

MomentsVR Study Protocol

First Session

Setup

Bring

- ☐ Computer
- ☐ Headset
 - ☐ 2 remotes
- ☐ Connection cable
- ☐ Mouse (need scroll wheel for browser interface)
- ☐ Sanitation wipes / cleaning cloth
- ☐ Paper + pencil (for notes)

Computer

- [first session] Create workspace for participant
 - Load sample stories into workspace
- Boot up recording software
 - test audio
- Connect mouse
- Boot up moments server
- Open moments
- Open workspace for participant
- Open chrome://inspect
 - Keep refreshing if anything don't work
- Mobile hotspot

Headset

- Plug headset into computer
- Enter headset,
 - punch the 'let this computer access files on device'
 - Setup boundary
- Boot up casting on headset (if available)
- Testing connecting to a story and entering VR
 - Start story on desktop browser
 - Punch share
 - Test Audio
 - Check that volume is high enough
 - ! test recording

1) Opening Spiel (5 mins):

Hello, thank you so much for taking the time to speak with me today.

My name is [...] and I will be leading this session today.

I will just go over everything we are going to do, and if that sounds alright we can get started. If you need to pause or stop the session at any time, just let me know. Feel free to not answer or

skip any questions, you can just say you'd rather not answer, no need to give a reason. Please feel free to ask questions at any time.

Our study is about understanding the role of VR in the context of creating personal narratives of experiences of migration. You don't need any previous knowledge on the topic of VR. Our goal is to evaluate tools for supporting authoring these immersive narratives.

I will ask you to fill out a short demographics form, then ask you a couple of demographics questions related to your cultural identity and experience with VR. Would you be comfortable with this?

Then we will brainstorm some ideas for a narrative you would like to create yourself.

Then, we will experience some narratives in the tool to give you an idea of what is possible in VR, and use this to discuss how you could create your own narratives. We will also discuss what media, like images or audio, you would need for your narrative. This will be the end of the first session.

In our next session, we will ask you to create the narrative using the tool. We will ask you to bring any pictures or audio you would like to include, and we can also spend some time collecting things from the internet, we will discuss this more at the end of the session. We will ask that you please only bring things you are comfortable with sharing, and avoid pictures that include people's faces. You will then have some time to use the tool to create your story. Afterwards, we will have a short discussion of how it went, and what you were and were not able to achieve.

Do you have any questions?

During the study, I will be audio recording and taking screenshots. This will be used as part of our analysis. Do you have any concerns about this? Are you ok with being audio recorded?

Audio and images will be securely stored and only accessed by the research team. All personal information will remain confidential, but anonymized quotes, images and anecdotes may be used to illustrate points in publications, presentations and reports. In this case, you will be referenced by an anonymous identifier, For example, Participant #4.

Does that sound alright? Do you have any questions?

Is it okay for us to start recording?

START RECORDING. both Zoom and handheld

Demographic Question, complete online then research asks the following:

1. Have you used any VR tools?
 - a. Can you describe your professional background and experience with VR or curation?
2. Where is your home country, and what is your native language?
3. What is your cultural identity?
 - a. Do you belong to multiple cultures? If yes, what are those?
4. When did you migrate to Canada?
 - a. How long have you been in Canada?
5. Are you comfortable with VR?
 - a. If not we can use the desktop version of the VR application

2) Thinking about migration experiences they want to share (with Family friends, other people, your future self)[15-20 mins]

Before we look at the system for narrating memories in an immersive experience, we want to think about what sort of things are important for your narrative about your migration experience.

We are going to brainstorm some possible narratives about your experience, you might want to author. I also have some paper and pencils in case you want to jot down ideas.

Provide participant paper and pencil to note down ideas

I have some questions to help brainstorm, but before I ask them, do you already have an idea?

If yes, discuss the idea, if no:

- Can you tell me something you are nostalgic about your home country now that you are living in Canada?
 - What memories do you have of your home country or old homes
 - Can you share your transition journey?
- What cultural elements are important for you to hold onto?
 - In what ways do other cultures influence your migration experiences?
 - [If the participant has a dual cultural identity] Can you share an experience that captures the duality of your cultural identity?
- Did you bring any artifacts with you while migrating, and how does it help you to hold onto memory and culture?
 - How do different artifacts [photographs, videos, TV shows, etc.] help you to share/talk about your migration experiences?
 - What artifacts, dishes, clothes, food, or things are important in some way?
 - What are some artifacts (objects, heirlooms, photographs, etc.) that are missing or you could not bring during immigration but consider significant?
 - Can you find some of those artifacts online or (e.g., google maps, digital media, etc)
- What are some rituals or experiences you experienced differently now being in 2 countries?

Now that we have discussed a variety of experiences in relation to migration, memory and culture, what will be some possible narratives about your experience you might want to author in VR?

3) Introducing the VR tool and Scenario (20 min - 30min):

So during this part of the study, I am going to ask you to follow the think aloud protocol.

Have you ever used that?

If no: It's super simple, it's just asking you to say out loud everything you are thinking while using the system. This helps me understand what you are understanding and experiencing in the system. If it's too difficult, don't worry too much about it. I might just prompt you to verbalize things as we go.

Now I am going to share some examples of VR narration that we researchers have created for you. You can either experience the environment through VR or by using desktop mode, and you can feel free to switch between them as we go. The desktop is a good alternative if you need a break from the headset.

To start, we have a slide deck with the basic controls. Please take a few minutes to read through this, then we will try them out in a story.

Show participant tutorial slidedeck

We have two stories you can choose from, please pick one.

(if using VR)

Open the story up

Hit share on the story

Put on the headset yourself

punch refresh on the browser

open the story (👁👁 button)

Select the correct starting moment scene

Ensure casting is casting

Sanitize headset

Headset setup

- *Have participant put on the headset*
- *Adjust the headband*
- *Adjust the focal distance*
- *When the participant is ready, tell them to hit Enter VR*

(if using desktop)

Open the story on desktop and open the right starting moment

Demonstrate the look (drag around) panning (hold shift and drag) and zooming (scroll wheel) controls

(If participants wants to change stories)

Open the new story and share

If participant are confident, they can switch themselves, otherwise you should take the headset

Exit VR

Hit back on the browser to exit the current story

Refresh the browser (sometimes needed)

Hit eyes on the new story

Select the right starting moment

Enter VR

4) Debrief (10 min): The last 15 minutes of the session will be reserved for an open-ended discussion with the participant about how they might render their narrative within the VR environment.

- *What are some images or places you want to use?*
- *Is there any audio or music you want to use?*
- *If there is time, the research can help find and download some things from online.*

Final questions

Finally, I would like to ask you a couple of questions about what you think about the idea of creating immersive narratives based on what you've seen with the tool so far.

They will also be asked to think of what other components they might want to add to their narration to foster understanding in their audience (e.g. family members, members of the public, etc.). Possible questions include:

- How do you envision utilizing the VR customization tools to create scenarios?
- What spaces will be more important for you to recreate digitally?
- What elements do you think are important in making a VR-based personal narrative meaningful and impactful?
- How do you think interactivity and customization within VR environments influence narrative expression?
- What challenges do you foresee in using VR for personal or cultural storytelling?

Second Session

1) Intro (2 minutes)

Welcome back. Today we are going to try creating the narrative we discussed last session. Do you need a moment to familiarize yourself with the study protocol?

Are you ready to get going?

May I start recording?

START RECORDING both Zoom and handheld

2) Creation of Personal Narration (35 min):

So in this session, we are going to use the system tools to create a narrative. We have a slide deck here which outlines all the tools in the system, please take a couple minutes to look through it, you can take as much as you like, and come back to this later if you need to.

Just a reminder we would like you to use the think aloud method in this study to.

3) Final interview (15 min):

- How was your experience overall?
 - What were the positives about the system?
 - Was there something unexpected?
- Now that you have created an immersive environment to narrate your experience, how different is it from narrating using 2D artifacts like photos?
- Did our VR system make you feel that you were in a different space and time?
 - If yes, what most contributed to that?
 - If no, what would help to foster that experience of being there?
- -What did you find hardest about translating your memories into an immersive environment like this?
- What were things the program let you do that really helped create your narrative?
- What were things you wanted to do that you couldn't do?
- Can you think of anything that frustrated you when creating your narrative?
- What other different formats of artifacts (e.g., video, etc.) do you think may enrich your narration creation in our VR system? Why?
- Today we created this specific narrative, are there other things you might want to create in this kind of system?
- Are there any final thoughts you want to share?

Part 2 Debrief (10 min):

In the debrief session, participants will be asked if there are any other thoughts they want to share and conclude the study, and the researcher will handle payment.