

March 1, 2010 / Participant #1

N.B.: Hugues moderated this participant, as P's primary language is French. Notes were taken late in session as I was holding the video camera most of the time till it ran out of batteries.

I. Reality testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * **Searched for object information through exhibitions**
- * Did not find object code entry option till much later (did Hugues have to identify the option?)
- * **Made a conceptual connection between the device catalogue theme sections and sections within the physical space [catalogue theme sections weren't intended to navigate through the sections of the physical space]**
- * Eventually found the object code entry screen, and found an object code label
 - * **Was explicitly aware about both at the same time, but didn't make a full connection; didn't think the connection was obvious between the two**
- * **When watching a video, difficulty finding the volume controls on the case of the device, and inadvertently changed the orientation of the video**
- * Ended up watching video in portrait mode (video aspect ratio more ideal for landscape) [can we force orientation?]
- * **Participant spent a lot, possibly most (seemed like 80%+), of his time looking at the device and not the space, largely because he was having difficulty making the connection between the objects virtually and physically (i.e., difficulty in finding objects)**
- * [we really need to make the application simple—/*cantreadmywriting*/... affects physical space]

I. Reality testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * P: “It takes a while to load”
- * P: “Is this what it’s talking about?” (looking at “read more” of an exhibition and the physical space)
- * **P: “It’s a little confusing... what the introduction [screen] is” (specifically, the “Simply Montreal” initial screen)**
- * Went to ‘Simply Montreal’ under Exhibitions first
- * Made a conceptual link between exhibitions catalogue and the space
 - * **Uses exhibitions catalogue as the primary mode of navigation through the space and objects**
- * Finds the Exhibition intro page (“Simply Montreal”) a bit confusing; and the use of exhibition catalogue mode even more confusing
- * On artifact view:
 - * P: “The pictures are cool”
 - * Finds the pictures cool (repeated twice within the span of a minute or two) [we should capitalize on this more]
- * **P: “It’s confusing... where you should be looking, what pictures you should be looking at while you’re going through the exhibit?” (not sure what to look at while in exhibition with application)**
- * After a few minutes, seems to be finding objects in space in the catalogue pretty well—made a number of positive hits [this is surprising!]
- * Discovered artifact comments feature, but made no use of it yet
- * **P: “I’m a little lost as to where these headings (exhibitions catalogue), what I should be looking at.”**
 - * Participant is lost: where are the items; difficulty in making a physical space vs. catalogue list relationship (P is trying really hard to find/make that relationship)
 - * P: “Are the titles under the exhibitions catalogue the same as the physical section spaces?”
- * **P: “Are the pictures (really means “these artifacts”) additional content? Are they not in the physical space? Possibly from other places (outside the collection [or in storage])?”**
- * P: “What does it do you when you ‘Collect’? Maybe if you’re thinking of buying a picture, to buy print afterward? At the end of the exhibit you have a collection of stuff?”
- * Sees evening dress in front of her, sees evening dress thumbnail, makes the conceptual link
 - * Likes how it says what it is on the device screen (re: the virtual tombstone label); tells you the date
 - * Collected it; P: “Don’t know what it does”

- * **Made a link between a section on the catalogue and the physical space because P saw an object in the space that she saw on the device just before**
 - * **P: “Now that I know where I am, feeling a little less lost” [only needed a single object link to feel that comfort]**
 - * Currently feeling less lost, after seeing familiar objects in the space and in the catalogue list
- * **Sees artifacts on the device, but where is it in the space? (P: Where are the bottles?) Asks, “Is it additional content?”**
- * **Sees artifacts in the space, but where is it on the device?**
- * Attempting to use comments feature:
 - * On entering a comment, and trying to use the on-screen keyboard: P: “Might need a little pen [stylus]”
- * Participant has not yet use the “view all” functionality in catalogue; just the default full catalogue view
- * **P: “Maybe if it [device] tells you where to go first...”**
 - * Would like the device to provide direction/path, where to go next [this participant wants something predefined, linearity]
- * Notes “view all” option in catalogue
 - * **P: “I think I figured it out, I’ll click on view all, that’s where I got confused, only saw four items per section”**
 - * Likes the list of all those artifacts; P: “Pretty cool”

II. Task-based testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * M: Showed object code labels and object code (participant did not recognize them in the space in reality testing)
- * P: “So object code is like those handheld devices where you can enter a code to learn more”
 - * P: “Is there an enter button?” (while waiting for the artifact view to load)
- * **Really likes the extra textual descriptions (noted this several times) (provides more than what’s on the label)**
- * Really interested/curious in seeing what My Collection is for
- * Sees video icon on physical label; P: “Does it have a video?”
 - * Tapped on ‘Play’ of video (even though it plays automatically)
 - * Really loved the video—made new interesting discoveries
 - * Likes the close-up video, and the Ken Burns Effect video (hockey trophy)
 - * **Not always paying less attention to the video—looking at space/the object a lot while watching**
 - * **P: “Will we have headphones? Might be annoying to others if video is playing.”**
 - * P: “Are pictures playing in the video also part of the exhibit? (or are they extra?)”

- * On hockey trophy video: participant unsure which object the video/label is for (object label was stuck to a case containing multiple objects)
- * **Likes close-up images in video because you can't see the detail in the object itself, even when it's right in front of you**
- * **On related objects: "neat"**
 - * P: "Are these the related objects? No?" (pointing to space)
 - * **P: "Are the objects actually around here, in the space? – Maybe not, could be an extra; not really expecting them to be in the space" [need to make in space and not in space more explicitly]**
 - * **P: "I like that there are extras"**
- * **P: "It'd be cool if you could zoom into the pictures"**
- * **P: "Explanations are helpful—didn't actually know what it was before" (re: foot warmer)**
- * "My Collection"
 - * P: "What do you do with them? Maybe like a bookmark?"
 - * **(on entering email for send) P: "Where are the symbols?" (for '@')**
- * Leaving comments for exhibition
 - * P: "Is there a section for that from 'Home'?"
 - * P: "Would think that's just under the pictures (for artifacts)"

III. Interview notes

Bullet numbers correspond to the interview question number.

1. *Easy?* Found it pretty easy to use the application. A little confusing at the beginning because P didn't realize that the pictures went with the different sections of the exhibit. Understanding what's in the space, what's not took time.
2. *How long to understand?* Took less than five minutes to understand how the application generally worked. Can't imagine P's mom would find it immediately intuitive though; might ask, "Wait, you would touch it here?"—would take her a while to learn, but not too long.
3. *Problems?* Video crashing (we had a kernel crash on the device). No major frustrations. Touched the wrong buttons sometimes (e.g., instead of tapping collect, accidentally tapped back button). Didn't think right away to keep scrolling on artifact view and look at related items.
4. *Improvements?* Tell people how it works, explain how it works briefly when they come in. Like it the way it is right now. Thought it was pretty cool.
5. *Additional features?* Liked the videos. Would like it if videos gave more visual context and use.
6. *Discoveries?* Yes. Foot warmer. Didn't know what it was before, even having visited before; just looked like a box. Liked the hockey trophy video—told the history of it. Easier to listen to it than read it on the label [or device], especially if it's a long passage. M: "What about audio vs. video?" Prefer video, because it showed different pictures, though some videos like the foot warmer only had audio with one picture.

7. *Museums & mobile?* Yes, especially if you had a device already; wouldn't need to rent one from the museum. Liked "Send" feature (My Collection). Wouldn't need to carry a camera around; more convenient. Wouldn't need to sit there and take a crappy picture—instead, the museum's already done it for you professionally.
8. *Best video?* Really liked hockey video because of interest in hockey, and history of it. But also liked curling one because of the different pictures and angles and zooms.
9. *N/A.*
10. *Overall impression?* Think the application is cool. Liked the pictures. Liked the videos best, and being able to read more.
11. *Revisit when it's done?* Yes, would revisit museum after the application is complete, and go through all the object code numbers.

IV. Summary notes

Experience notes

- * Found some parts of the application confusing. Difficult to understand how the application should be used.
- * P wanted the device to tell self where to go
- * Used the exhibitions catalogue as the primary mode of navigating through the space. Didn't notice the object code labels until they were explicitly pointed out.
 - * This caused some confusion. Tried really hard to link objects in the space with objects in the device. Unsurprisingly, had substantial difficulty doing so. Surprisingly, P did find some success in using it via this mode after passing through some initial confusion.
- * Difficulty understanding what objects in the space can be found on the device, and what objects in the device can be found in the space
- * A little uncomfortable listening to the video without headphones on—conscious about bothering others in the space
- * Really liked:
 - * Pictures (something we should capitalize on more; multiple images, zoomable images)
 - * Extended text description (though P has mixed feelings on reading extended text in-museum)
 - * Video (liked both the additional imagery and the audio commentary, as P doesn't always want to read long text)
 - * Related objects
 - * Lists of objects (as in the full 'view all' exhibitions catalogue)
 - * Liked being able to send one's collection to an email

Usability notes

- * Difficulty entering email address in My Collection (couldn't find '@' symbol)

I. Reality testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * **P: “Does it guide me? Or do I guide it?”**
- * Started by going to exhibitions
- * P: “What exhibition am I in? ... Must be ‘Simply Montreal’”
- * **P: “I had to scroll back all the way up to the top when I was at the bottom of the page—not nice.” [a persistent, always-on-top bar would help with some of this]**
- * **Viewing the default full catalogue. M: “Why did you choose this?”. P: “Because it was on the screen; would guess that it’s asking me what I’d like to see” (reasoned that because it was there, that’s what he was supposed to do and see)**
 - * On full catalogue: P: “Lots of options here”
- * **P: “Doesn’t guide you in a linear way”**
- * P: “Takes a bit of time to load up”
- * **P: “Shows me the picture [of an artifact] but not where in the exhibit it is”**
 - * P: “Would be easier if there was a map of the exhibit floor and tell me where I can find this item”
- * Standing in front of case with winter clothing, going to full catalogue to try and find objects
 - * **P: “Looking visually for it.”**
 - * P: “Are all these items [physical space] in the database? Are they grouped by case?”
 - * Sees groups of artifacts on device, but not sure where they are in the space
 - * P: “Clearly not a linear exhibit, very open-ended exhibit”
 - * P: “Would be easier if I could tap on a map where I am, and it would bring up the case that I’m looking at”
- * Sees section headings/titles in catalogue
 - * **P: “Not sure where in the exhibit where it gives me that title; don’t see areas with that title”**
- * **P: “Don’t seem to be able to search for artifact on the mobile guide”**
 - * **Would like to be able to type in a keyword/title like “Stove” and get the object; and if able to find that, would think to be able to find objects nearby it**
- * P sees physical object, but can’t find it on the default full catalogue view (doing a visual scan); not sure if all the objects in the exhibit are in the guide
- * Notices “view all” option
 - * **P: “Kind of small—would be better if it were bigger and more noticeable”**
- * P: “For those who aren’t used to these sorts of devices, it’d be good if there’d be a tutorial on how to use it beforehand... handbook, or demo on device”
- * P: “Would be nice to type in a word and see if you can get more information” (search ability)

- * Looking at a print in the space, looked for it on the device through the catalogue view using view all, and successfully found it. M: “How did you find that?” - P: “Print looked like it was in a sports-themed case, so I scanned the section headings and I tapped on ‘view all’ of a sporty-like name”
- * P: “To get back to the previous screen, need to scroll all the way back up; would be nice if there were buttons on the bottom too”

II. Task-based testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * M highlighted the object code labels and object code entry option on the device
- * P used object code to access an artifact, but made a typo on the second digit; entered an invalid code, but recovered from it quickly (no difficulty)
- * On asking how to refer back to an object for the future, P responded by using “add a note” under an artifact [note vs. comments could have caused misunderstanding here]
- * On the comment/note entry screen:
 - * P: “Doesn’t say how to enter a note” (no keyboard popped up)
 - * On trying to submit, tapped: RET, then DONE, then SUBMIT
- * M: “What do you think comment does?” — P: “Leaves a note to self, or for subsequent visitors. Are comments permanent? ... It’s probably for subsequent visitors”
- * M: “What do you think ‘Collect’ does?” — P: “Don’t know.” (tapped ‘Collect’, tapped ‘Go to My Collection’) P: “Looks like you can assemble and send email of it to yourself or others.”
- * P watching an artifact video; finding the volume is low; P put the device to ear to try and hear better, but then back in front of self to view the video
 - * P: “No way to turn off the video mid way?”
 - * While watching the video, P looks mostly at the video, but sometimes at the actual physical object too
 - * Looks like P wanted to tap the screen a few times during the video, but restrained self for some reason (not sure what it would do, didn’t want to ‘break’ it?)
- * **After sending My Collection to self: P: “It’s apparently sent to my email?” (no submit feedback)**

III. Interview notes

Bullet numbers correspond to the interview question number.

1. *Easy?* Sort of easy. Don’t have an iPhone, and no experience with handheld touchscreen, but pretty easy to get used to it. Maybe an older person would have difficulty with it.
2. *How long to understand?* Not too long.

3. *Problems?* Screen is very sensitive, need to be careful about where you're touching, and not touch things accidentally. If you're looking for something in the physical space, can't really find it on the mobile device. A map would be nice—to tap where you are in the museum, and see what's there. Or a search feature, and when you tap on one of the objects, it shows nearby objects too. (M: What if all objects had object codes?) It'd be helpful, but it might be a lot to put on every single item, and might not be useful to put an object code on objects without much information.
4. *Improvements?* A static navigation bar so that you don't need to scroll all the way up.
5. *Additional features?* No way to stop video mid way through or scrub back to an earlier scene. Might be good to have earbuds so as to not disturb others.
6. *Discoveries?* Yes, very interesting, especially for some artifacts that don't have a lot of description (on the physical label), nice to go more in depth.
7. *Museums & mobile?* Great idea; a lot handier than carrying an exhibit guide with you. Would use it if the museum offered it.
8. *Best video?* Didn't have a preference; would be based more around interest of topic.
9. *N/A.*
10. *Overall impression?* Think it's interesting. Can be improved. It's an ingenious tool. Interested in seeing it, interested in seeing what the final version looks like.
11. *Revisit when it's done?*

IV. Summary notes

Experience notes

- * Before turning the application on, wasn't sure what sort of experience the device would offer (“Will it guide me? Do I guide it?”)
- * Used exhibitions catalogue as the primary mode of navigating through the space. Had difficulty finding physical objects on the device, and vice versa.
- * Wanted a floor map of the space to bridge between the virtual and the physical

Usability notes

- * Had to scroll all the way back up when at the bottom of a screen when needing to go back a screen or back to the home screen

I. Reality testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * **P: “I had no idea what idea the software would be doing.”**
- * P knows the photographs well (is the photo archivist at the museum)
- * Notes object code label, and notes the object code entry option on the screen
 - * Enters the code for an object
 - * Looks at device, looks at object, P: “Looks about right”
 - * Upon looking closer, notes that they’re actually a bit different (object is a photograph, but photo in the artifact view is a negative plate)
- * Saw ‘Collect’ option in artifact view, tapped on it to “see what happens”
- * **P not scrolling on the artifact view**
- * P: “Performance is a bit slow”
- * **Sees numbers on other labels (not object code labels), tried tapping it in, but didn’t work**
 - * **Wanted information for an object that we didn’t have a direct code for**
- * Browsed through Exhibitions screen
 - * Found full catalogue, looking for thing
 - * **P: “Good, but not as good as having a number to tap on screen and find out more information.”**
 - * **P: “Wanted to find that thermometer; if there’s a search facility, that would be nice, that way I can enter in the name if I knew it”**
 - * **P: “I don’t see it on the list; is the list complete?”**
 - * **P: “Lots of other neat stuff, but not that one”**
 - * P: “Let’s try one of the view alls, in case the thermometer is in there—nope, no sign of it”
- * **Would be nice if there was a navigation bar at the bottom instead of going all the way back to the top, or a thing at the bottom saying ‘go back to top’**
- * Saw a cap and some other objects in the space, trying to find it in the device (using default full catalogue)—can’t find them in the device
- * **P: “[Theme] sections in the device don’t seem to match up with the sections in the actual space” [if we’re going to use section names, and have it available in the in-museum experience, we’d better make sure the physical and virtual content maps really well to each other]**
- * **Sees stove in the space, remembers seeing stove in the full catalogue. P: “Let’s see if that stove is in here [the device]”**
 - * P: “Let’s see if it picks up the right one... Yep, picked up the right one.”
 - * P: “Going to try adding a note, just to see if it works.”
 - * Correctly tapped on text field to bring up keyboard

- * Tapped DONE, then SUBMIT
- * Did not look to see if self's comment showed up under the comment list
- * **P: "Unclear whether these comments are personal comments, or whether it'd be publicly visible."**
- * P: "It is a little slow. It's still working on it."—M: "How do you know it's still working on it?"—P: "There's a little 'I'm loading' symbol at the top."
- * Makes occasional mistakes (i.e., intends to tap one thing, but ends up tapping another)
- * P sees a painting in the space, looking for it on device (painting does not have an object code)
 - * **P: "Is there a way of looking for items by type of item? If I know what I'm looking for is a painting, maybe there's a way to look for it without looking for it up and down the list."**
 - * **P: "Doesn't seem to be a way to look for a painting when you know it's a painting; you'd have to get the whole list out. Not what I expected."**
- * Full catalogue not entirely intuitive—only see a few artifacts within a section, and thinks that's all there is
 - * P: "The 'view all' thing should be a little louder"
- * On a painting:
 - * P: "Tapping on the image doesn't bring it up bigger, and zooming doesn't seem to do anything."
 - * **P: "Already have the thing in front of me, but if I wanted to see a detail of it, it'd be nice if I could click on it and zoom or something like that."**
- * On performance: P: "It seems to do a two-step thing—I click on it, and it loads, and then does something, and then loads again. It's a bit disconcerting."
- * On seeing a media badge icon in the list (incorrectly as an audio icon, but really is a video):
 - * **P: "This one has sound—can I pull out my earphones and listen to it?" — M: "There are built-in speakers." — P: "Yes, but they're very tiny sounding."**
 - * Goes ahead and tries to listen to it
 - * **Taps on the list item, and then immediately puts device to ear—does not think to look at screen**
 - * With no audio coming out, P notes not hearing anything, and looks at screen, pushes volume buttons up and tries putting to ear again
 - * Presses back and tries tapping on the actual audio symbol
 - * Expected audio to start playing when tapping on item, simultaneous with being able to view artifact
 - * Tried this for multiple artifacts, also with code entry
 - * P: "Have to go right back to the beginning to enter one of these numbers" (repeated multiple times)
 - * **P: "... in fact, right back to the beginning... probably to the home page... right back to the entrance of the page" (some annoyance detected in voice?)**
 - * **P: "If we wanted to type in the number a little earlier, it might be nice to put the option in a little earlier"**
 - * (used back button instead of 'Home' button)
- * Was in artifact view after object code:

- * **P: “Need to work my way back into Exhibitions again because to get out of the object code thing you need to go all the way back to the beginning. Some exit, halfway along would be a good idea.” [did not use ‘Home’ button; also, Exhibitions and Object Code Entry modes were designed to be separate experiences, but clearly this isn’t the case with actual users]**
- * P: “Excellent idea to have the object image and description on the screen because it might be difficult to see details on the object, or if the lighting is bad, the label”
- * **M: “What do you think the collecting option did?” — P: “I would think it would put the information and image into a separate little group that you should be able to recall later. What you would do with that is up to you, maybe for student papers or research. Hopefully you’ll be able to look at it after the exhibition, maybe with some saving technique, maybe access these things from the McCord website afterward, maybe download the image to use in a presentation.”**

II. Task-based testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * On playing a video, P knew to flip the device’s orientation to get a bigger landscape video
 - * P notes the interface: controls, scrub, length of video
 - * P interrupted the video, didn’t appear to want to watch the rest of the video, tapped ‘Done’
- * P notes that none of the related artifacts are from the video (re: curling stone video)
 - * P saw a picture of something in the video, wanted to know what object that was, and found no identifiable way of finding it [our design relies on the content-provider to put in appropriate items under related artifacts and has no explicit affordance for discovering objects in the video in the device]
- * On having to enter more object codes, P notes wanting access to the object code entry screen from the home of an exhibition and elsewhere—not just from the home screen
- * On entering an object code, P asks what to do if made a mistake on the second digit entry? (automatic submit)
- * On video of hockey cup: really nice, likes how it shows things you couldn’t see otherwise
- * P: “It’s not clear whether the guestbook is for the object or for the entire exhibition” [not sure how it could be for an object?]
- * P notes that there’s no confirmation that a guestbook entry is added

III. Interview notes

Bullet numbers correspond to the interview question number.

1. *Easy?* Easy to use. The response was slow. Some of the flow didn't quite work well, for example, comments: you would tap show comments, but you weren't aware that they were below the screen [fold].
2. *How long to understand?* Pretty fast. Couple of things could be modified though—e.g., a way to get back to the section you were in a little faster (e.g., object code entry). It's almost easier to go back to home and restart the exhibition.
3. *Problems?* Not really, other than the ones mentioned. Potentially a really neat idea, really like it. Does need to be tightened up a bit, and maybe work a bit faster. The vertical vs. horizontal orientation of video was a bit irritating though (video had a black trim on the left and right sides, and showed up as small in both horizontal and vertical modes).
4. *Improvements?* Speed. An exit here and there, to get to main screens. There's a home one, but when you're at the bottom of the screen you need to scroll all the way back to the top. Some way of getting out of what you're doing, now.
5. *Additional features?* A link to the internet, especially the McCord website. A way of telling the McCord something right away, commenting directly to the staff (e.g., if you're interested in donating something, or something's wrong with one of the labels). Otherwise, seems pretty good already.
6. *Discoveries?* Yes, about the foot warmer—where it'd be used, etc. Liked the who/what/where/when extended description.
7. *Museums & mobile?* Great, think it's natural. Helpful, gives more information than what's in the label, more context of where it fit in its universe. You could probably add far more information, an extra section for really in-depth information [multi-tiered information detail... interesting]. Could add sponsorships and ads too.
8. *Best video?* Foot warmer one, because it was horizontally oriented and gave more detail in the horizontal orientation. The hockey cup one didn't fill the vertical aspect ratio.
9. *N/A.*
10. *Overall impression?* Like it, definitely. Needs improvement, but it's a good start. And so many people are carrying around these mobile devices now.
11. *Revisit when it's done?* Yeah, like to try out, see if it's faster and see what improvements you've made to it. Think it could be applied to other exhibitions too.

March 2, 2010 / Participant #5

N.B.: We lost the audio/video data for participants 5 and 6 reality and task-based testing. The notes under those sections are brief because I've relied on the limited notes I took during moderation. Also, application crashed unusually often with this participant.

I. Reality testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * P tilted the device horizontally from the get-go instead of using it in vertical mode
- * P spending time browsing through the various options, tapping on them, and tapping back (browse through: home, exhibitions, object code entry)
- * P tilted the device back to vertical orientation when exploring exhibitions further (no particular reason given)
- * P: "Can't seem to go back" (this was a performance issue—P tapped back successfully, but nothing appeared to be happening)
- * P exploring 'Simply Montreal' exhibitions; sees object code label in the space, but doesn't see it in the catalogue list. P notes not wanting to search thru the catalogue manually.
- * **P: "Am I supposed to explore this chronologically?"**
- * P: "It's very unresponsive." (P sounds annoyed/irritated)
- * **P notes collect functionality, thinks it's interesting; but that there's no extra information on the object, and finds that uninteresting (P was looking at a regular, uncoded object found through catalogue without extra information) [expectation of information if it's there]**
- * **P assumes that the exhibitions catalogue is in a particular order to visit the space, notes that some visitors might not like this**
 - * **P notes that the experience is disjointed, that the device doesn't keep the same pace as space**
 - * **P trying to use the catalogue as a linear tour—skipped a few sections on the device to try and keep up with physical space**
- * P accidentally tapped home button, exited application
- * P notes wanting read more about the narrative behind an artifact as opposed to the technical information (tombstone label)
- * P noted object code label and code entry option from home screen; entered code 09 (curling stone)
 - * Tapped video text label, didn't work (device didn't register the tap); tried tapping the icon (device registered the tap)
 - * Thinks the extended description and video here is more interesting
 - * Liked related artifacts functionality

- * While seeing object numbers on the label for other objects, P asks: “Are the object codes just for the black labels with icons?”
- * Uses ‘Home’ on navigation bar to get to home and then to object code screen (as opposed to tapping back several times)
- * P watching another video (object code 07, ice saw)
 - * Notes that the artifact description is the same as the video narrative (didn’t look impressed)

II. Task-based testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * P asks if the guestbook under an exhibition is a general comments box
- * P wanted to read the comments, intended to tap ‘Guestbook’ (non-actionable header), but mistapped ‘Add a note’ (which is right below the non-actionable header)
- * Entering a comment; tapped empty box to bring up keyboard; tapped DONE first, then SUBMIT to submit

III. Interview notes

Bullet numbers correspond to the interview question number.

1. *Easy?* Easy in the sense that it was intuitive. But things took longer to load than generally experienced on the iPod touch/iPhone. Found initial Exhibitions screen unintuitive where you had to scroll down through every artifact. The artifacts were grouped in collections which was easy, but would’ve been better to have a menu to jump right to the portion of the exhibition that you were at.
2. *How long to understand?* As soon as saw the home screen, and how it was divided up, and understood the top-level categories.
3. *Problems?* In terms of collecting, not sure how useful that would be if the devices weren’t your own (i.e., renting). Not sure would feel the need to collect or store object for later. Didn’t feel there was significant difference between information provided in the physical space and on the device. Appreciated whenever there was a longer description, or if there was a video clip, but for most of them even if there was a longer description not really useful to P (extra stuff not really useful to her). M: “Do you like reading the labels and panels?” Sometimes, year, material, and donor is interesting information, if interested in the work itself. Also, not sure how useful it is to include artifacts that don’t have extended descriptions or video clips. Seemed repetitive, when the information was already in the physical space. But may be good for people who don’t want to read off the wall, etc.
4. *Improvements?* Value adds—something more than what you can already get from reading the panels. Liked function of related artifacts—maybe a different type of taxonomic structure

that could lead to other things, like a recommended feature. Really questions necessity of having collection functionality at all—would replace that with something else more experience-centric (i.e., something that could be used during the visit, not after it's over). Don't think that visitors would use collected objects at a later time. Add a museum map. Basic information, phone number and hours. Focus on museum, add more contextual details. Like a matching game, something to engage the visitors. Sees a future for mobile devices providing a more interactive experience, especially good for people who don't visit museums out of their own volition.

5. *Additional features?* Focus on interactive games. Art museums are different from historic museums; for exhibits that are genealogically-based, so interesting in terms of tracing history and country of origin—would be interested in seeing contextual information, what artists inspired other artists, etc. Games. Fun. But for P, museum experience is about being in the physical location, instead of interacting with a mobile device. M: “Would you use games or interactive media on the mobile device?” P: “No, and don't usually use audio devices either.” Does take a map though. Order of the sections in catalogue seemed to be pretty on, but some parts were spotty. A blueprint of the room, being able to tap where you are in the space. Something less text-heavy, more visual. Freedom to walk through the space the way they saw fit, less linear experience.
6. *Discoveries?* Yes, liked reading about the hockey cup and the history and context that offered.
7. *Museums & mobile?* Would be cool, actually. If it was free download from museum, would definitely have it (P has an iPhone). Might not use it for everything, but would be nice option to have. If it's a front-desk option (i.e., rental), most likely wouldn't take it, unless it was being advertised with a particular feature. Don't like the idea of standing in the exhibit, and watching a video on the mobile—not useful, and don't like people looking at P while watching. Doesn't like the idea of visitors milling around watching video in the space.
8. *Best video?* Liked the widescreen effect. But doesn't seem appropriate to have with others in the space, and the ambient noise. Don't feel like it added value to experience.
9. *N/A.*
10. *Overall impression?* Don't think it adds enough value to patrons. Most of the information already exists. Video would be better if it were more private, with headphones. But wouldn't pick up the device if available at the front desk.
11. *Revisit when it's done?* No.

March 2, 2010 / Participant #6

N.B.: We lost the audio/video data for participants 5 and 6 reality and task-based testing. The notes under those sections are brief because I've relied on the limited notes I took during moderation.

I. Reality testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * P started by going to Exhibitions, did not notice object code entry option
- * **P: “Not sure if the device is providing information for the exhibition”**
- * **P spending a significant amount of time looking at objects without the use of the device (possibly looking for cues in the space to use the device?)**
- * Tapped on ‘Being Irish’ exhibition (it’s first on the exhibitions list in English; not sure if P is aware which exhibition she’s actually in)
 - * Browsing through catalogue of ‘Being Irish’
- * Went back to home screen, browsed to object code entry screen
 - * P: “But what is the code?” (confused about where to find numbers)
 - * Participant tapped in a random but valid code—not of the object in front of her
 - * Went back to code entry screen, and staying there for several moments (looking for something to enter?)
- * P alternated between going to Exhibitions and object code entry screens (seems a bit confused about where to go)
- * P observes and notes the object code label beside a physical artifact (this label had an extended text icon)
 - * P: “What is that for? Is it for reading a book?”
 - * **P tried pressing the physical label as though it were a button**
 - * **P: “It’s not a button”**
 - * P eventually makes the link between object code label and entry after a few more moments, and successfully arrives at artifact view of the object in front of her
- * P in front of curling stone object, and enters the appropriate object code
 - * P scrolls through the information and watches video
 - * P notes pictures from videos, and looks for them in the space (to no avail)
 - * Continues browsing curling stone artifact view after the video is complete
 - * Browses through related artifacts

II. Task-based testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * P looking at object in physical space (photograph reprint) and of object in digital space (photo of negative slate), and notes that they're not the same
- * Collected the object. M: "What do you think that does?"—P: "For looking at it later"
 - * Collects if it's interesting to her or she thinks it'd be interesting to friends
- * On video of foot warmer:
 - * Expected more from the video
 - * **Liked how the video explained its use, but was not impressed that it used just one still image with audio [what's the difference between having an artifact image on screen + audio, and a 'video' with a still image and audio track?]**
 - * Spends time looking both at actual artifact and the video (roughly 50-50)
- * P notes (for the first time) that the performance is slow
 - * P appears patient (at least verbally), but taps a lot on the screen
- * On sending collection to self:
 - * **P: "Did I send it properly?" (there was no feedback)**

III. Interview notes

Bullet numbers correspond to the interview question number.

1. *Easy?* At the beginning, a little bit confusing—there were no instructions on how to use it. After a few minutes of using it though, was able to find information she was looking for.
2. *How long to understand?*
3. *Problems?* Didn't understand what 'object code' meant. Put in a few random numbers to try it out, and then understood that it meant getting more information about a picture. [trial & error] A little slow—thought it was her fault (not using it correctly somehow).
4. *Improvements?* Make it faster. Give tips/instructions. Make it more clear how to use the application.
5. *Additional features?* Make it like a [human] tour guide—as soon as you enter the museum, it starts to speak. Also teaches you how to use the device: what the object code means, where you should start, follow some timeline, etc. Liked videos. Would like enlarged pictures, then she wouldn't need to step so close to the item.
6. *Discoveries?* Yes. Makes the museum tours more colourful. Can read things, watch videos. Not just the picture or the item—more information, more perspective, the other side. Absolutely helpful and useful.
7. *Museums & mobile?* Definitely useful. Interesting. It's not just walking through the exhibitions; it like someone teaching you about something you don't know. But some

visitors might not be patient enough to read all the words on display. It'd be more interesting if the device would talk to them like someone reading a book audibly.

8. *Best video?* Curling stone video. The foot warmer video wasn't really video—it was just audio describing things. Would have liked to see more about it, like seeing how it works. The curling stone video had more information.
9. *N/A.*
10. *Overall impression?* Cool. Quite useful for young people (teenagers and above), because they're willing to try new things. If her mother were trying it, and failed at the beginning, would probably stop using it.
11. *Revisit when it's done?* Yes, definitely. Hope every museum has it.

March 2, 2010 / Participant #7

N.B.: This user has some bias as she had (limited) involvement with setting up the pilot, and knows the exhibition very well.

I. Reality testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * **Assumes that the museum would have told a bit about how the device should be used when it was rented, or maybe not**
- * Playing around with the application first
- * Accidentally chose the wrong language, attempting to correct, takes a long time. P: “The spooling is quite long”
- * **Goes to ‘Simply Montreal’ under Exhibitions first to “get ready” before exploring the space [because they’re given to this in-museum, visitors must think every part of the application is useful/needed for the in-museum mobile experience]**
- * Currently in ‘Simply Montreal’, but sees object code label in the space, and remembers seeing an object entry icon in the application
 - * **Afraid that tapping ‘Home’ will bring P back to the language selection (and not the main menu)**
 - * Tapping ‘Back’—P: “Back? Back is not working. Back? Okay... back.” (performance issue)
 - * **Expected to see an object code entry option under ‘Simply Montreal’ in exhibitions, but not seeing it [user thinking that ‘Simply Montreal’ under Exhibitions is the one-stop shop for mobile experience for ‘Simply Montreal’!]**
- * Enters object code for object in front of her
 - * Expecting sound to come out after entering the code, even though she saw the book icon on the label
 - * **P: “Where’s the enter? Oh, ‘Opening artifact page’. I thought there’d be an enter key.”**
 - * Same picture? Yes, no, yes, no, yes. (it’s not exactly the same—the physical picture is a reprint, the digital one is of the negative)
 - * **Skimming through extended description—P: “There’s a lot of text here... that’s a lot of text”**
 - * **Information on physical label didn’t prepare her for the quantity of information presented on the mobile device; lots of scrolling; would want more introduction into the matter before having all that content**
- * Went to Exhibitions to try and find object code entry again (trying ‘Read More’, and ‘Catalogue’)

- * Tapped on 'Read More'. Expecting introduction text, and an index of some sort, links towards different access points (podcasts, texts, etc.)
 - * **Just sees introduction text. P: "I probably would've already read this prior to coming here."**
- * Sees an object in the space in the catalogue, and taps on it to see what's there
 - * **P: "No information more than what's on the tag. Not really much use to me right now."**
 - * Sees 'switch to grid mode' icon, taps on it thinking that it'd bring the object code entry screen
 - * P: "It's giving me the same sort of objects, but in a more gallery view... Really thought that'd be an access point where I can punch in the object codes, but now I realize I have to get completely out of this to get to the object code entry."
- * Enters an object code for object in front of her (red sleigh)
 - * Compares physical and digital tombstone labels—notes that they're different, and more precise on the mobile device
 - * Reading full text (tapped 'More'); notes that the digital description is very similar to the one that's the one in the physical space
 - * Tapped 'Less' instead of scrolling up because "I'm lazy"
 - * P: "It's too bad that the whole page doesn't fit on the screen—if I'm at the end, I have to scroll all the way back up"
- * Anxious to see something more visual, less text
- * P: "I'm getting very nifty and good at [using] this" (approx. 15 minutes into session)
- * On comments entry:
 - * **P: "There's nowhere to type in a comment. There's no keys. There's something missing, because there's nowhere I can type in my comment. Is it recording my voice? Is there something I'm missing? Am I trying in vain? This must have been thought out. Is there something I'm not finding, or is it not done?"**
 - * Accidentally tapped the box, and keyboard came up
 - * P: "This is a weird keyboard"
 - * Confused about the international globe symbol on the keyboard, sees that it's a change language [could cause confusion—keyboard and application languages might be different]
 - * P: "I have pretty good eyesight, but I can't read what I'm typing" (font too small)
 - * Wanted to see if her comment was there, and looked for her comment
 - * **P: Tapped 'Show comment' several times, but appeared as though nothing happened (comments expanded below the fold)**
- * On an object with media:
 - * **P: Tapped 'Show audio and video' several times, but appeared as though nothing happened (audio and video list expanded below the fold)**
 - * Successfully started and restarted (via scrubbing to the beginning) video
 - * P: "How long is this video? Oh, a minute twenty-two left."
 - * P: "Just an image and nothing else" (video of static image and audio track)
 - * P: "It said I have a movie, why all the text?"

- * On related artifacts:
 - * P: “Probably not something that’s not here because there are no engravings in front of me”
 - * P: “That’s neat.”
 - * **P: “Even though it’s not identified, it looks like it’s an object in the collection that’s somewhere else or not in the collection... but it wasn’t too obvious that it was an extra bonus information, and not something that was in front of me.”**

II. Task-based testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * On foot warmer video:
 - * Would be nice if there are other images, a slideshow of related objects
 - * Can’t zoom on the image
 - * No interest in watching it—eyes would be elsewhere in the space—but maybe that’s a good thing
- * On getting to the curling stone object from the foot warmer object:
 - * Going to use ‘Home’ instead of ‘Back’, because learned that using ‘Back’ makes you go through a lot of pages before getting to where you want to go
 - * Ended up using ‘Back’ anyways, and got to the object code entry screen quickly
- * On curling stone video:
 - * P: “A lot more interesting—that’s what the other one should have showed” (slideshow of images, some related objects, some zoom-ins of the current object)
 - * P: “This video is really good... well, it’s not really a video, but a slideshow. A lot more satisfied.”
 - * P: “All the movies should be like this.”
- * M: “What do you think ‘Collect’ does?”—P: “I guess it does something like a shopping basket, which I think I access from ‘Home’?”
 - * Went to My Collection, but didn’t use “Tap to go to My Collection” even though it was showing. Went to ‘Home’ -> ‘My Collection’ instead
- * On sending collection:
 - * P: “I don’t know if it was sent, it didn’t say ‘Your message was sent’, but I’m guessing it was sent. Maybe I didn’t submit properly? A bit confusing.”
- * On reading a comment of an artifact:
 - * P: “Oh, abuse reported—someone did something nasty.” (P didn’t appear to notice the garbage comment, ‘ddkfjsiejf’)
- * On hockey cup video:
 - * Nice that it’s zooming in on the object, because it’s a small object to begin with
 - * **P: “I think that’s a nice feature, to zoom on the object”**
- * **Confused about comments vs. guestbook vs. note**

III. Interview notes

Bullet numbers correspond to the interview question number.

1. *Easy?* Too bad that the object code entry was not in the digital exhibition environment—had to exit that to enter the codes. Would have felt more like a guided visit if once at the ‘Simply Montreal’ page, could have kept that open while looking through the exhibition. Instead of hide-and-seek to find things, would have been nice to have an index of things what was offered. No idea how much one should be using the device—having an index can indicate how much mobile content there is for the exhibition. Sometimes text was small and hard to read. Performance problems.
2. *How long to understand?* Fairly quick. Understood object code and My Collection well, but not Exhibitions.
3. *Problems?* Small text, long load times. Link between “pod” and exhibition is feels disjointed—should be entering the code in the exhibition. “Pod” space is like the exhibition space. Once a visitor has entered the ‘Simply Montreal’ virtual space (the detail page), that’s where you should get detailed information—that’s the context. It seems odd that you have to go back to the home page and into object code entry.
4. *Improvements?* Video clips that presented a static image were not interesting. When there are related artifacts, visitor should understand that it’s not something you should go hunting for (because it’s not in the space). What makes the tool interesting is that what you’re getting is a bonus—P doesn’t know when what’s being displayed is a bonus or not.
5. *Additional features?* Having more video. Different views of objects. Restoration before-and-after images of objects. Showing what’s hidden about the object (e.g., underneath the object, inside of a coat), showing a whole side of an object that you can only see virtually. Showing how the object was used. Spent a lot of time looking at the device, and not the exhibition itself, maybe too eager to find flashy things on the device. Device didn’t entice P to look at the space, except for the object that it was directly referring to (e.g., “Hey, if you liked this, you should look at the object to the left.”).
6. *Discoveries?* Yes, but not patient enough to read all of the text. Would be nice to have the text narrated, because P is a lazy text reader. But also would be nice to have captioned video—not sure the average person would be able to hear the video at the device’s maximum volume (w/out headphones).
7. *Museums & mobile?* Some reservations. Would be more inclined to look at content before and after visit, taking time to browse through it. Device you can take home, always have it with you. But the exhibition is something you can only experience when you’re there. Would like exhibition/device to tease the visitor to look at it more at home afterward.
8. *Best video?* Curling stone video, because it showed context, how it was being used, who would use it, where you’d play it, etc. The hockey cup second best, because it zoomed in.
9. *N/A.*

10. *Overall impression?* Not there yet. Still too complicated. Maybe it's P not being comfortable with it yet. And device is taking too much time out of experiencing the exhibition.
11. *Revisit when it's done?* Yes, for sure.

March 3, 2010 / Participant #8

N.B.: This user has some bias as she had (limited) involvement with setting up the pilot.

I. Reality testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * Browsing through the options on home screen, starting with My Collection
 - * P: “Not clear what the procedure is. Would be good to have a picture of what it is you’re supposed to do, like ‘Press this on the item’.”
 - * **Notices object code in the space, but isn’t clear on what it is**
 - * **Pushed the physical label, nothing happened**
 - * P: “Feel stupid”
 - * **P: “Says if you want to put an item in your collection, you click on a button on the artifact screen—not sure if that’s on the artifact, or on the application? Maybe through exhibitions? Object code? That could be it.”**
- * Looking at the picture of an artifact in artifact view, looking at actual artifact, verifying that it’s the right artifact
 - * Likes it a lot, gives a lot more information than what the space offers
- * P tapped collect. M: “What do you think that did?” P: “Might be biased because I was in the meeting about what this did, so I know it automatically sends to my email at the end.”
- * P: “Are there more objects in the space with object codes? Because if you really like something, but it’s not on the list, it would kinda suck.” (“list” either referring to catalogue or to available objects)
- * Would be interesting to have an option that tells you if you’re allowed to touch/interact with specific artifacts (interactives, tangibles).
 - * P: “Some things you’re allowed to touch, but you don’t know. Or you might want to touch it, but you’re not sure if you’re allowed to.”
- * P spending more time looking at the space than the mobile device
- * Sees movie graphic on a label—P: “Probably a movie”
 - * Successfully played the movie without difficulties
 - * Interesting that someone’s talking to you (especially for her since she doesn’t like reading), but expected more—not just see the actual object, but object in use, etc.
 - * Not clear on how to exit the movie—tapped on the device’s home button (i.e., left the application and returned to iPhone OS home screen) because there was nothing else to tap on to exit
- * **Tapped ‘DEL’ on object code entry screen thinking it was the enter/submit button**
- * Object code labels need to be more clear (not sure which item it refers to), and more visible from different angles in the space

- * P confused when tapping ‘Show related artifacts’—nothing appeared to happen (panel expanded below the fold)
- * Nice to see related artifacts. Gives more information, broader range of explanation without just using words. If you don’t know what a thing is, it’s nice to see other things that are related to it. Good reference.
- * P: “When you press ‘Show audio and video’, if there’s only one option, just show it.”
- * On curling stone video:
 - * Much more interesting than just having a single image of the object
- * **When P was exploring the device’s option, she was facing/looking at empty space in the exhibition**
- * P reading artifact comments
 - * P: “The comments are funny!”
- * P used object code entry as primary means of navigation, not exhibitions screen
- * “When you walk around, maybe it can show on the screen what the possibilities are, an image of what you can see from your position, instead of thinking, ‘Where’s the object code? Is there an object code?’, and instead of saying, ‘Well I saw number 8 and 10, but where were the others?’”

II. Task-based testing

P refers to participant. M refers to moderator. Quotes are paraphrased, not verbatim. Notes/ observations in round brackets. Initial analyses in square brackets. Significant observations in bold.

- * On comment entry:
 - * Knew how to use the iPod touch, and tapped on the empty text field to pop up the keyboard, but noted that many would know how to do that
 - * Tapped DONE then SUBMIT to enter the comment
- * **Would be nice to have access to the object code entry screen directly; otherwise, have to go back to home and going into object code entry—gets annoying when it’s repetitive**
- * On hockey cup video:
 - * Interesting because of the detailed images, more interesting than a static image, but could be more interesting with actual footage, etc.
- * On entering character symbols (‘@’, ‘.’):
 - * For users without familiarity of iPod touch/iPhone, might not know what to tap to get the other symbols
- * On sending collection to self:
 - * Confirmation that it’s been sent to the email would be nice
- * Expecting on Exhibitions screen:
 - * **Expecting a list of things that are available to see**
 - * When P saw the catalogue, expected an object code for each item in there
- * Thought the ‘Report abuse’ was a bug in the application

III. Interview notes

Bullet numbers correspond to the interview question number.

1. *Easy?* Really not that hard to use, but if you don't know how to use an iPod touch, it might take a little time to do it. At first, it was a bit confusing—in My Collection it said to touch the artifact, it wasn't clear if you were supposed to touch the actual artifact or how to get to the artifact screen. After the initial hump, simple to get around. More onscreen directions might be helpful for some people.
2. *How long to understand?* The only confusion was at the beginning (My Collection), maybe 2-3 minutes to understand that she wasn't at the right place to get to artifact information.
3. *Problems?* It wasn't that difficult. Maybe having more obvious object code labels around would be good. Since she already knew the exhibition, she was already looking around for the numbers.
4. *Improvements?* It was a bit slow. More user-friendly, like a manuals or hints. Wouldn't know what some buttons do. Look more like something they've seen before.
5. *Additional features?* There's no actual design right now. No colours, logo—just the basics are there. Would add colour. Would make it a lot more appealing.
6. *Discoveries?* Not really. The objects that were already available to be seen, knew what they were. But if she didn't know what they were, would've been very helpful.
7. *Museums & mobile?* Helpful for people who really like it. But P is not the type to take audio guides (not that interested; goes to museums twice a year maybe), or to read. Don't know if she'd actually use it. But would tend much more to use a screen that's next to an artifact (i.e., kiosk), but wouldn't want to pick up something that's offered at the beginning.
8. *Best video?* Curling stone was the best, because it showed actual pictures of how they played the game, the stone, other instruments, etc.—brought more aspects to that object. Hockey cup was second best, because it moved around a bit, got to see more detail. But the saw (static image) was dull, began to lose interest because it was static, didn't see context of use, etc.
9. *N/A.*
10. *Overall impression?* Very useful if you like these sorts of applications, nice to have more information. Would personally just like to walk around the space (raw experience). If you're doing research, would be great because you can get some of done in the actual space instead of going back home to do it. If P were doing research, would definitely take the device and application.
11. *Revisit when it's done?* Yes, would like to see how it's improved, and if there's more to see. New technology is always a fun thing to experience.