

# Reconstructing Intimate Contexts through Data Donation

## A Case Study in Menstrual Tracking Technologies

Alejandra Gómez Ortega, Jacky Bourgeois, Gerd Kortuem

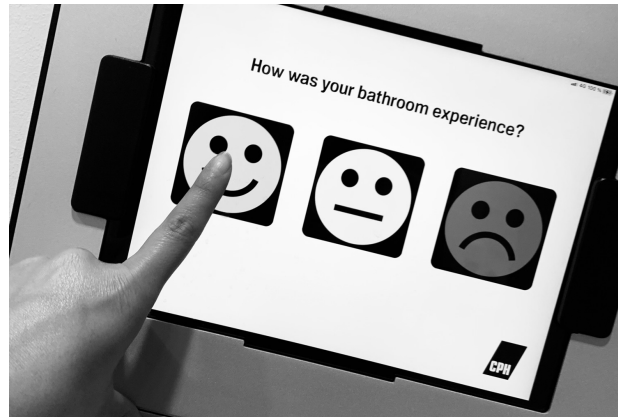


# Behavioral Data

Data that captures people's behavior



Sensor Data



Self-Report Data



Digital Trace Data

# Behavioral Data: Context Matters



Source: van Kollenburg and Bogers. 2019. Data-enabled design: a situated design approach that uses data as creative material when designing for intelligent ecosystems.

1. Data collection through sensorized **probes and prototypes**.
2. People **actively** reconstruct the context of the data.

Gorkovenko, et al. 2020. Exploring The Future of Data-Driven Product Design.  
Lu, et al. 2021. The Impact of Data on the Role of Designers and their Process.

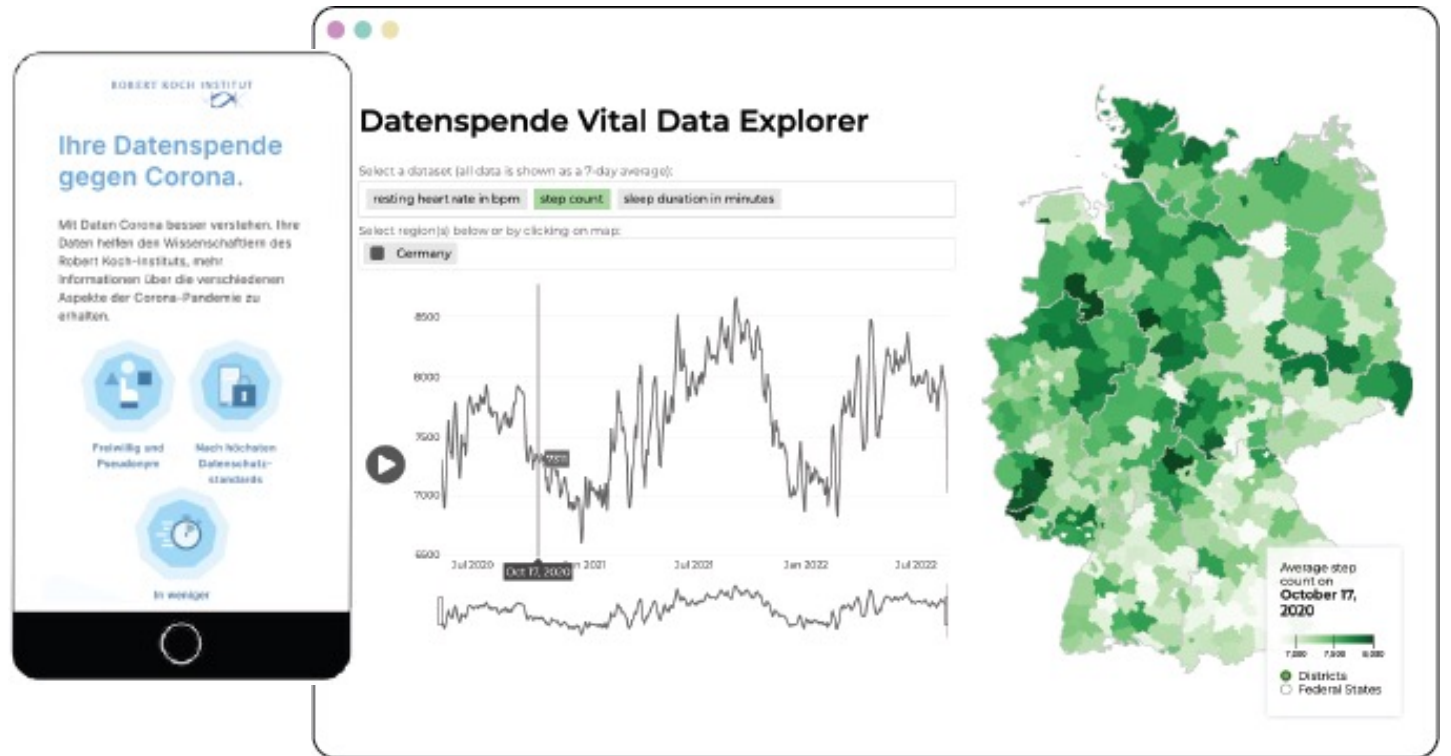
Lu, et al. 2021. The Impact of Data on the Role of Designers and their Process.





# Data Donation

The opportunity to **reuse** behavioral data.



Source: Corona-Datenspende (2022), Robert Koch-Institut.

# Data Donation

The opportunity to **reuse**  
behavioral data and **reconstruct its context?**

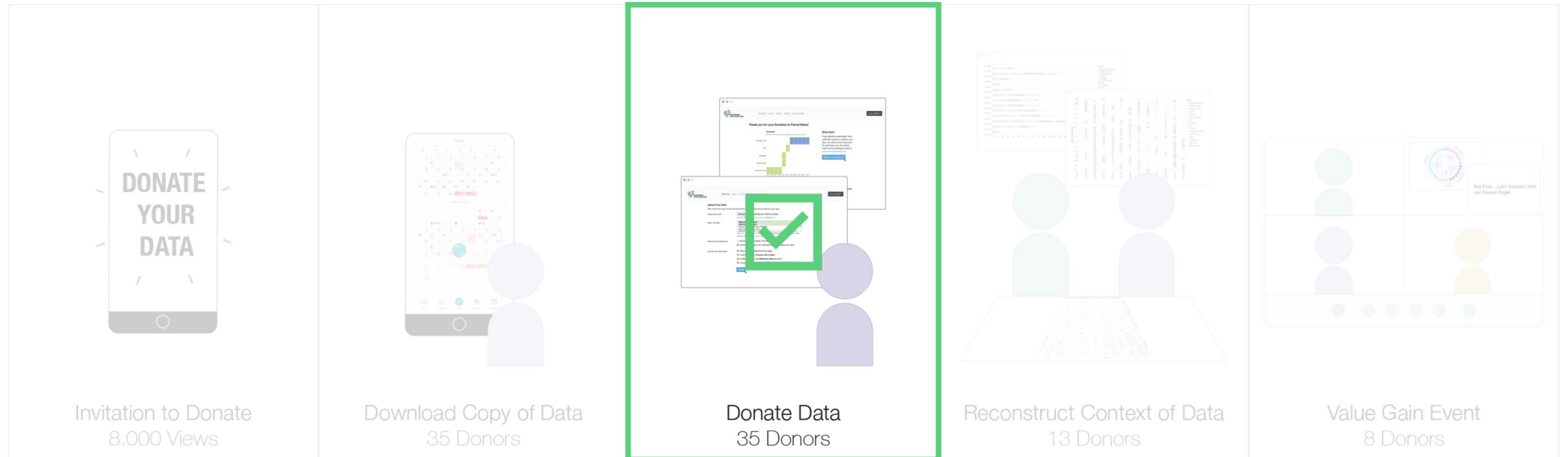
# Context: Menstrual Tracking Technologies



Source: Screenshot of Menstrual Tracking Apps on Google Play, November 2021

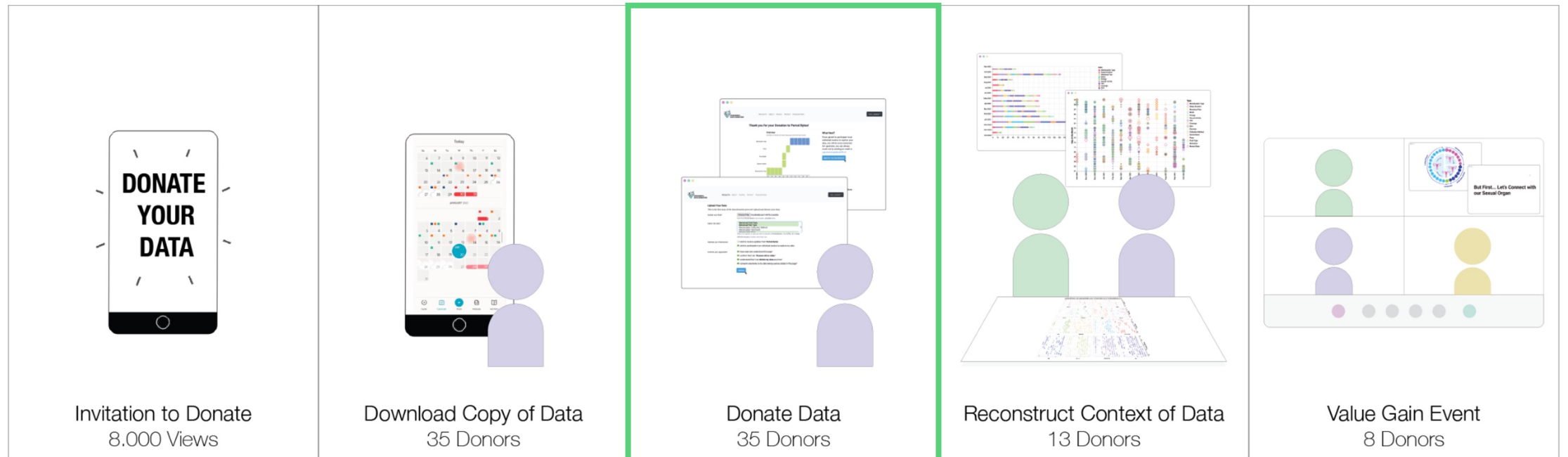
# Data Donation: Informed Consent

## Recent Approaches

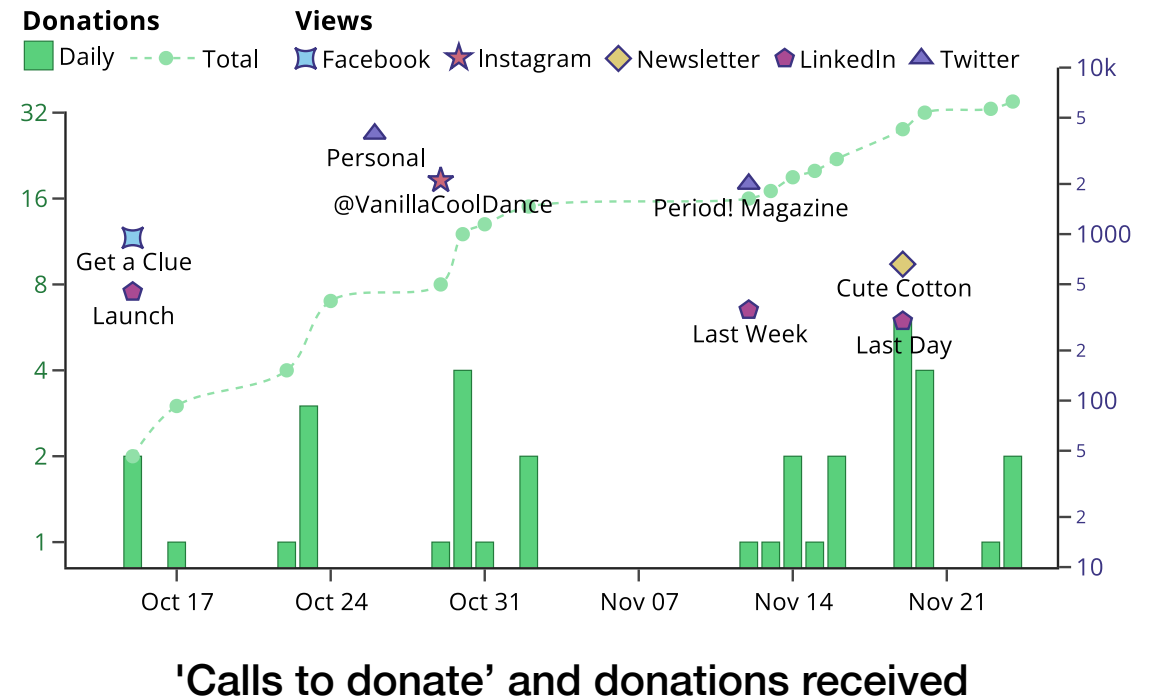
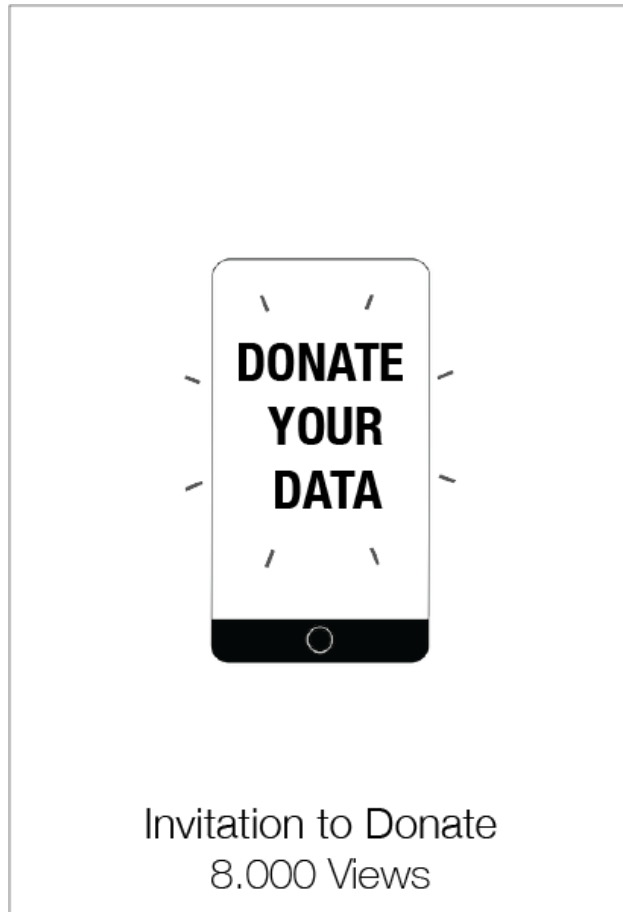




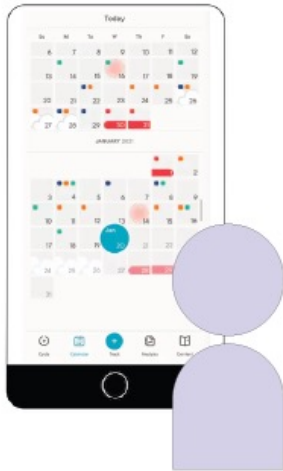
# Data Donation: Journey



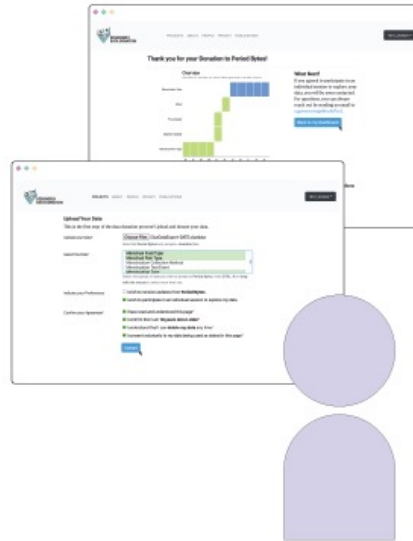
# Invitation to Donate



# Download and Donate Data



Download Copy of Data  
35 Donors



Donate Data  
35 Donors

- **Support** in **obtaining a copy** of the data
- **Inform** about **research objectives** and intended **ways to use the data**
- **Enable** donors to **decide what** to donate and **how** to participate

# Reconstruct Context of Data



- Interviews **prompted by data** visualizations
- Questions on:
  - Menstrual tracking
  - Data donation journey

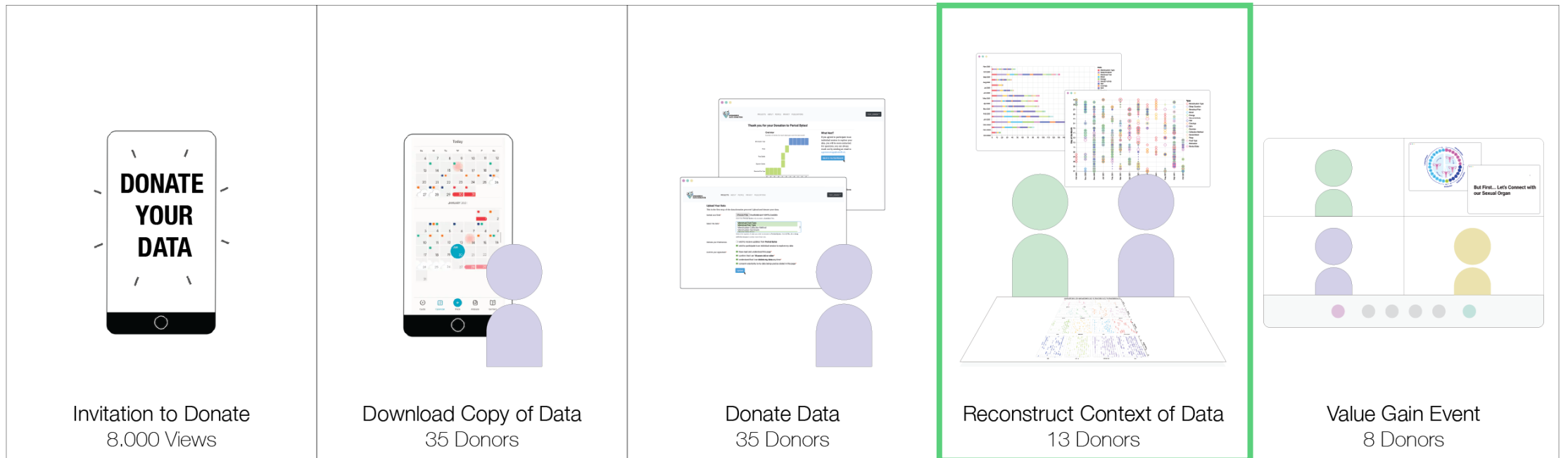


# Value Gain Event

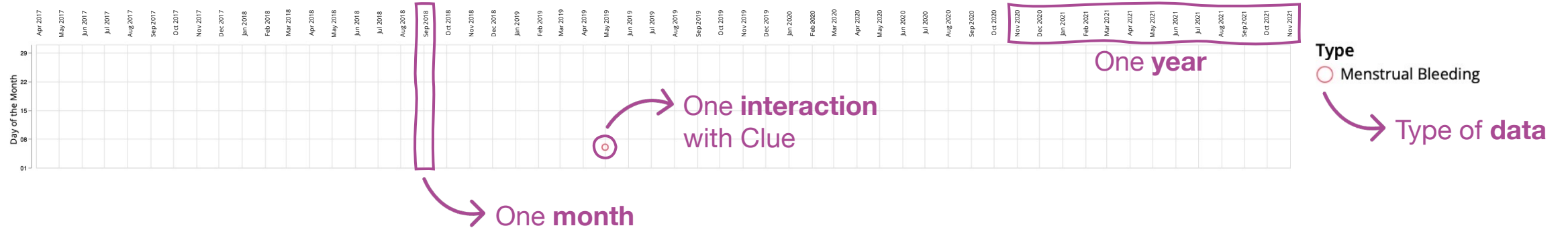


Online space with an **expert** in **reproductive health** and **sexuality**.

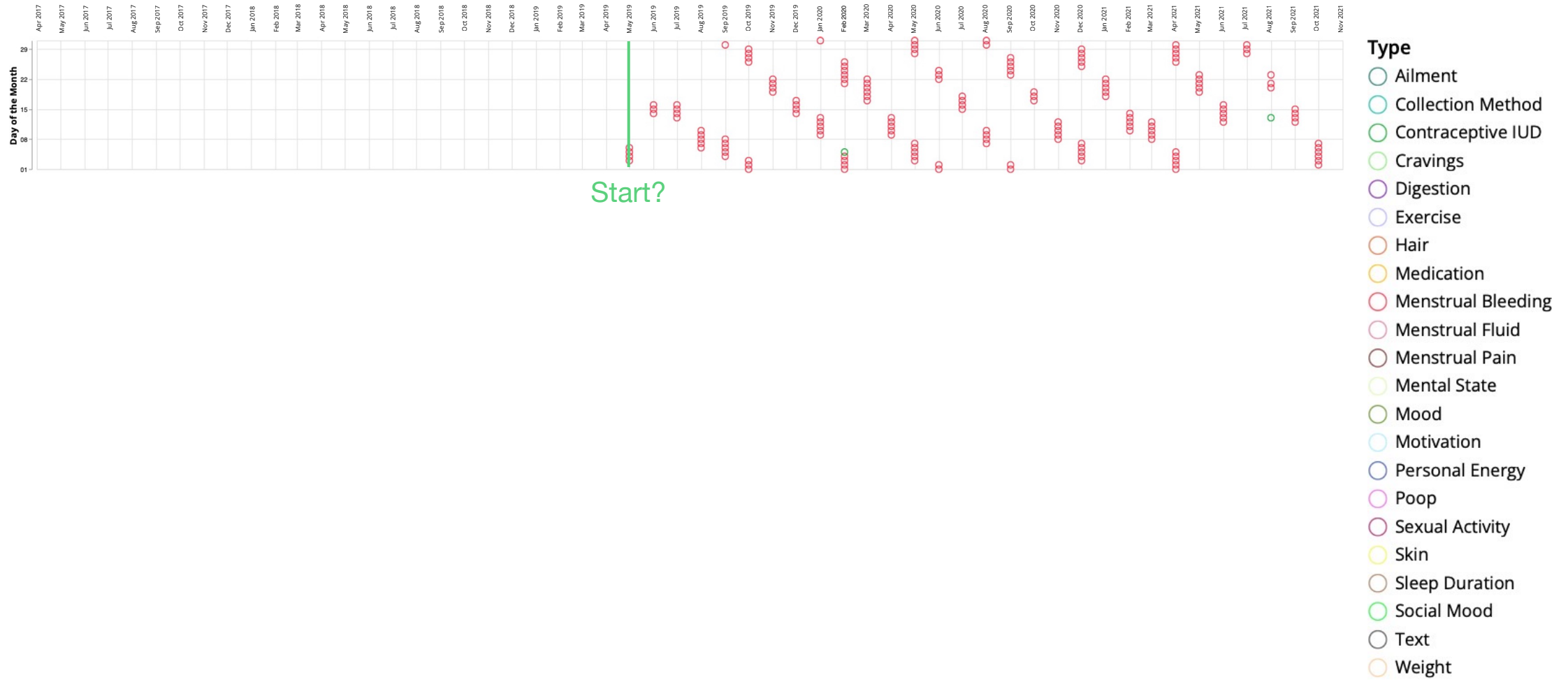
# Zooming in: Reconstructing the Context



# Reconstructing the Context of Data



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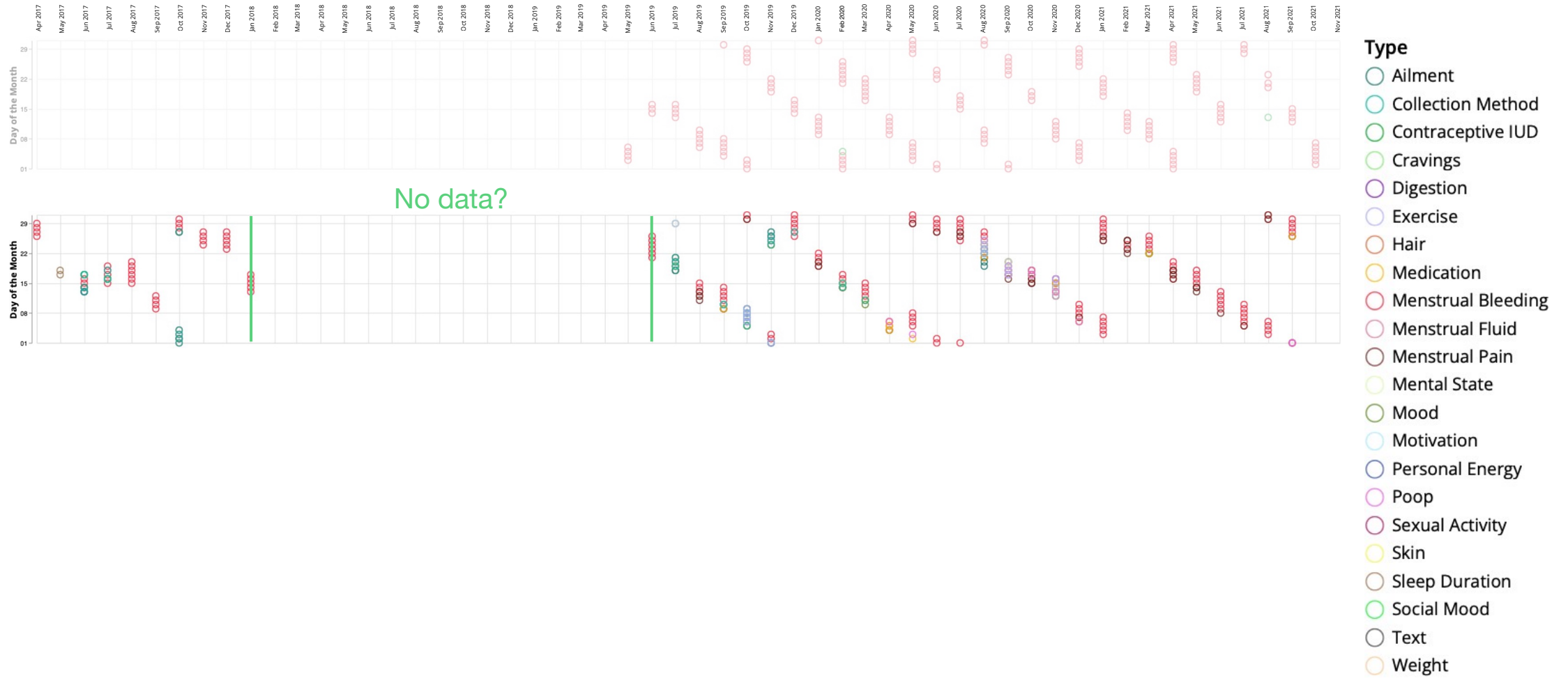




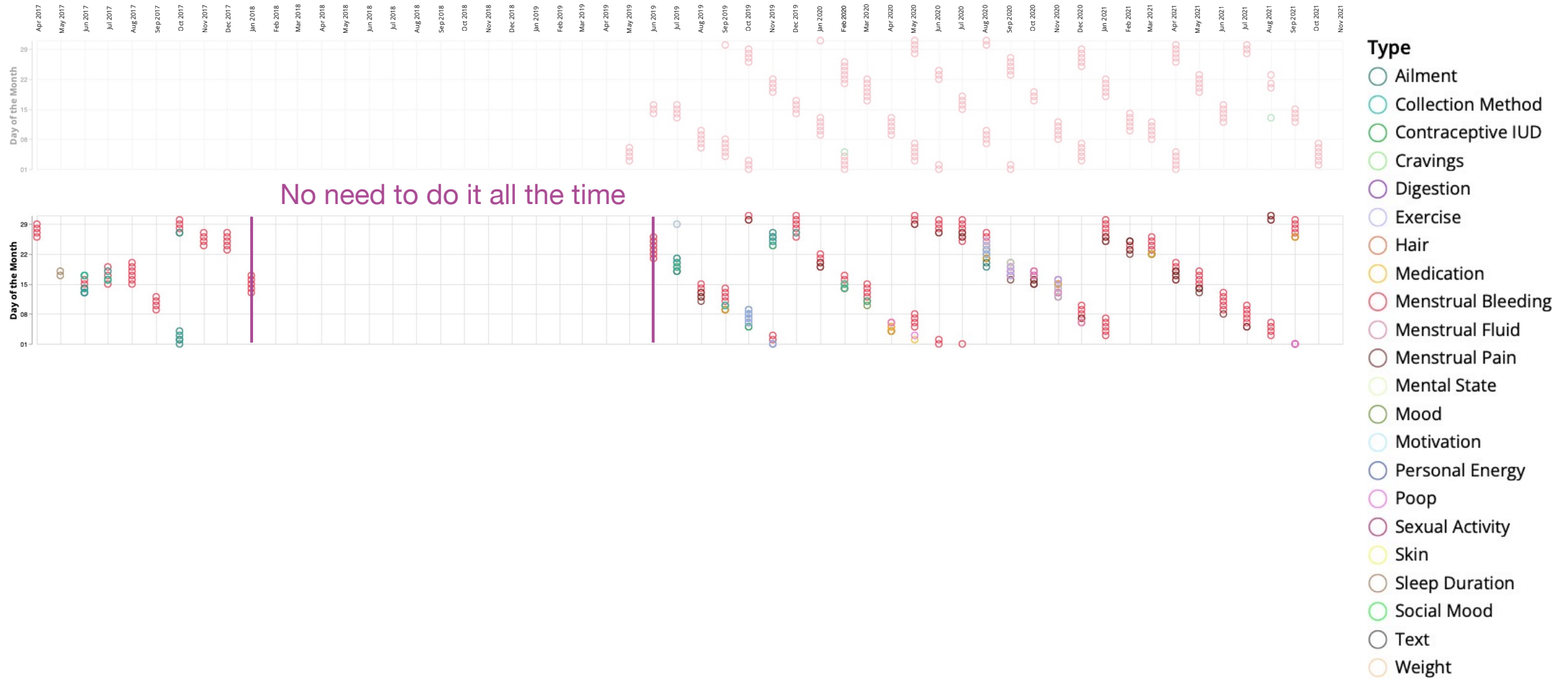
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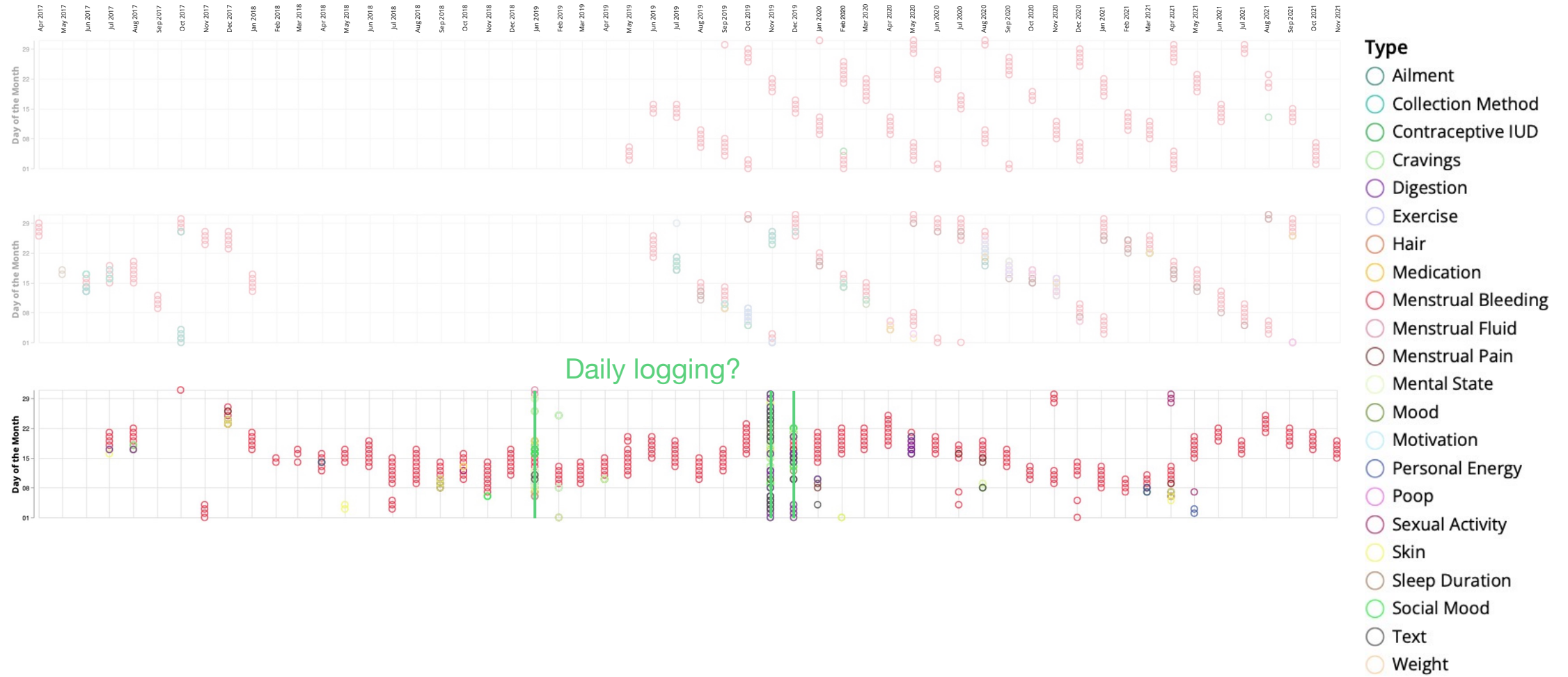
# Reconstructing the Context of Data



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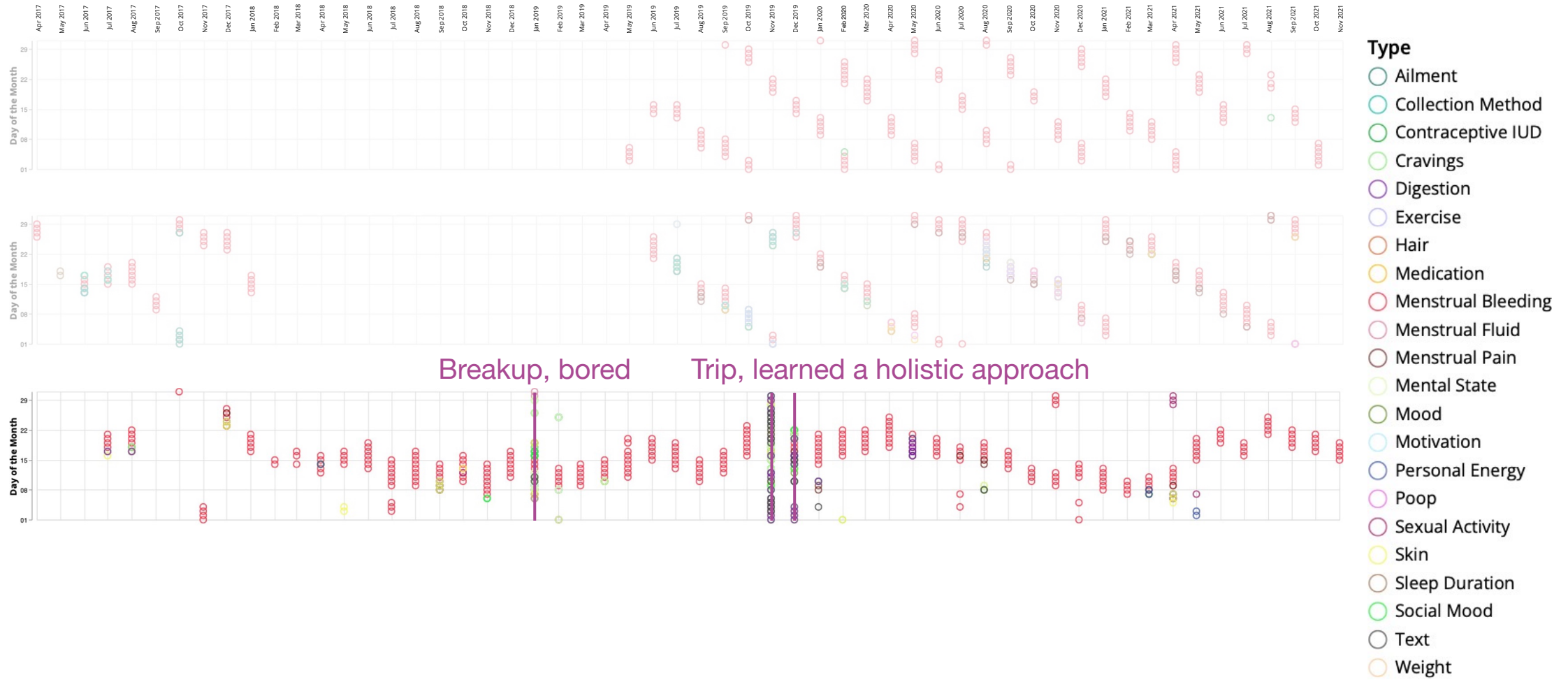


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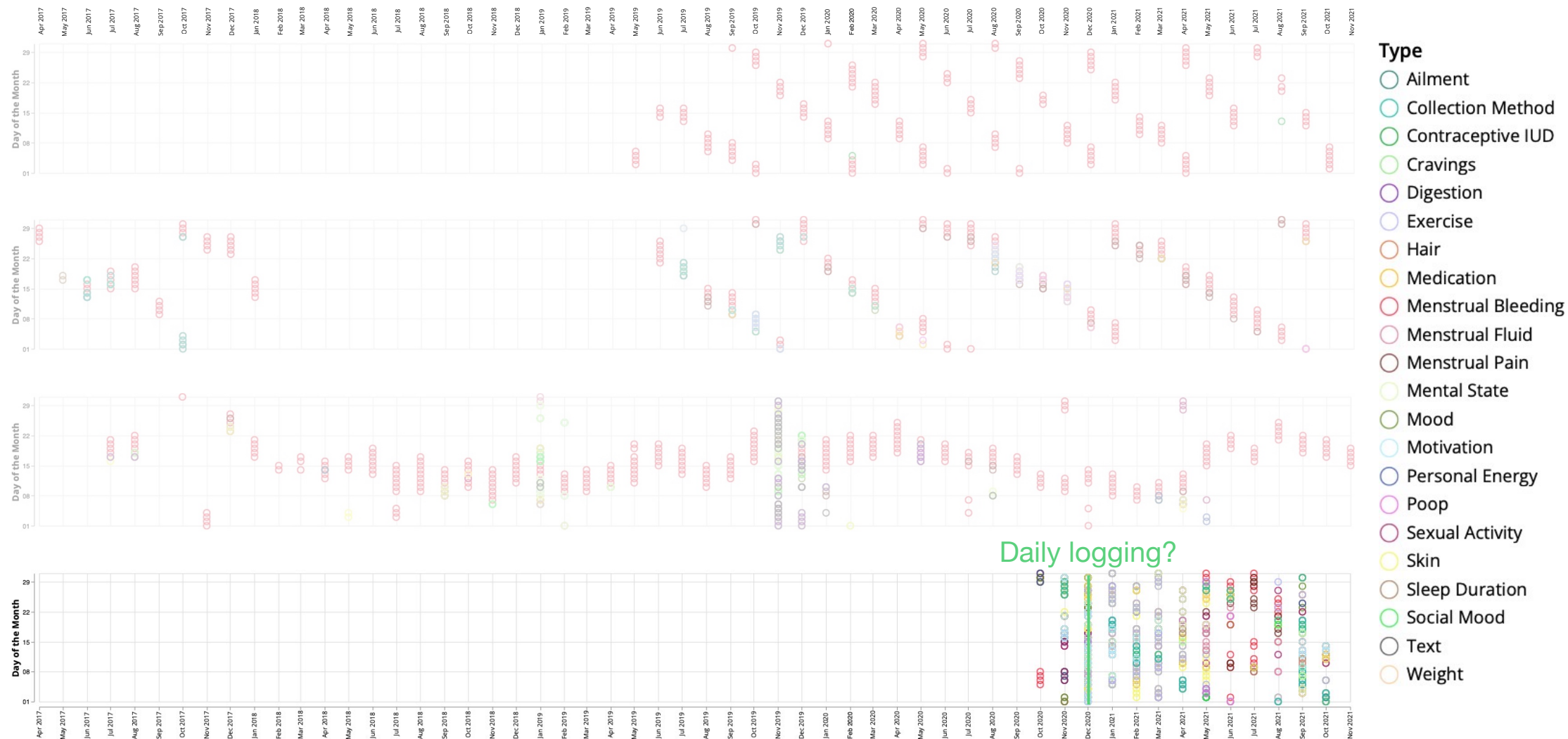




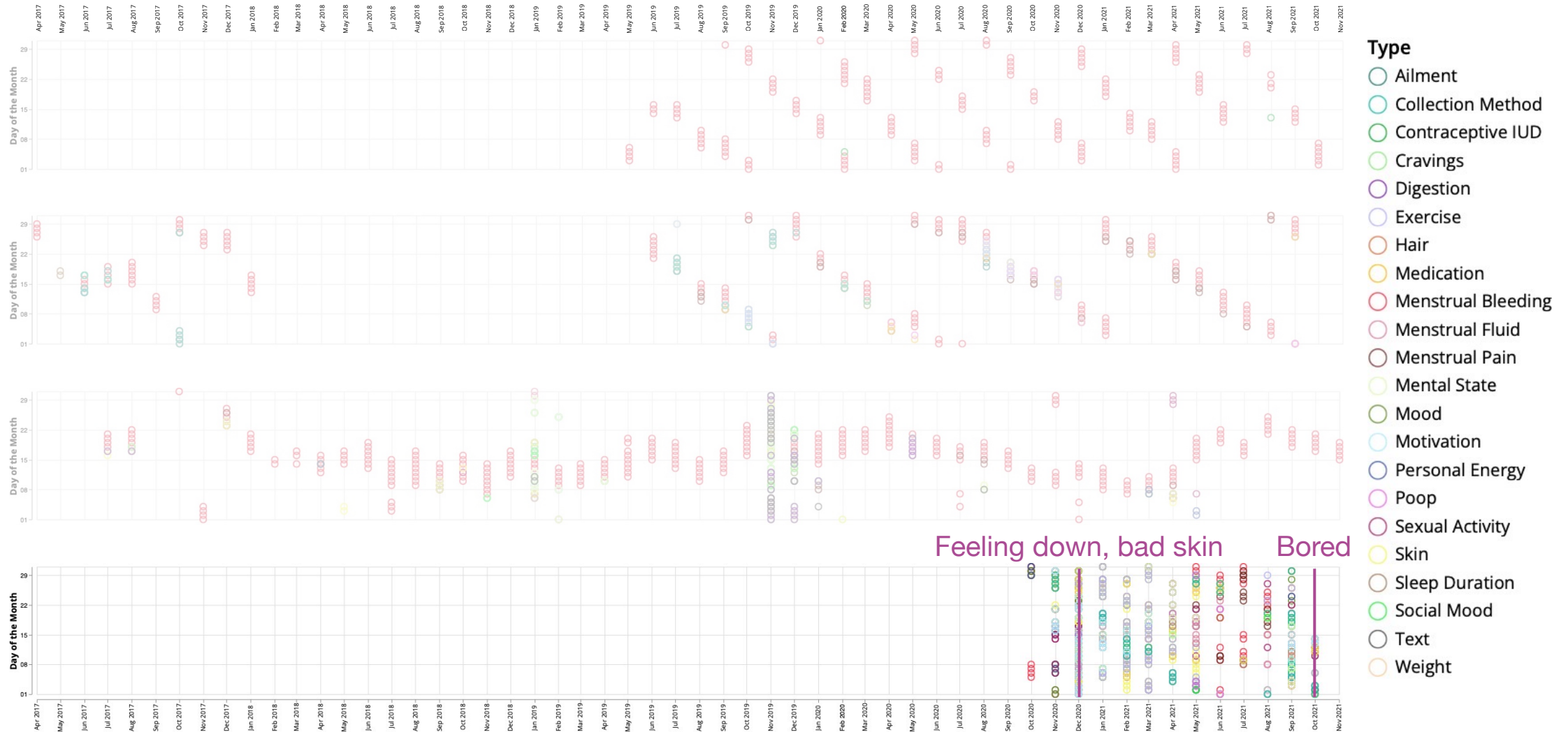
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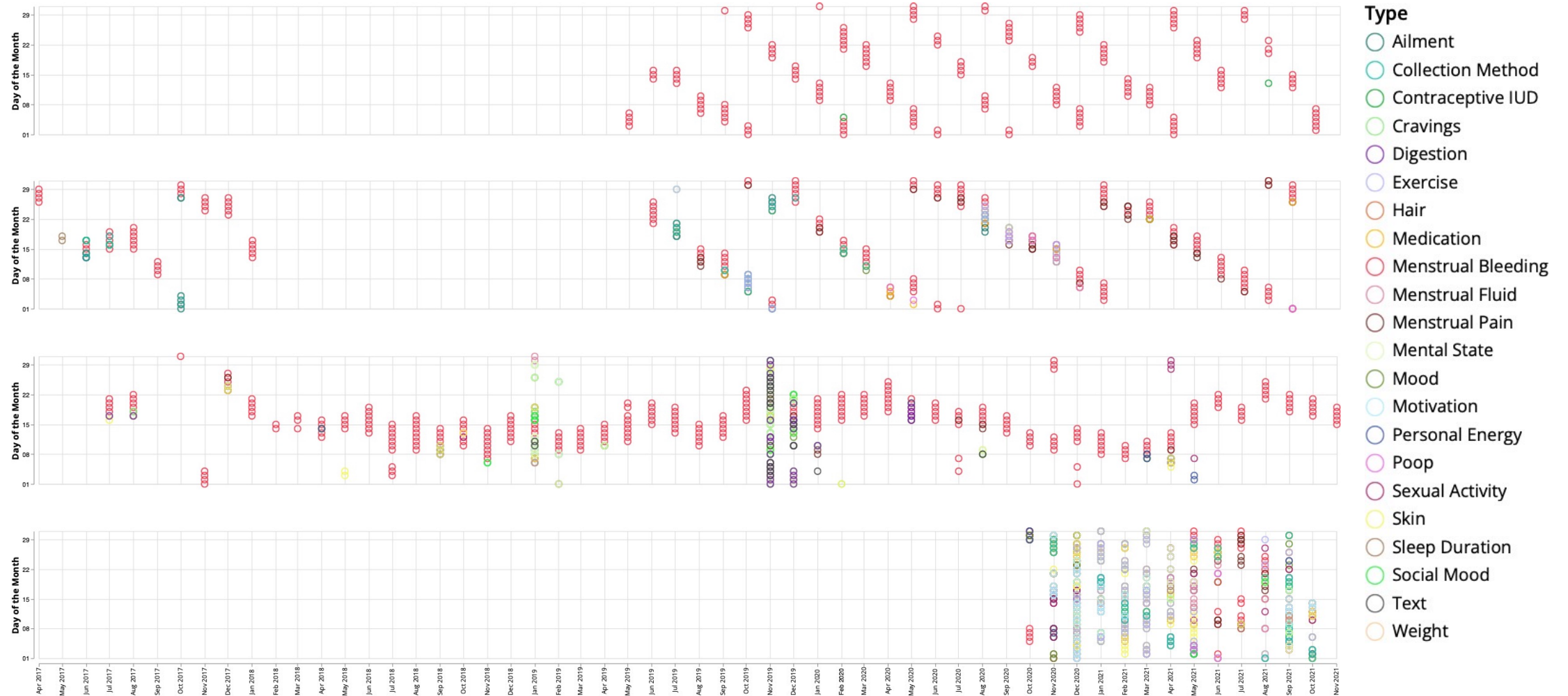
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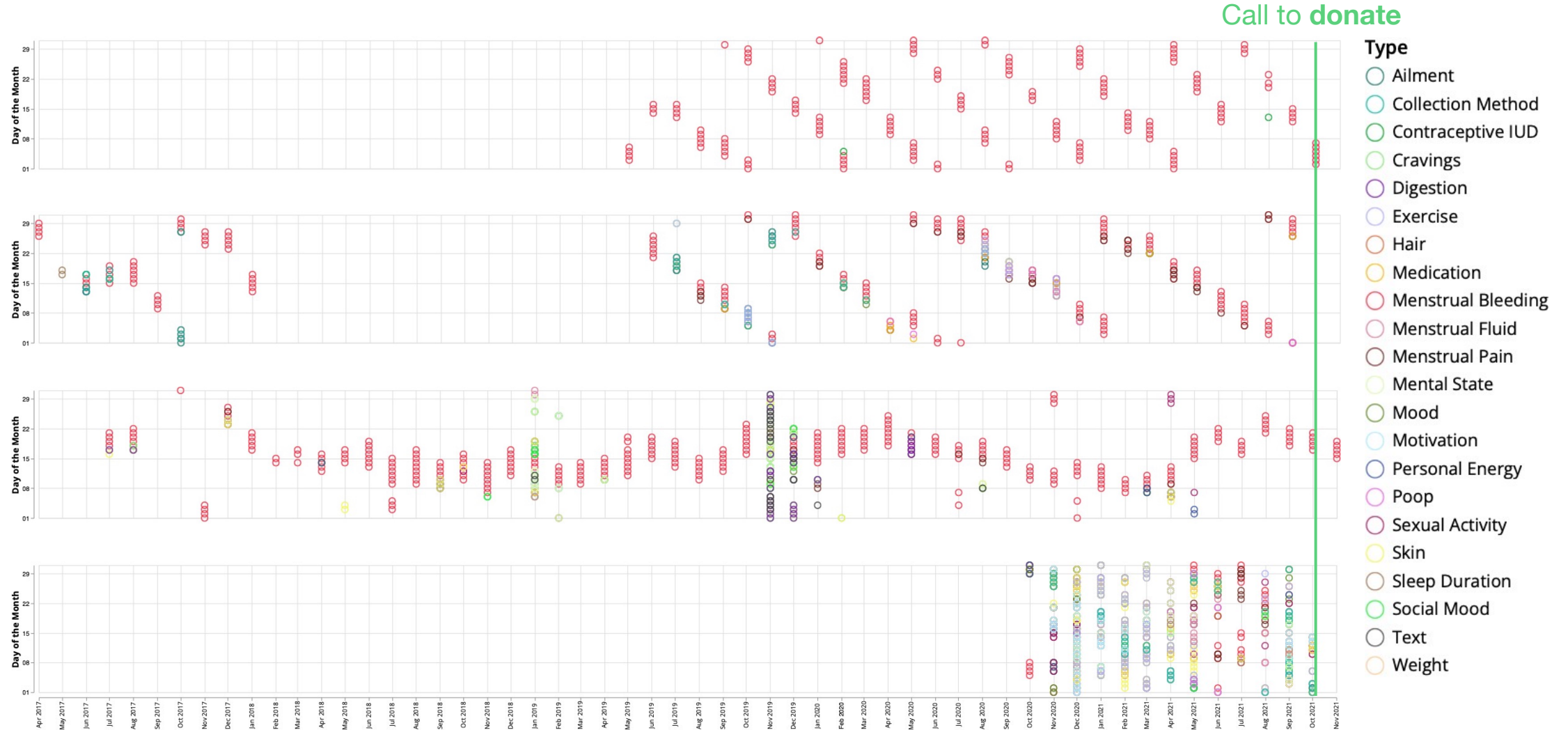
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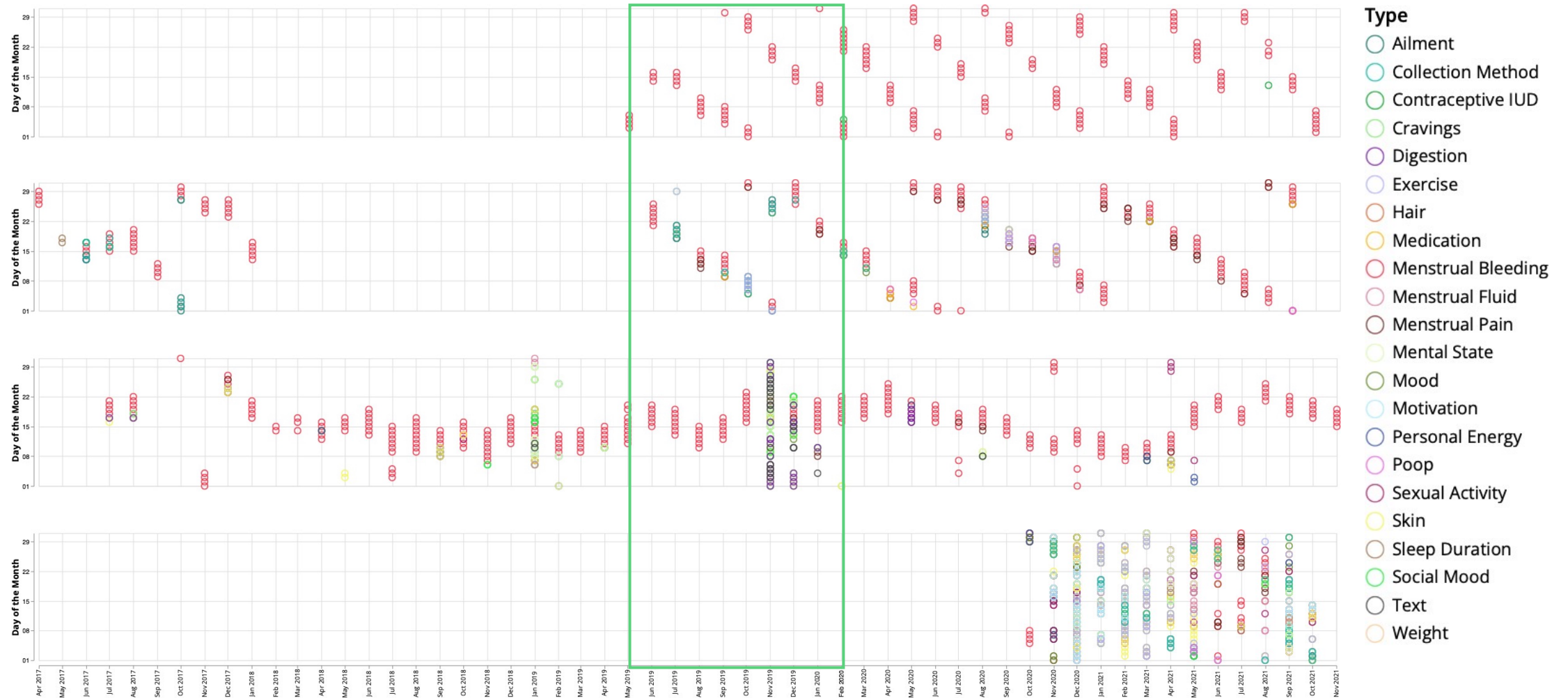


# Data: Temporal

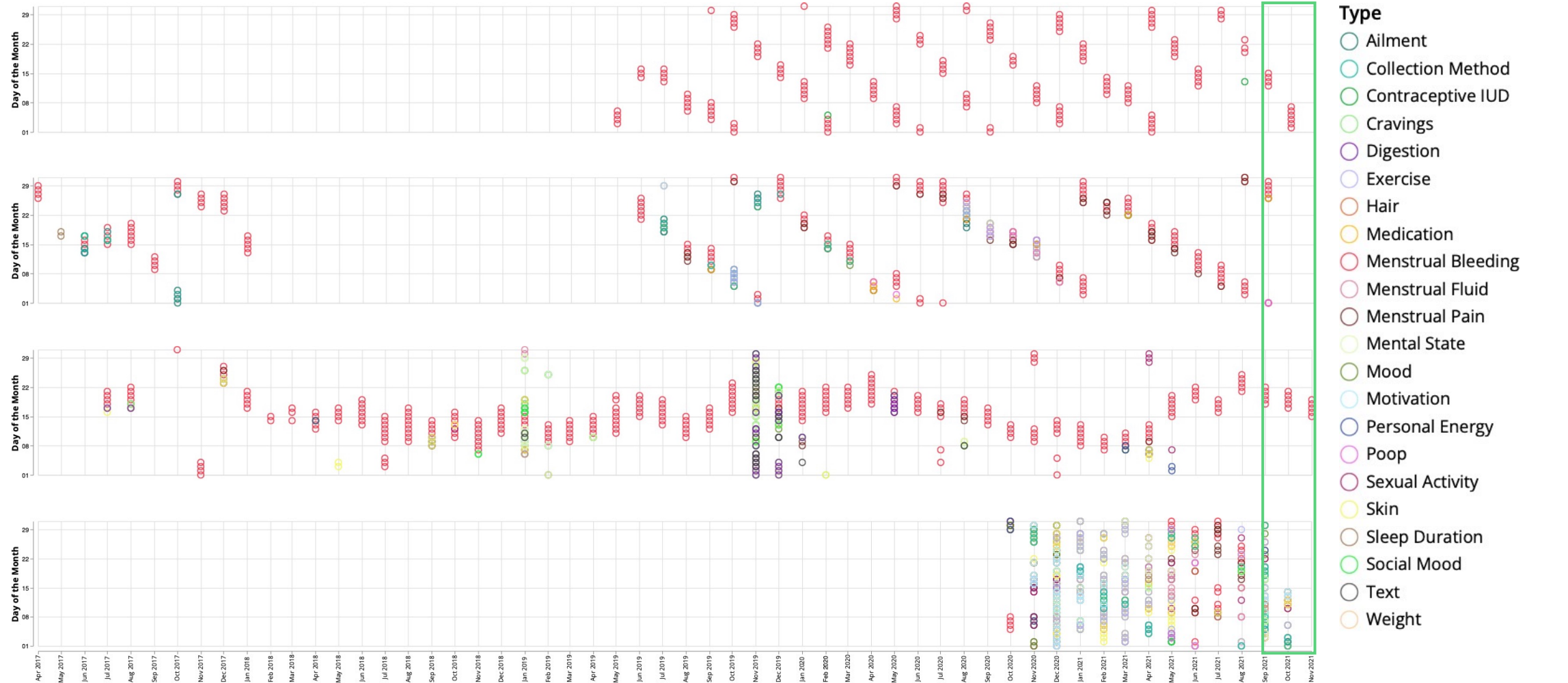




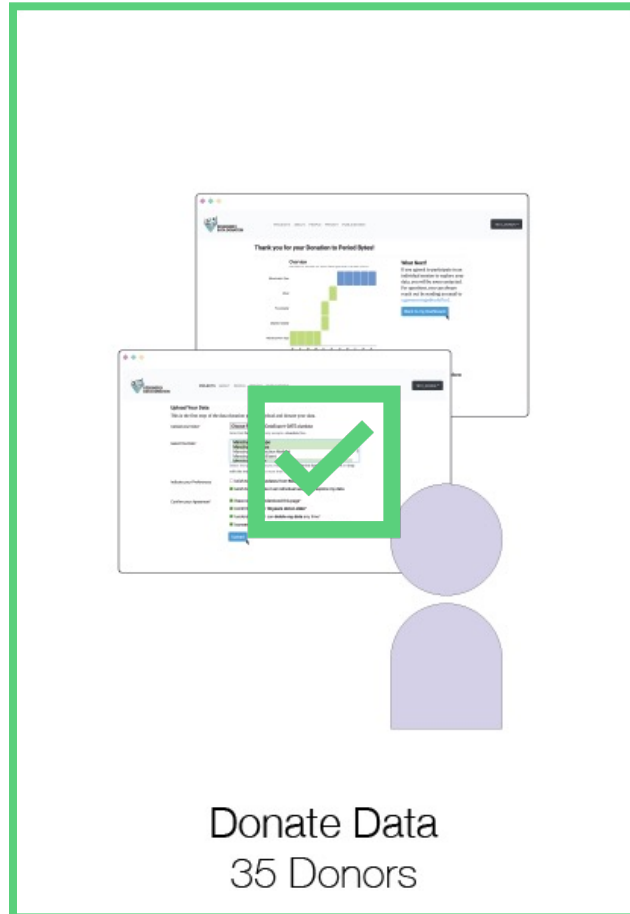
# Data: Diverse and Dynamic



# Data: Personal



# Data Donation: The bigger picture



Clue users already “donate” their data to scientific research

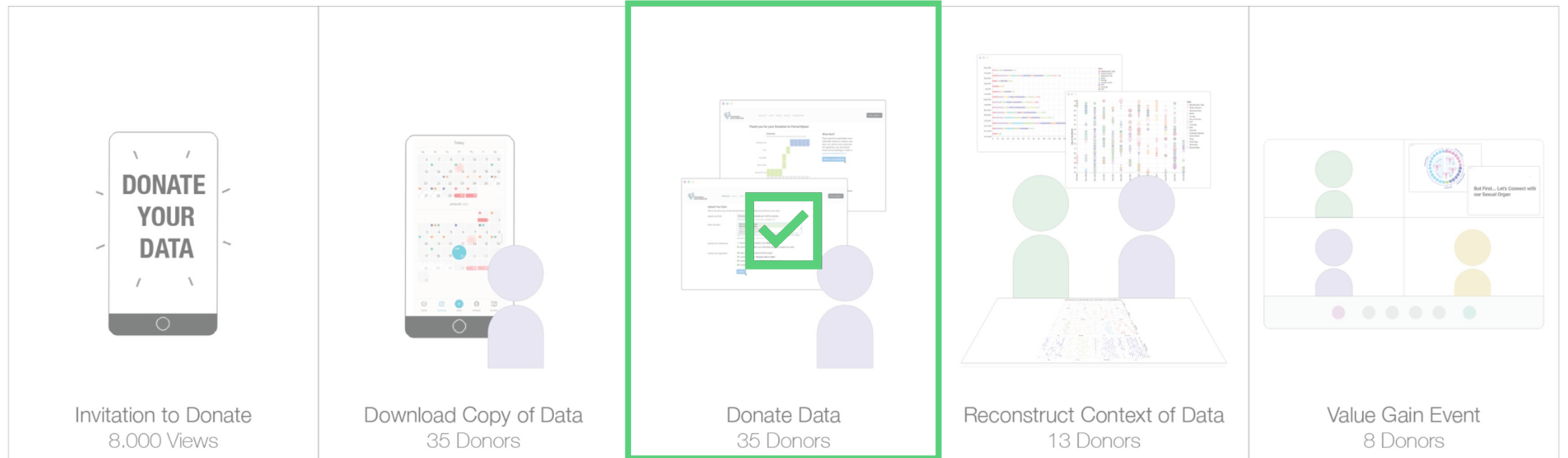
“When you track in Clue, your **de-identified data** becomes something powerful: data that can help answer questions to better understand menstrual and reproductive health.

Your cramps, cravings, and the other categories you track **become part of an unprecedented data set** that can be used by **top research institutions and clinicians** to explore topics with real-world impact.”

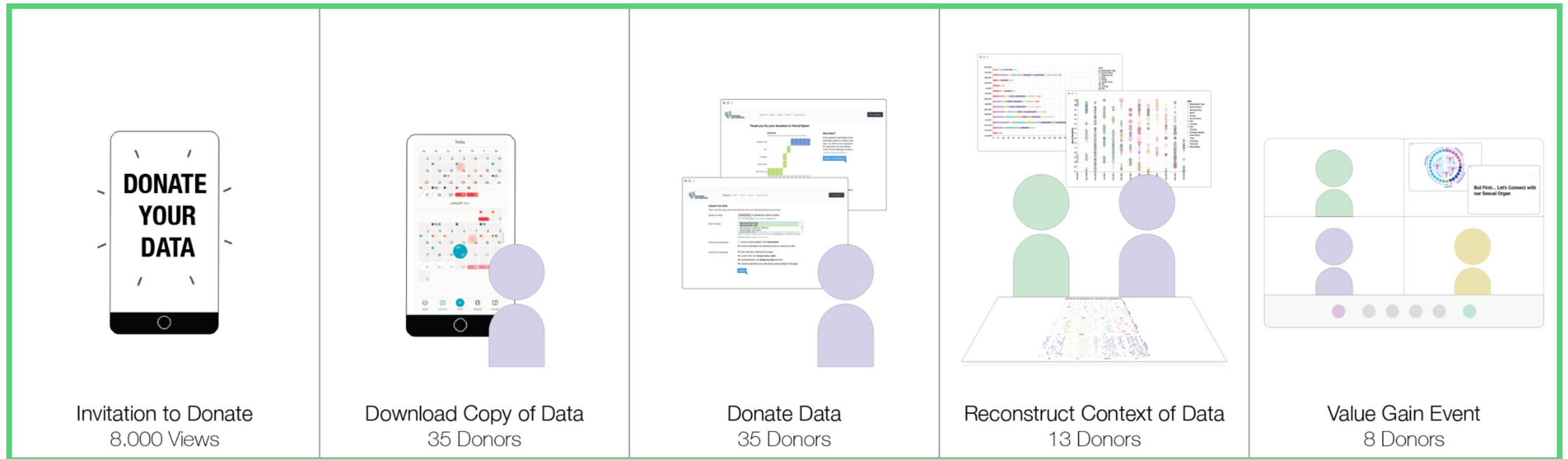
Source: Scientific research at Clue. How tracking your cycle advances female health. Amanda Shea (2022). Clue by Biowink.



# Data Donation: Not an instance, a journey



# Data Donation: Not an instance, a journey





# THANK YOU!

Alejandra Gómez Ortega, Jacky Bourgeois, and Gerd Kortuem.  
2022. Reconstructing Intimate Contexts through Data Donation:  
A Case Study in Menstrual Tracking Technologies.

[datadonation.ide.tudelft.nl](https://datadonation.ide.tudelft.nl)



[edu.nl/k3r3f](https://edu.nl/k3r3f)