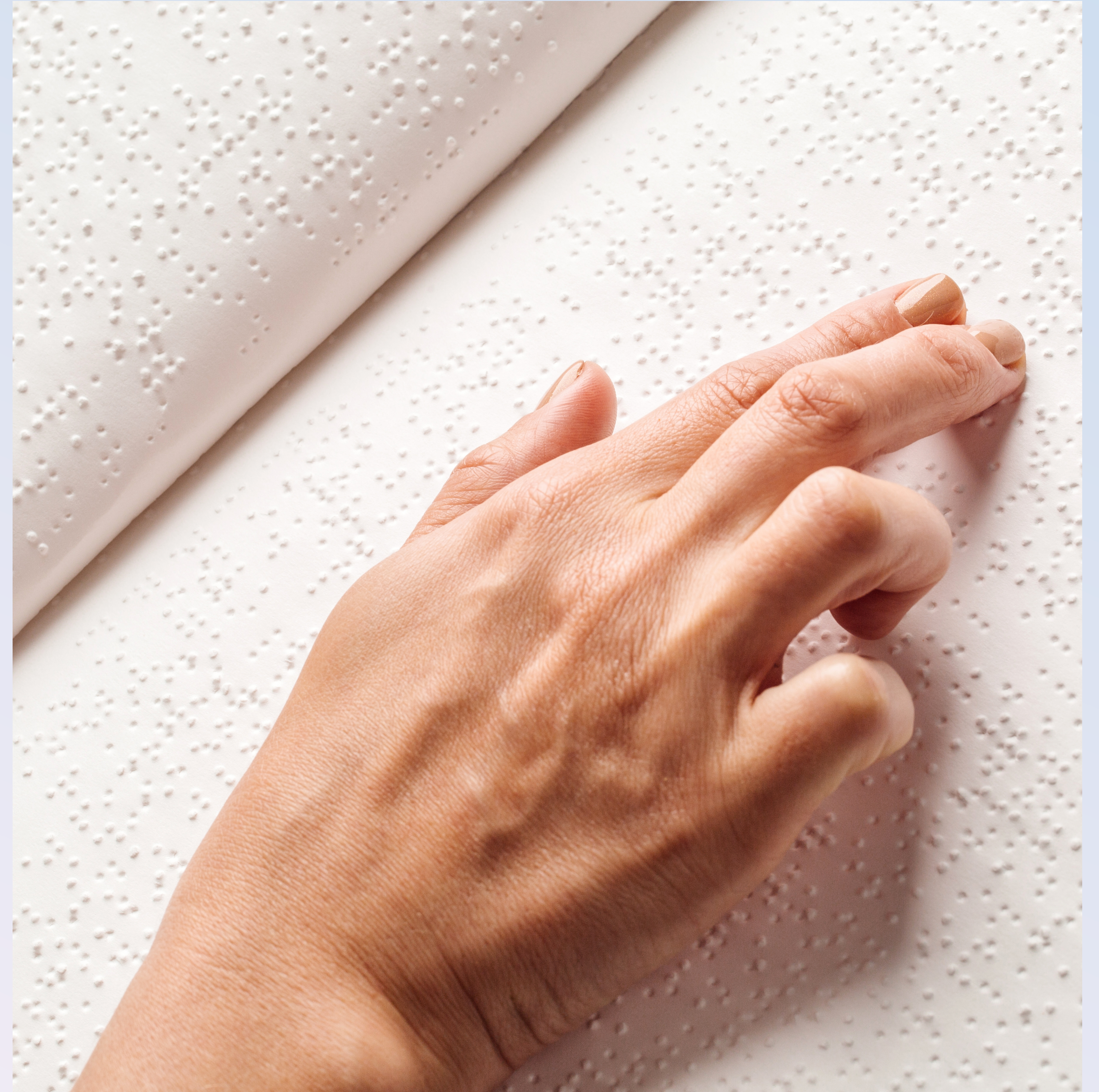


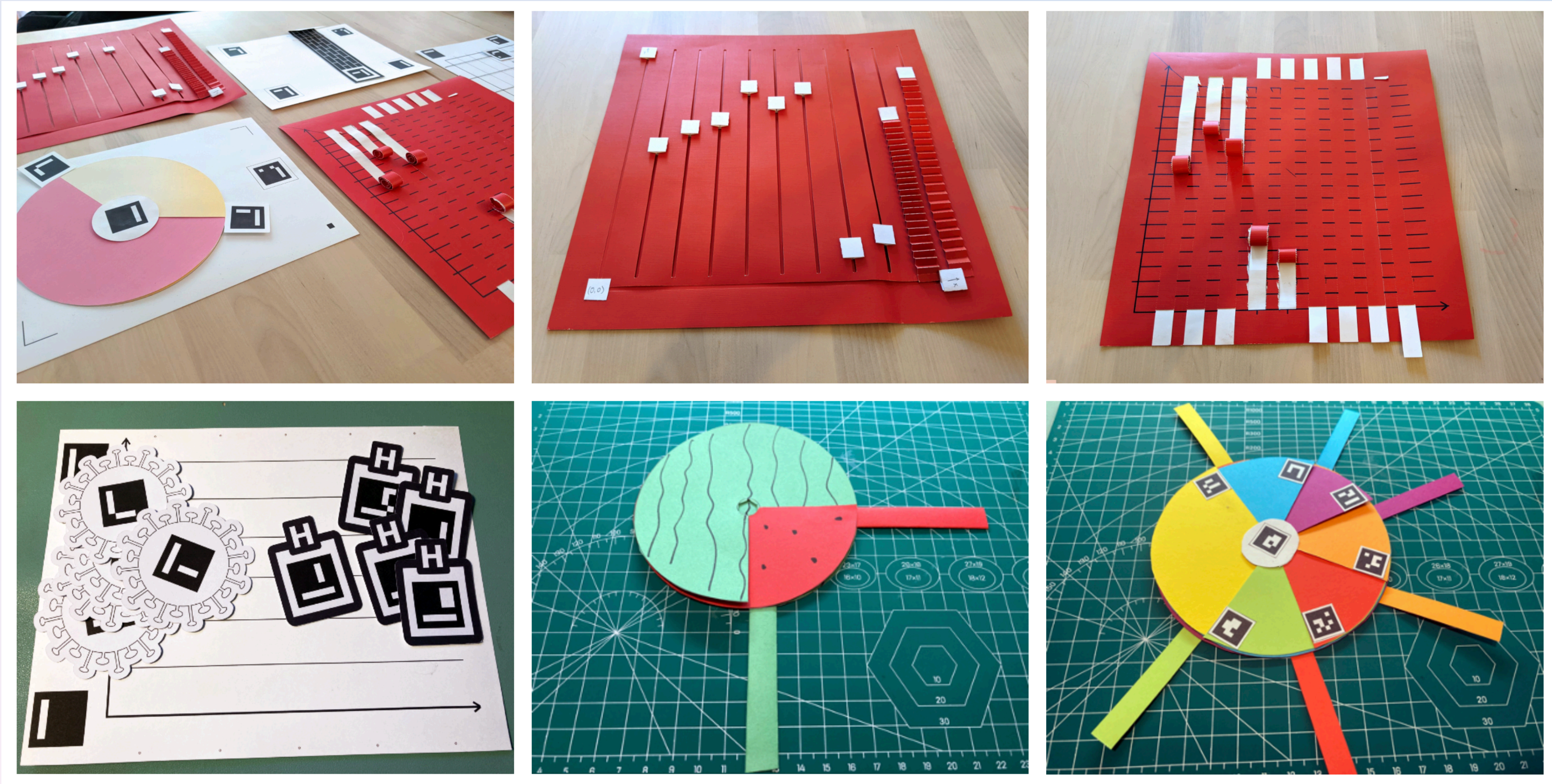
Chapter 4, Episode 3:

Towards data *experiences*: hardware, physicalization, and embodied data

Embossed paper

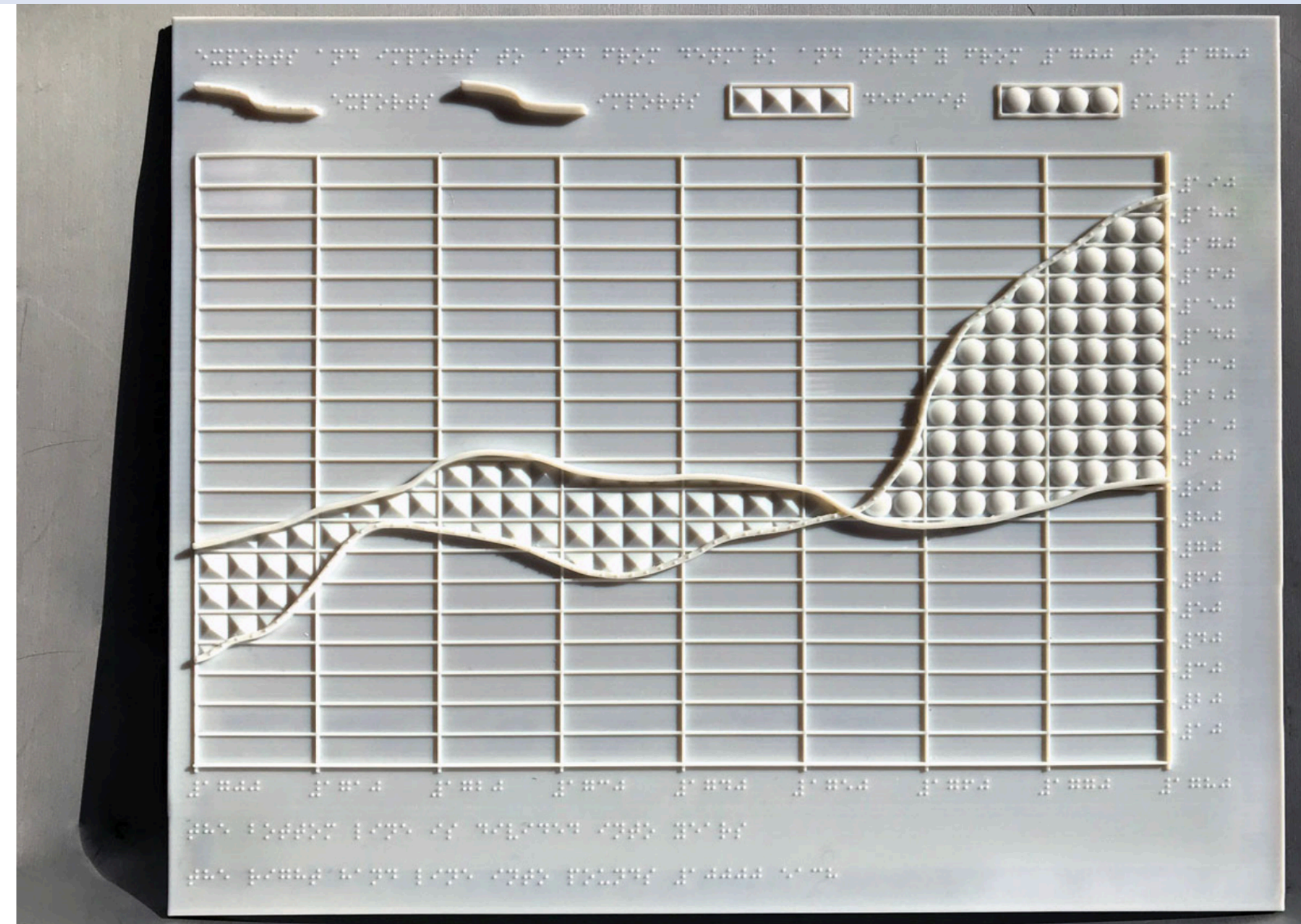
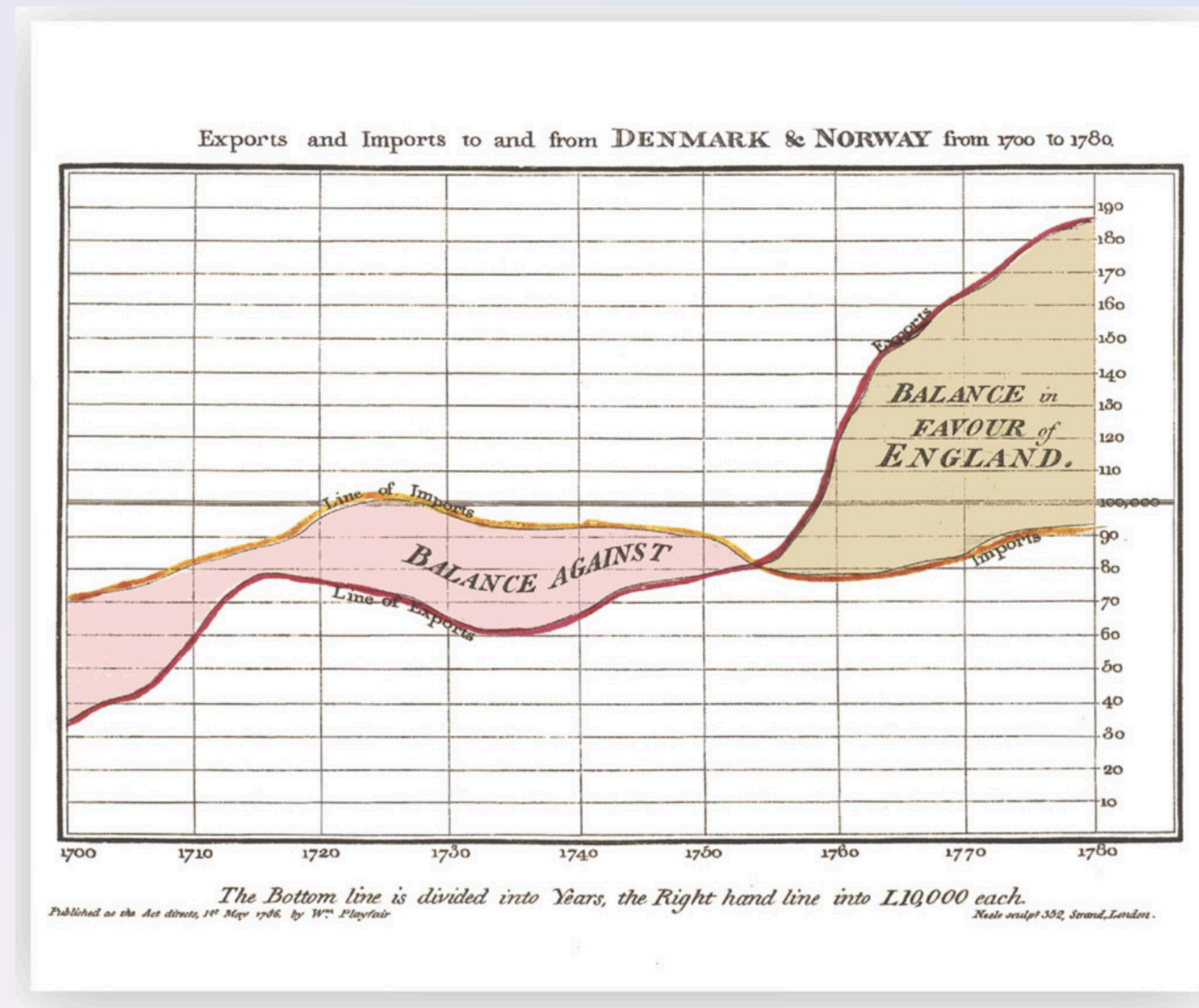
Still one of the best technologies out there!





Credit: [“Touching Information with DIY Paper Charts & AR Markers”](#) by Bae et al

3D Printing

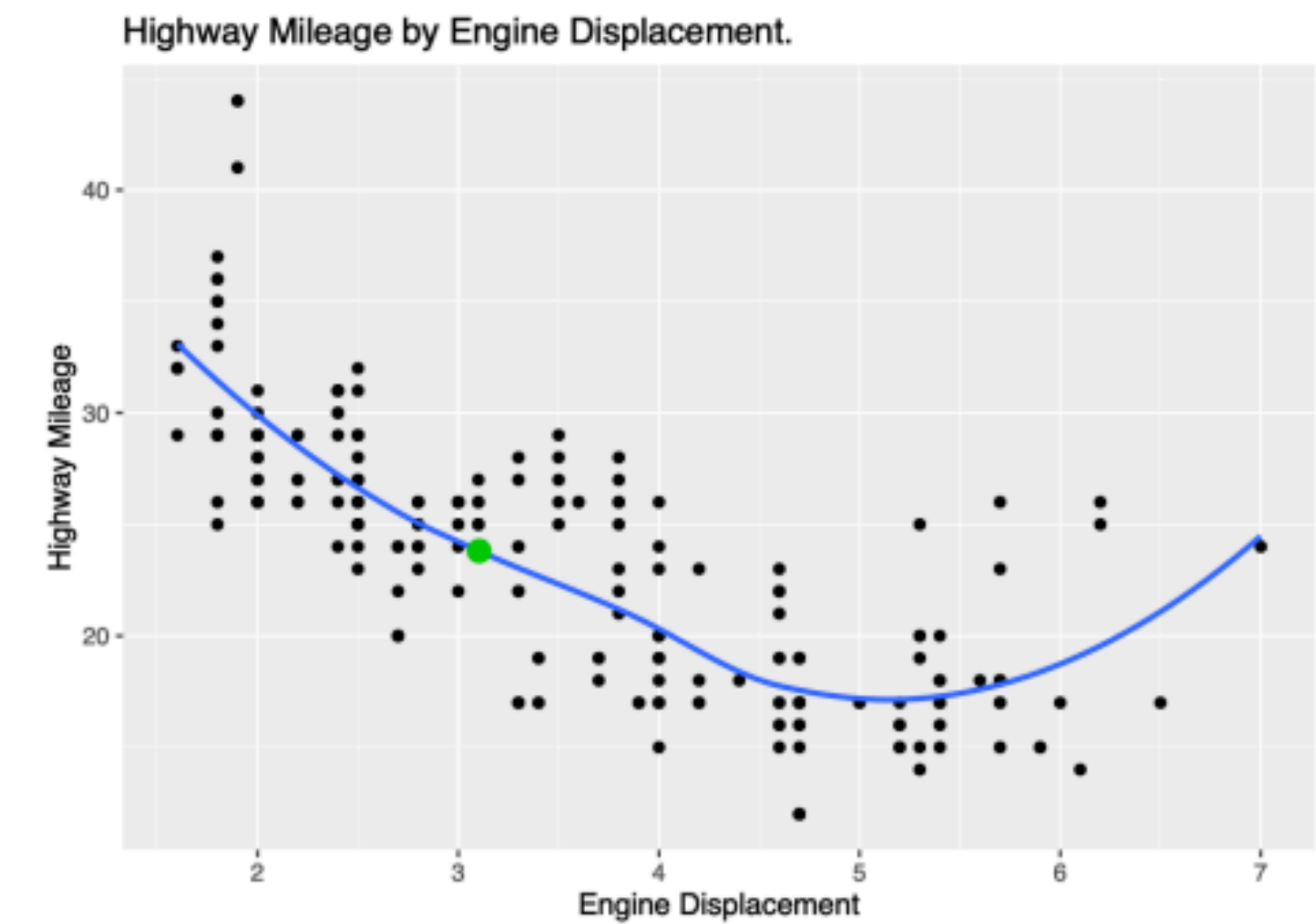


[“Sociotechnical considerations for accessible visualization design”](#) by Lundgard et al

Refreshable tactile displays



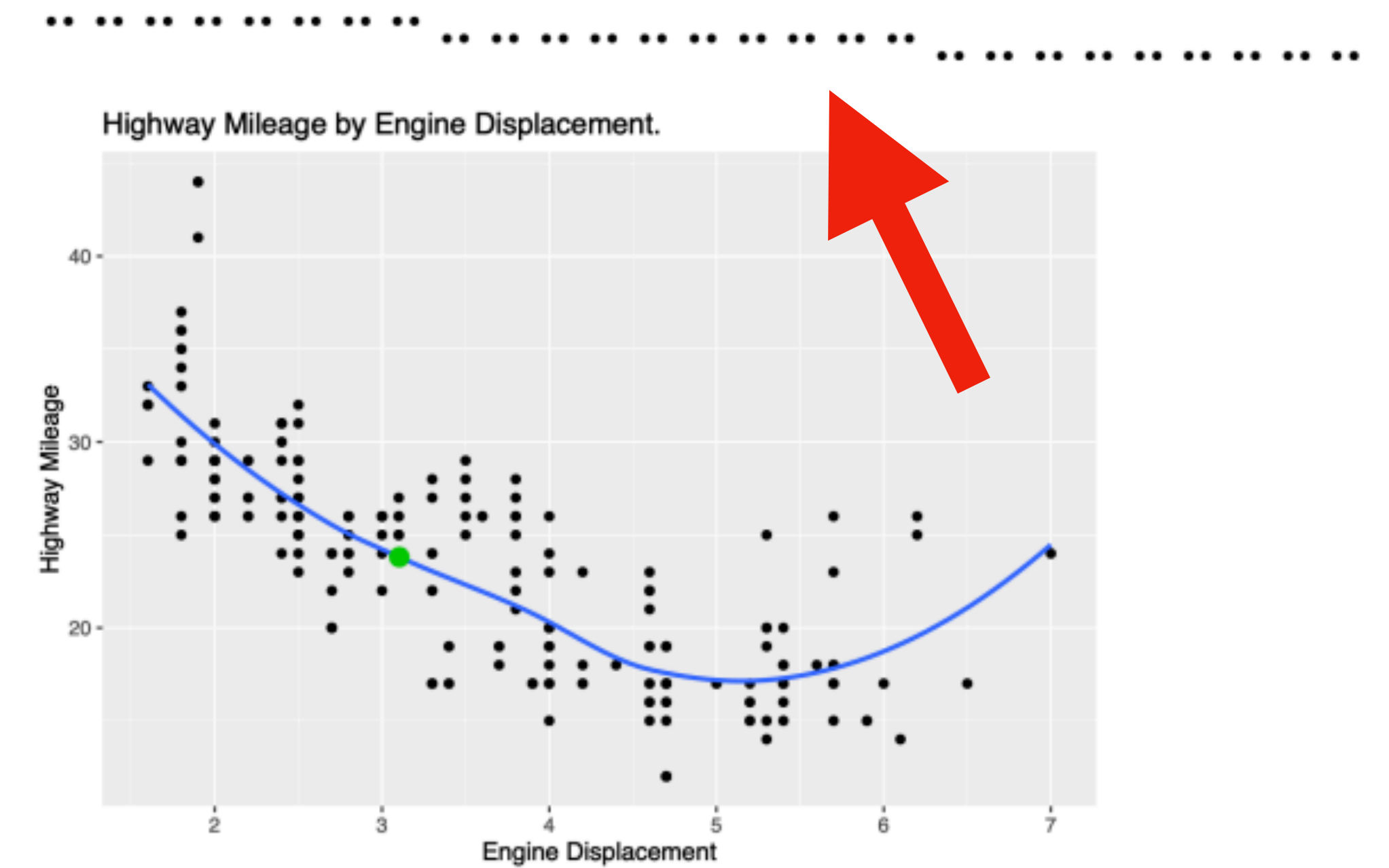
Methods for using existing tactile displays



Engine Displacement 3.1038, Highway Mileage 23.8055

(d) Scatter plot

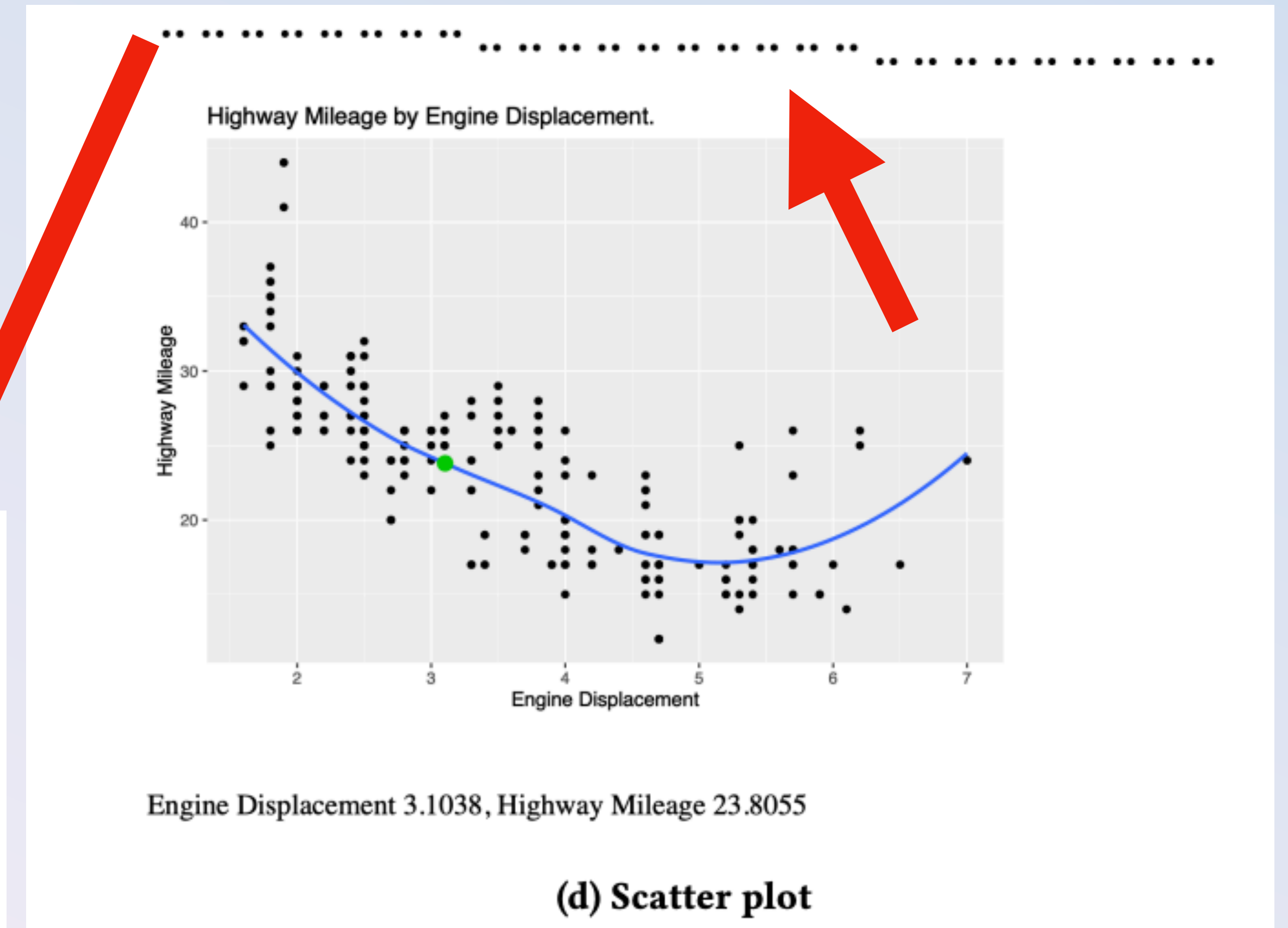
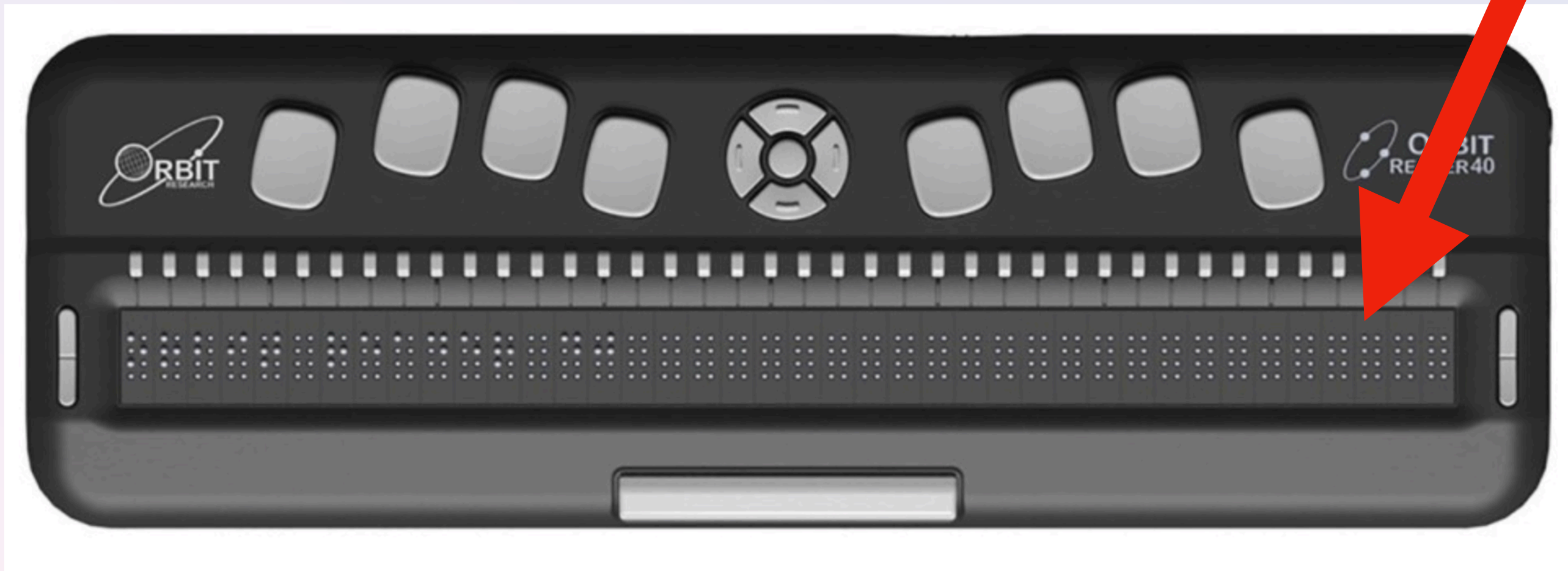
Methods for using existing tactile displays



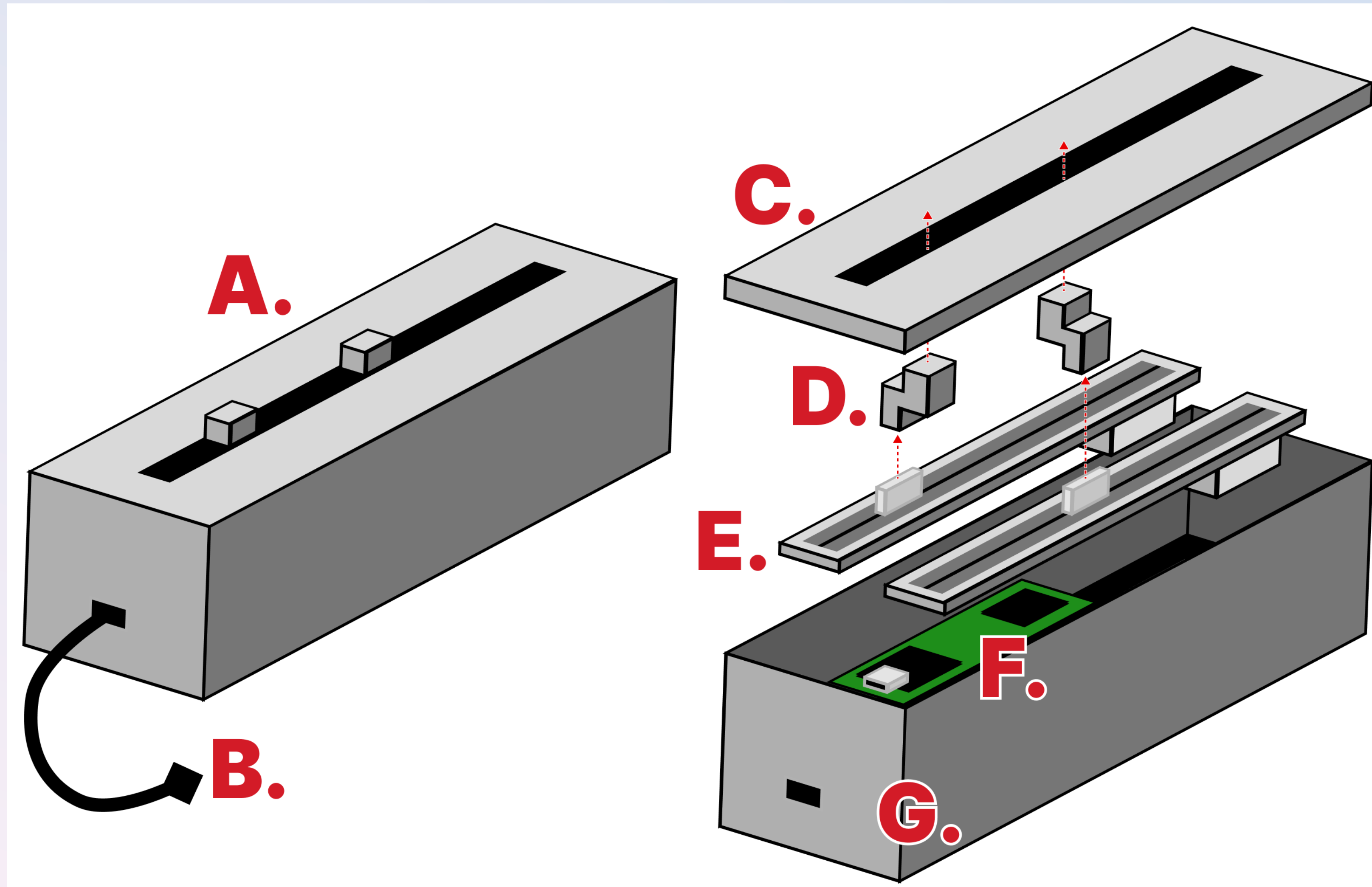
Engine Displacement 3.1038, Highway Mileage 23.8055

(d) Scatter plot

Methods for using existing tactile displays

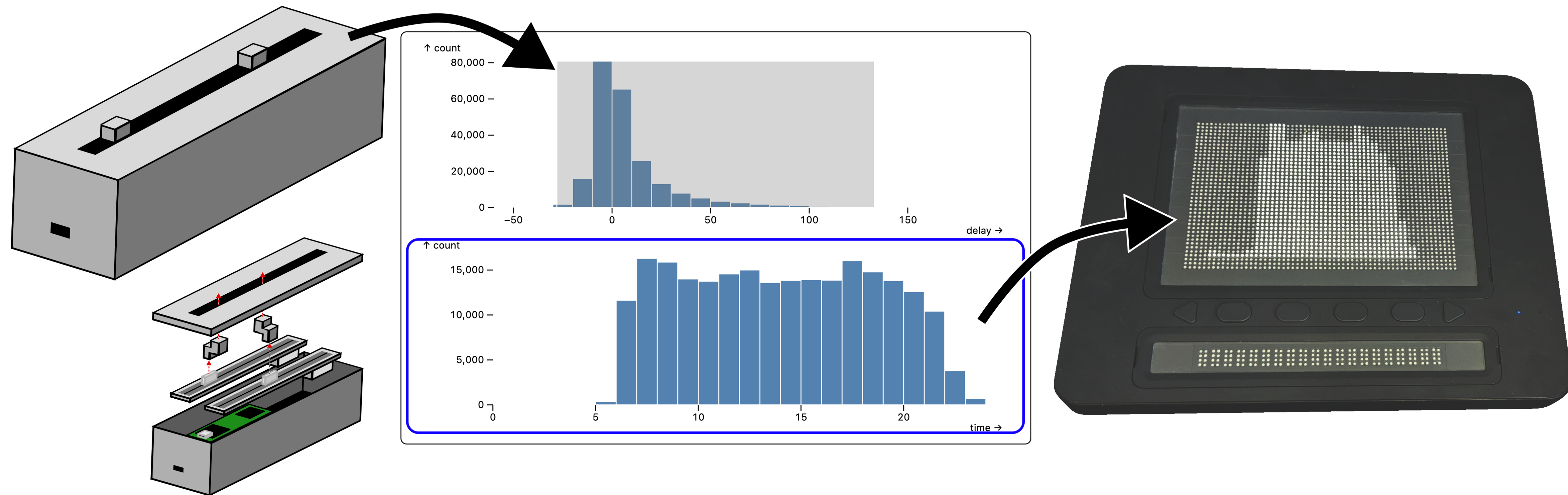


Prototype: *cross-feelter*



Credit: "Cross-perception" by Elavsky et al

Cross-perception: A tactile, dual-task paradigm.



Credit: "Cross-perception" by Elavsky et al

Who is data for?

Public data and accessibility

Credit: [“American Monument” by Data Vandals](#)





Credit: "Life under curfew"



Credit: [“Conscious Waste: Visualizing waste in Panama City” by easydataviz](#)

Play, community, and data

“We create playful experiences with data 🇮🇹 to spark meaningful conversations” - Jose Duarte



Credit: [“Let’s play with data kit” by easydataviz](#)