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Understanding User Experience of COVID-19 Maps through Remote Elicitation Interviews

This study focuses on understanding the impact of data visualizations through remote elicitation interviews. It is mostly based on previous studies by Hogan[1] on regular Elicitation Interview techniques, but done remotely due to the current Covid-19 pandemic scenario.

Hogan describes it as a method for gathering detailed and precise accounts of human experience, and in our case, applied to help understand how people experience and interpret visualizations. The EI (elicitation interview) process goal is to capture the richness of each individual's experience, as those experiences deeply affect them on a personal level as they are triggered by visualizations.

The elicitation interview process explicitly requires the users to reach a mental state that enables evocation of the previously lived experience. This evocation state is believed to facilitate the obtention of additional details a regular interview process would not.

In order to reach the evocation state, the interview is conducted in a quiet place. Also, during the interview, content-empty and also open-ended questions are asked by the interviewer in the present tense, to evoke the user's experience.
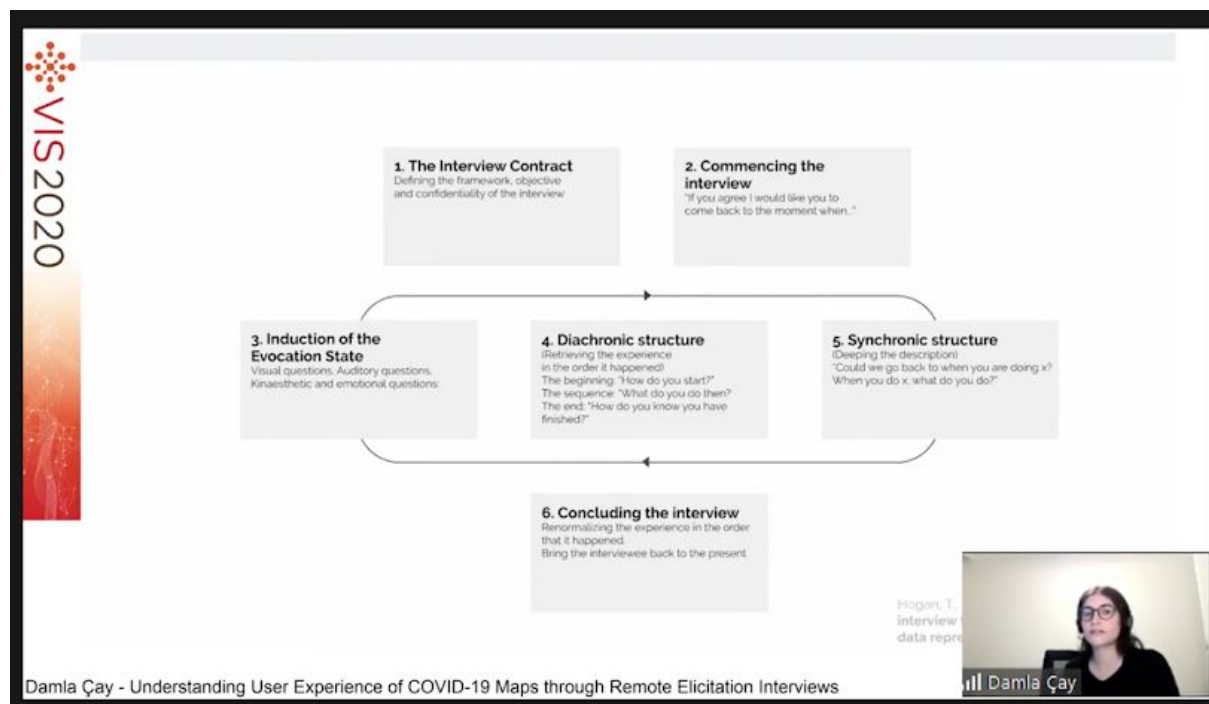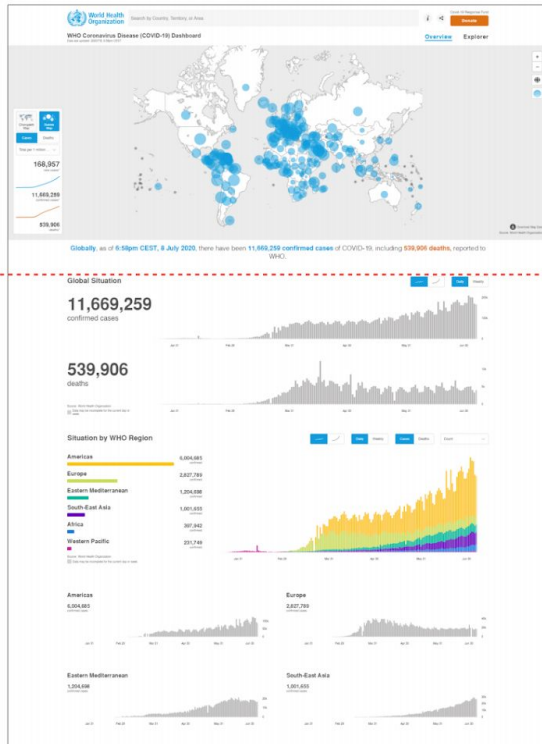

Image: Interview evocation process

For this paper, users were asked to describe their experiences by analysing Covid related visualizations by the World Health Organization and Johns Hopkins University, both reputable and well-known sources to avoid bias.

Image: WHO and JHU visualizations used in the study

During the interviews it was observed that, even when the data is very similar or the same, the choice of design and even colors can greatly impact users' perception of the topic. In general, participants found the WHO to paint a positive picture while JHU created a sense of danger. Additionally, regardless of which visualization the participants were trying to recall, they were prone to be easily overwhelmed by the data.

In conclusion, remote elicitation Interviews aim to reveal emotional and sensory aspects of interacting with data visualizations, with previous studies mostly focusing on static or narrative visualizations. This work provides additional insights on understanding the general human experience dealing with data in remote settings where in-person interviews are not possible.

[1] T. Hogan, U. Hinrichs, and E. Hornecker. The elicitation interview technique: Capturing people's experiences of data representations. IEEE transactions on visualization and computer graphics, 22(12):2579– 2593, 2015. Link