
ACCESSIBILITY

A WORD ABOUT ACCESSIBILITY

A table can be translated to Braille, but that's not always possible for charts.

Describing the features and emerging structures in a visualization is a possible solution... **if they can be spotted.**

Analysts must produce clear and meaningful visualizations, but they must also describe them and their features in a fashion that allows all to "see" the insights.

This requires them to have "seen" all the insights, which is not always necessarily the case (if at all possible).

A WORD ABOUT ACCESSIBILITY

Data Perception:

- texture-based representations
- text-to-speech
- sound/music
- odor-based or taste-based representations (?!?)

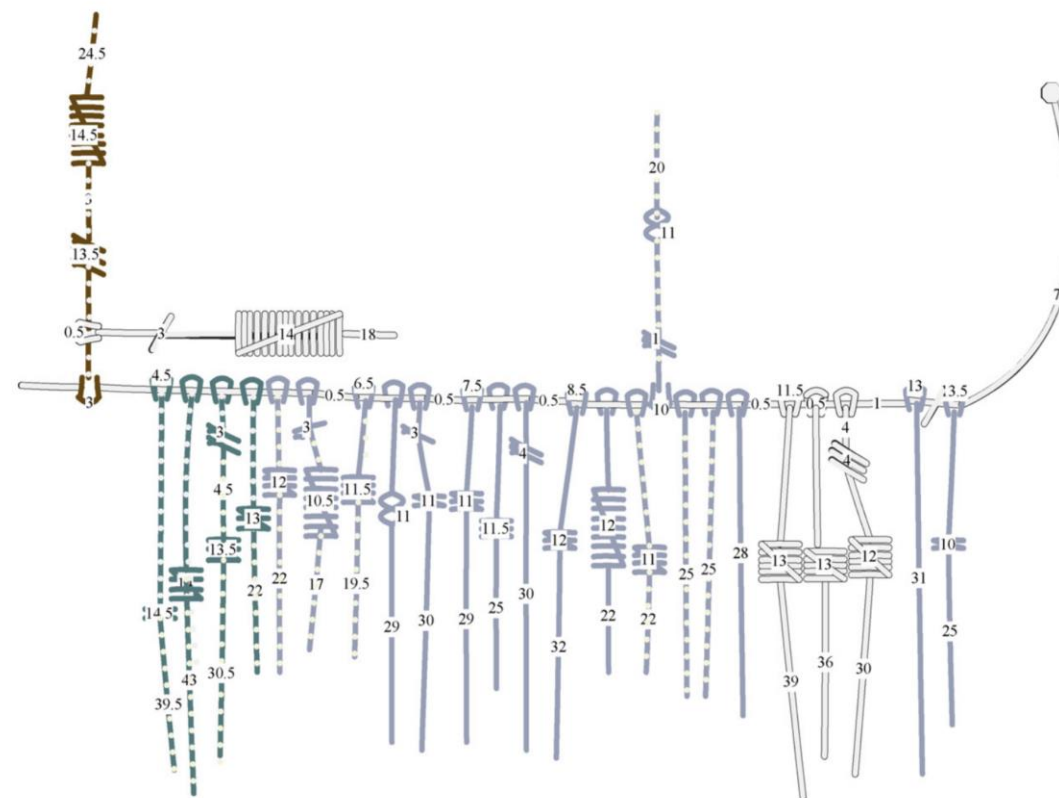
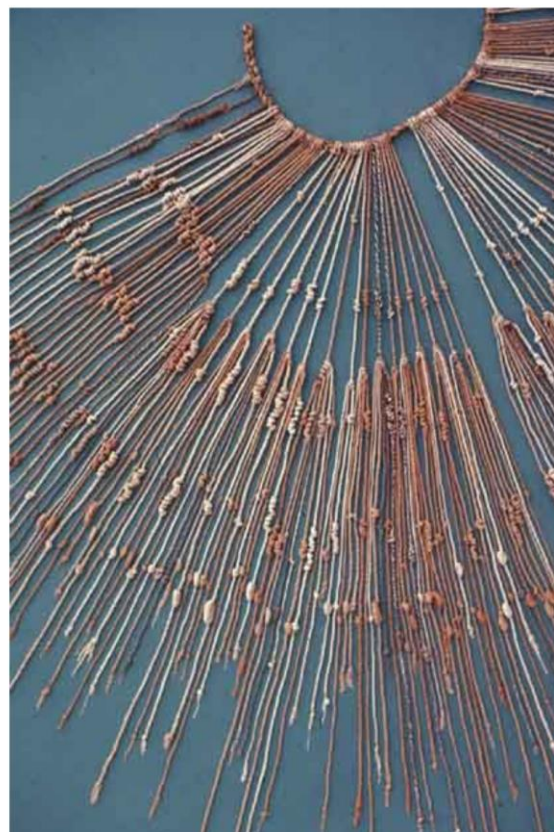
Sonifications:

- [TRAPPIST Sounds : TRAPPIST-1 Planetary System Translated Directly Into Music](#)
- [Listening to data from the Large Hadron Collider, L. Asquith](#)

PHYSICALIZATIONS

Inca Quipus

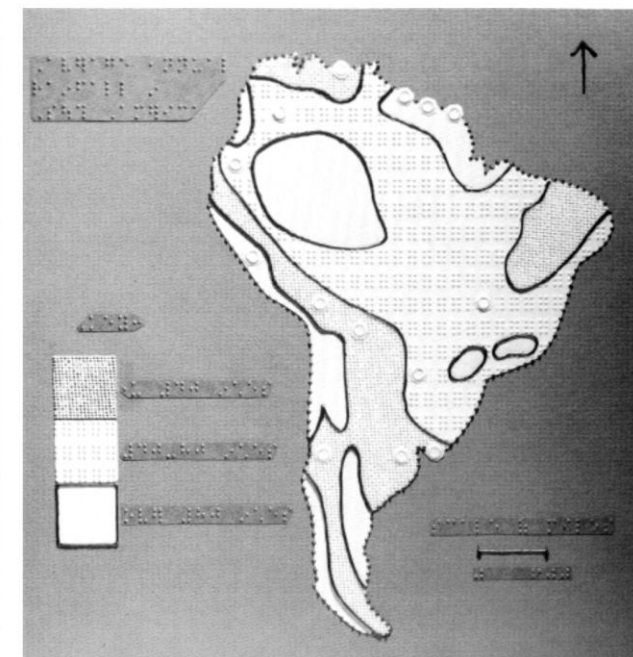
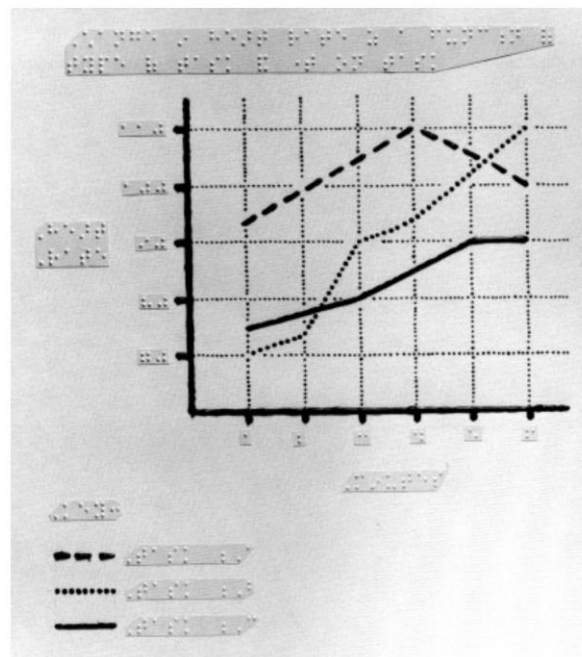
- used as a data storage device
- it is believed that **color, relative position of knots, knot types, and rope length** were used to encode the variables.



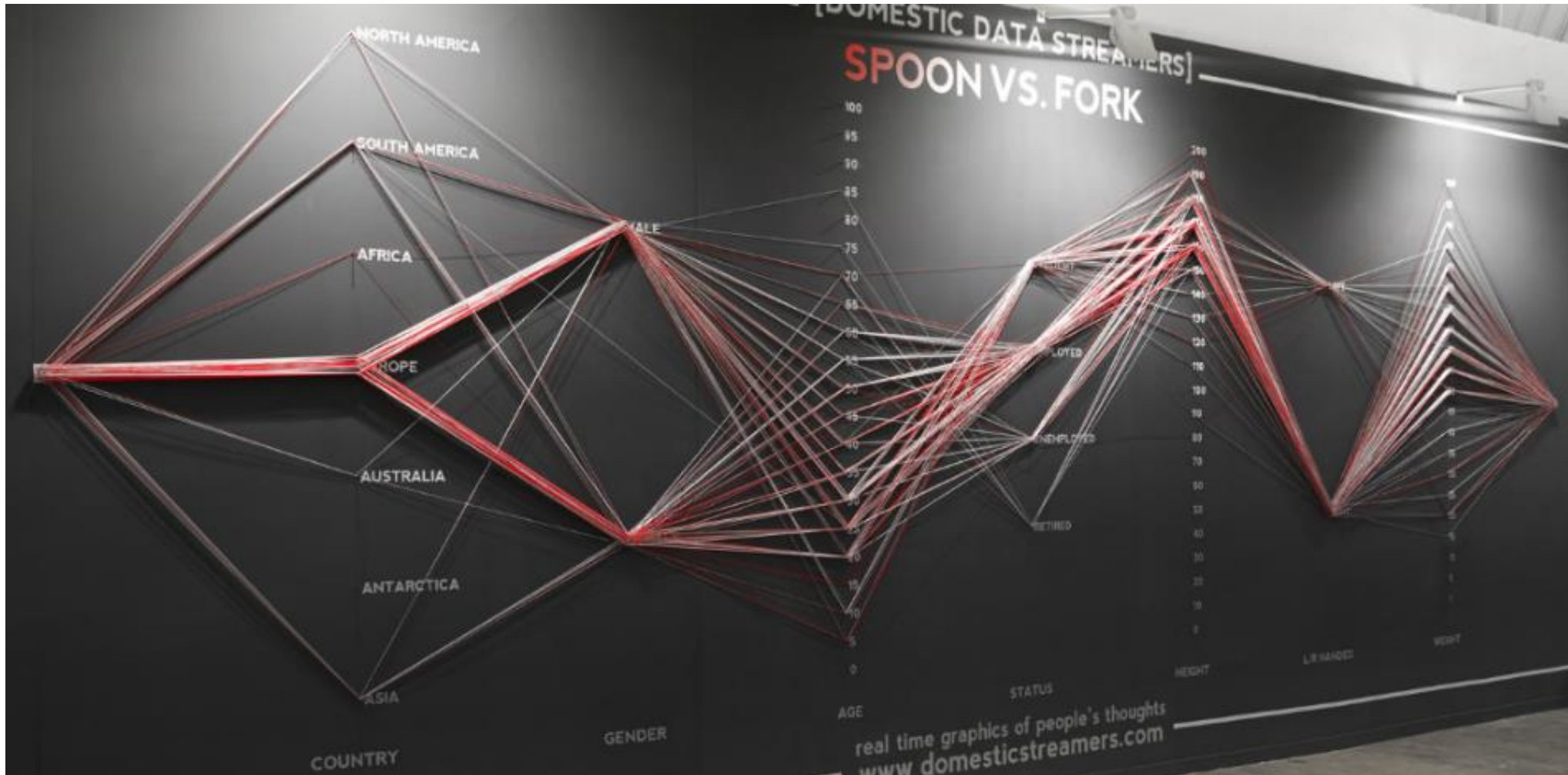
PHYSICALIZATIONS

Tactile Infographics

- **thermoform:** heated sheet of plastic sealed on a physical model
- **swell paper:** thermoform-lite
- **tactile map variables:** vibration, flutter, pressure, temperature, size, shape, texture, grain, orientation, and elevation.
- **audio tactile maps:** use software with audio files to convey information as the user's finger rolls over features or symbols



Spoon vs. Fork



Are there any issues with data collection? Where do you think this event took place? Is the spoon/fork question a red herring?