

drawnTogether – a collaborative approach to virtual graffiti

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1. ETHNOGRAPHIC DATA GATHERING

We conducted three semi-structured interviews and carried out at least five other free form conversations around the goals of the project. Since graphics creation on mobile devices is very infantile, we instead chose to focus on “normal users” that may have used graphics programs and the intersection with their mobile usage.

The three researchers in this project were to each speak with individuals and gather information concerning artistic leanings and computer based tools used in these endeavors. In hindsight, we should have either had one individual conduct all interviews, or provided a more rigid script for each interviewer to use. The questions started from the following set, but would often stray into other tangents concerning the topic:

- Can you list any devices you have used for drawing besides paper?
- Have you used any drawing software before?
 - If yes, which tool have you used and how often have you used it?
 - Would you choose to use Paint or Photoshop if familiar with both?
- Do you prefer art creation on paper or via digital means? Why?
- Have you ever considered collaborating with others when creating artistic works?
- Imagine you are able to draw on a screen and have that work appear on a building. What would you draw?

These questions, although not rigidly adhered to, provided for interesting conversation starters and were definitely useful in showing a definite interest in our eventual application. One of the interviewees came from China and is a student at Texas A&M University. He mentioned he usually uses Paint application and sometimes uses Photoshop and that, overall, he uses graphics applications about once a month. His responses indicated that the MS Paint application is simple and easy to use, and that Photoshop has too many functions and is quite sophisticated to use. Additionally, after he heard about our application, he said it would be helpful to provide a function to search a sketch drawn by friends without going to a certain location.

One of the respondents, an economics student of Chinese origins, has never used an iPhone before. Yet, she is very interested in drawing and painting. She mentioned highly enjoying drawing on a small toy board which has an eraser as a child. She randomly uses the Windows Paint application, as well. Most often though, she uses analysis software, such as SPSS to draw professional diagrams. When questioned about pure artistic endeavors, she expressed a high preference pen and a paper drawing and a complete disdain for using a mouse to draw strokes when sketching. Her response concerning this area was “If I can have a pen to draw on the computer screen, I would definitely draw a good picture.” Concerning collaboration, she definitely showed some excitable interest but her biggest concern was the ability to tell her strokes apart from others. When the question about drawing on a screen and appearing on a building was broached, she replied that she would like to draw something related to her surroundings and that she would care about others sketches. In particular, she remarked, “That’s one aspect of collaboration, right? First, I care about my friends’ drawing. Then people who share the same interests with me.” When our intended application was finally revealed, she said she would care more about what people around her were drawing.

Another interviewee, a technology worker from Houston, TX, mentioned being highly proficient in multiple graphics applications, including Photoshop. Throughout the interview, his mind raced with different ways to collaborate on different projects even at one point asking “Would it be possible to really project what others were drawing onto an external wall for live events and concerts?” This was an idea previously not considered by the researchers and one that is being heavily considered as a way of involving passersby who may not have a device but could still be considered consumers of collaborative creations.

2. STORYBOARDS

We can apply our application to various scenarios. In this section, we show two of them. Storyboards for the intended application

2.1 Scenario 1: collaborative drawing

Alice and Bob are students at Texas A&M University and are friends. Alice wanted to draw the MSC building before it is remodeled, so she went near to the building and sketched it using our application. She did not finish the drawing because of a class. While she is going to a classroom, she sends a SMS message to Bob. The message is “Could you finish

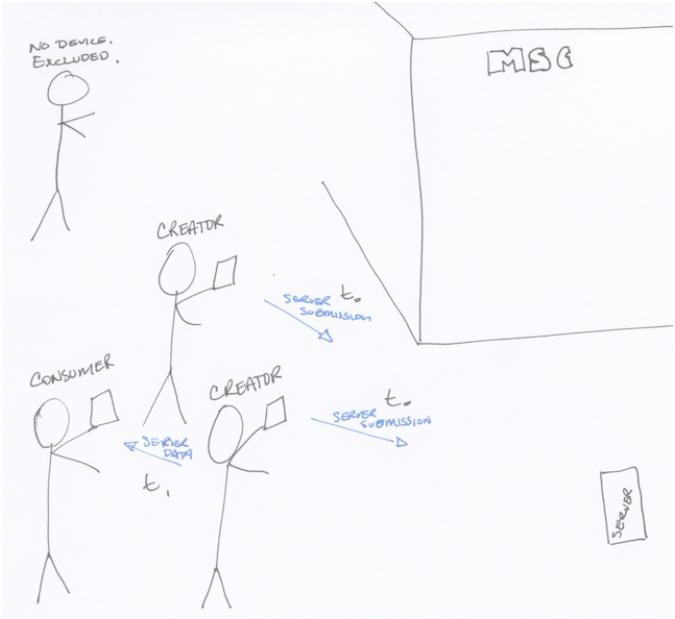


Figure 1: Scenario 1

the sketch for the MSC building in location X?" Fortunately, he is passing in front of the building and starts to add some sketch into the figure, which Alice drew. Sometimes later, he finishes to draw the building and sends a SMS message to her. The message is "I'm done!" After the class is finished, she goes to the location in which she drew the building. She can view what they drew and is satisfied about what they did. This can be weakly seen in Figure ??.

2.2 scenario 2: event impressions

Alice and Bob can attend a public event, such as a conference or a concert. While at the event, each user contributes small sketches to the location. On a whim, Alice decides to draw the standing position of each speaker during their talk or show and tags these creations as "position". Likewise, Bob decides that each time a question is asked from the audience, he will annotate that by creating a mark on the screen and tagging it "question". At the end of the conference, they each view the other's visual notes and deduce several anecdotal observations related to audience participation and performer position. This can be weakly seen in Figure ??.

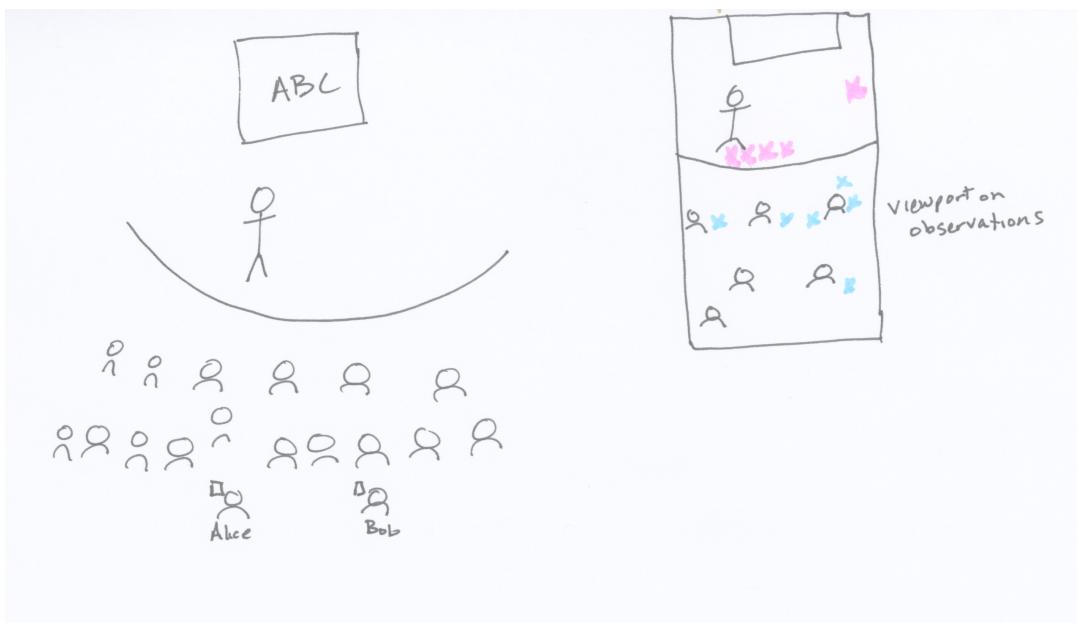


Figure 2: Scenario 2