Introduction

You might have been noticed that each object is numbered - it's because that will be easy to refer to when you talk about them. So please remember when you are talking about one object during our conversation, just let me know it's number.

Also each object is cut into different shapes, like different sizes of square. Please try to consider those as the combination of different materials and focus on the materials properties, instead of too much focus on the shapes and sizes. E.g. like no. 10 is the combination of rubber, foam, and copper tape, that's the idea

So do you have any questions so far? Okay let't start today's interview.

The first part is to -

1. Talk about your Initial impression of those material

This part is to explore how participants perceive and articulate the material properties of objects from their memories. Followed are the questions that we will ask:

- 1.Do you have any objects that you like/dislike because of its material properties/ qualities? Without thinking too much, just focus on the material itself now.
- 2. Do you have any specific experiences or memories about that object and its materiality? Or say, **does this material invoke your memories/ experience of something?**
- 3.Could you imagine, how the objects you might be make use in digital musical interfaces design? Why? You don't need to talk about all of them, you could just pick some of objects that you think are interesting to you.

2.Play with material samples

In this part, a set of material samples is provided so that participants develop conversation regarding material properties of artifacts by playing with them. The samples include rubbery, wood, papers, fabric pieces, and so on by covering a certain range of different physical properties (i.e., soft, hard, shiny, warm). They are selected for an inspiring purpose instead of representing a broad range of design materials in general. In this part we will ask:

The second part is play with the materials samples-

Now I'll give you a brief introduction of those material samples: <u>From no1 to no5, they are conductive fabrics - some are 2-way stretchable, and</u> <u>some are 4-way stretchable, and their stretchability are different as well;</u> <u>No 6 is conductive rubber,</u> <u>No 7 is a combination of conductive rubber and conductive foam,</u> <u>No 8 and no 9 are conductive foam in different density,</u> <u>No 10 and no 12 look similar - both of them look like three buttons on a board - the</u> <u>difference is one base is soft rubber, the other one is cardboard,</u>

No 11 is conductive rubber covered by Copper Tape.

Basically, they are different combinations of conductive materials and nonconductive materials.

You can have a look of them again, and maybe try to interact with each of them, and think of what kind of deformation you could do with them.

Please Let me know when you have interacted with all of them.

After you play a while:

- 1. After you played a bit with them, did you change your preference? If I'll ask you pick you like and dislike ones again, do you change you ideas or not, if so, why?
- 2. Could you explain why you like/dislike them specifically in terms of their material properties?
- 3. Please use 4-5 terms to describe the material properties.
- How can the potential of this material be used in DMI design? Could you give more details of how you would design DMI with those materials?
 Please explain what gesture you might use to control what parameter.

The last part of the interview is going to discuss the deformable DMIs and nondeformable DMIs

3.Compare and contrast to non-deformable DMIs

This part is to investigate how participants' desire related to material properties are satisfied in the design of DMIs. Participants will be asked to compare and contrast their experience with other DMIs (e.g., non-deformable DMIs) to their preferences of material properties discussed in previous parts. In this part we will ask:

- 1. What kind of DMIs you've designed/built (tangible interface)? Please describe its features and context of use.
- 2. Could you imagine how the DMIs you've mentioned would be transformed if some deformable materials would be incorporated into their forms?

Freeform answer

Briefly discuss your overall feelings of deformable materials in musical context, and the use of deformable materials in DMI design.

- 1. have you used these kind of materials in DMI design before? Including synthesiser.
- 2. Would you like to have a try in the future?
- 3. What biggest challenge you think you might face if you design DMI with deformable materials?
- 4. IN the design process, which part you think is most important? I mean, such as the interaction design, physical design, musical values, learnability etc.

Okay! Thanks for your time, it's done from my side. Do you have any questions want to discuss or ask?