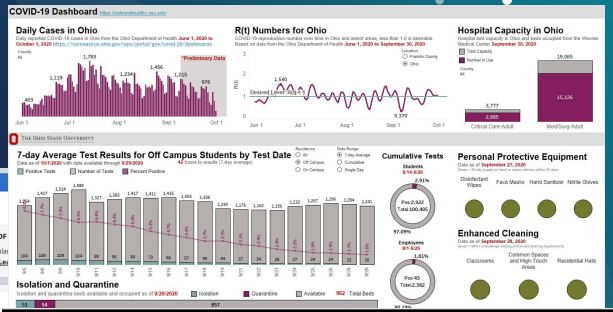
Data Journalism and COVID19

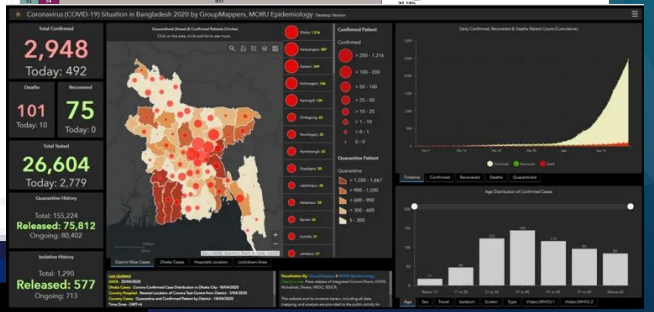
DASHBOARDS

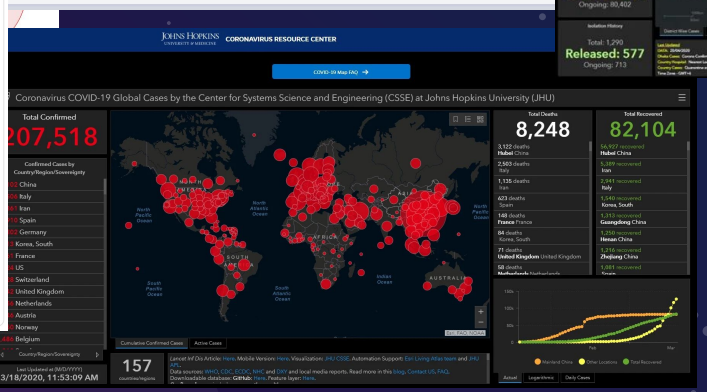


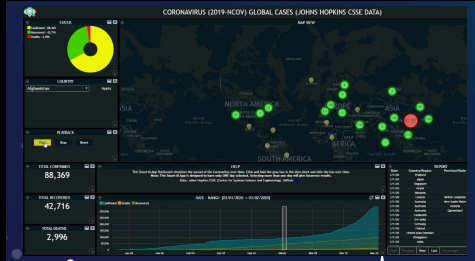












So many! So how do you choose, how do you know what visualizations are best?

From speaking with friends, teachers, and essential workers, people are using national and global dashboards at increasingly less frequency, but use local dashboards to make decisions about whether or not it is safe to step outside in their area to grocery shop, ride a bus, or visit a store.

“Today's dashboard visualizations tend to operate at much larger scales, and are far more complex and frequently updated. But in some ways they are perhaps less useful to ordinary people...For example, there are data lags of up to 10 days in digital dashboards that are difficult for users to wrap their heads around.

Additionally, public health dashboards, like our many covid-19 dashboards, are unusual in the history of dashboards in that they share information but not in a way that allows ordinary people to take action." - *Jacqueline Wernimont, The Washington Post*

A NARRATIVE APPROACH

Arguably, the most effective and impactful forms of data journalism (in terms of individual action and relevance) during the pandemic are not the dashboards and unlimited access to public health information, but more local stories.

Details about action items individuals can take give readers a better sense of agency.

This Includes...

- Local news channels discussing local COVID numbers
- Public Health officials giving data-informed advice about safety precautions
- Stories about struggling businesses or other organizations community members can donate to or help in some way.
- Microcovid risk analysis tool

Microcovid tool

- Activity Risk: The chance that an activity will transmit COVID to you, assuming the other person currently has COVID.
  - Dependent variables: duration, masks, location, distance, volume
- Person Risk: the chance that the other person currently has COVID.
  - Assumes the person is “average” for their region. The chance your friend has COVID is the chance that anyone in your geographic area has COVID.
    - New Infections Last Week = Reported Cases × Underreporting Factor × Delay Factor
    - Person Risk = New Infections Last Week / Population In Millions
- Cost = Activity Risk × Person Risk for one person × Number of people

Calculate the approximate COVID risk of an activity or relationship

Step 1: Enter your location

Country or US State:

Washington ×

County:

King ×

Override location-based data

Details

Step 2: Describe the scenario

Start with a premade scenario or build your own:

What do you want to know?

How risky is this gathering/activity/errand?

If one person is infected, there is a baseline **9% chance of transmission per hour**.

How likely is it someone is infected? It depends on your location and the choices of people around you. This calculator will also walk you through **choices you can make** to change the baseline risk (backed by research!)

Nearby people

People: How many people are usually within 15 feet (5 meters) of you, at any given time?

1

Distance: How close are these nearby people, on average?

6+ feet / 2+ meters apart [1/2 the risk]

Duration: How long is the activity, in minutes? (For a repeated activity: minutes per week?)

30

Risk Profile: What is their risk profile?

In a closed pod of 4 people [50 microCOVIDs]

Very Low Risk

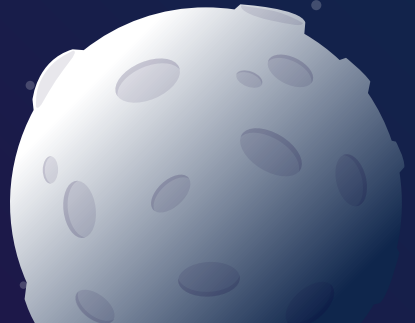
0.1% of your weekly risk budget

~0.2 microCOVIDs each time (probably between: 0.08 to 0.7)

Advanced method: **217** Person Risk

- *Remember, here you're calculating **Rosie's own** risk of getting COVID from **her** activities, in microCOVIDs, which you can then use in calculating **your** risk of getting COVID from her.*
- Each walk starts with a 6% Activity Risk (for one-time contact per hour) times 1.5 hours, and then gets a decrease of 2x for Rosie's mask, 4x for her friend's mask, and 20x for being outdoors. Since you she at regular distance on these walks (3 feet), there is no additional reduction for distance. We'll treat the friends as average residents (using the 5106 Person Risk from the Basic Method above). Five walks in the past ten days adds up to `0.06/hr × 1.5hr × 5 × 5106 × (1/2) × (1/4) × (1/20) = 14` microCOVIDs.
- Rosie also goes to the grocery store twice a week. We estimate this as spending 2 hours per week, about six feet away (2x) from 5 random people at a time (each with 5106 Person Risk using the Basic Method), wearing a high-quality mask (2x). Let's assume the other people in the store are not wearing particularly good masks (no decrease), but that people are not talking (5x decrease). Rosie's grocery shopping adds up to `5106 × 0.06/hr × 2hr × 5 × (1/2) × (1/2) × (1/5) = 153` microCOVIDs.
- So Rosie's errands plus her walks gives her a risk of `153 + 14 = 167` microCOVIDs (or 167-in-a-million chance of catching COVID).
- If Rosie's roommate does the same things (two hours of grocery shopping and five walks with friends per week), then Rosie's roommate's risk of getting COVID, in microCOVIDs, *due to sources other than Rosie*, is the same: 167. Multiply this by the 30% Activity Risk of being a roommate and you learn that Rosie's roommate poses a risk to Rosie of `0.30 × 167 = 50` microCOVIDs.[1]
- So the total COVID risk for Rosie, based on her behaviors, is `153 + 14 + 50 = 217` microCOVIDs. Now you can use this number as the "Person Risk" when you're calculating your own chance of getting COVID from Rosie.

Covid19 and the Burden of the Journalist



An emotional toll

It is traumatic to report on tragedy during times of extreme loss with no end in sight

- Journalists who have reported on assignment during wars can cope by remembering an end date. But COVID has no defined end date
- Photographers and investigative journalists have to witness loss and frailty in their communities
- PTSD, anxiety, and depression

Trust in the media

- Fewer Americans than ever before trust mainstream media: 59% of Americans said they agree with this statement: That “most news organizations are more concerned with supporting an ideology or political position than with informing the public."

This makes it difficult for “good” data journalists to effectively communicate to the masses. Today, they are tackling questions of how to earn trust again.

- One such solution is to engage in the community more, to report as a citizen or participant rather than an outsider looking in. This can earn the trust of readers.

THANK YOU!