

APPENDICES

M. Phase 1: transcript of focus group

CC - We want to be able to see each other's photos and share as we're talking. There is no right or wrong answer. We're interested in your perspective as individuals: what is of interest to you. I also want to emphasize that the approach with KS's research is viewing people living with memory loss as the experts of your experience. We want to hear your point of view and perspective. You also don't 'have' to talk. Any time you feel like not talking or have nothing to say, you can pass. You don't 'have' to share. I do want to allow the person who is sharing, to give them the floor to make sure that we hear the thought before we move on to the next person. You will not be asked to provide any personal information. This discussion will be audio recorded to help KS analyze your conversations later for his thesis. Just a general reminder of this whole study, since the beginning of the morning until now is that your participation in this study is voluntary. At any point you could opt out. You have the right to leave the study at any time or skip any questions.

Does anyone have any questions about what will happen next with the focus group?

Let's get started then!

The first question I have is just to ask you, how was that for you this morning; taking photos during the walk?

D3.1 - I found it enjoyable, and interesting, and kind of helped to focus on...points of interest.

CC - So D3.1 found it interesting.

D3.1 - Yeah, I did.

CC - ...and enjoyable. Thank you.

D4.1 - I liked the camaraderie...in sharing what we were interested in.

CC - So that shared experience and camaraderie for D4.1. Any other folks have anything to say about how it was walking and taking photos with a polaroid camera?

D2.1 - I enjoyed it...uh, I was taking it, in the manner in which (...) have a camera give me, or give us, a view of what was going on (...) the walks that we've done...it was really nice, mostly in terms of (...) taking (...) everybody is actually trying to (...) It was nice also (...) some other people getting ideas. It was a lot of fun.

D3.1 - Yeah.

D2.1 - The history of it, the fun of it...

D3.1 - A good mix.

CC - I appreciate also you offering that perspective about the context of this walk within other walks that we do together, and that idea of documenting what you see. You do take a lot of photos on all the walks, so...

D2.1 - (laughs) If you want me to stop taking...

CC - No, that was great. That actually helped with this idea, "well, people are already doing that." So KS felt that it would be a good place to bring it.

D3.1 - Yeah.

D5 - I do think that taking photos helps me remember the walk better...what I'm seeing...I had discussions with Nancy about the maps and part of it was that if I understood where what was happening on the map, I could remember what I was seeing, and that has, like, nothing to do with Alzheimer's (laughs)... just in general, that helps, to be able to visually connect the two together.

CC - Yeah.

D5 - ...and taking photos definitely will, I think, over time, help reinforce my memory of it, of the experience.

CC - So, two things there from D5, one, being able to have a map that you know you're going on to look at and helps you connect and remember the walk. And also that photos, kind of, serve the same purpose.

D4.1 - I really enjoyed the artwork and...took a lot of pictures, from different angles...kind of like a left brain thing...and the colors...and some of the mosaics were wonderful.

CC - Any final thoughts about how it went today, or what it felt like to take photos on the walk?

D3.1 - Just an aside, there was also, you know, the backstory of all these, you know, these old buildings, and what a thriving, little town this was and is, is again.

CC - Yeah.

D3.1 - I'm sure it went through some hard times in the Depression and other eras, but...but it was just, you know, all the, you know there was so many substantial buildings that were...I'm kind of into architecture, and all that stuff, so I got a kick of that, just observing those buildings.

CC - You know, that kind of connects with what you were talking about D1.2, where the Out & About walks have a layer in that we don't have, when we're out walking in the neighborhood by ourselves, which is the historical context, that we hear from the leader about the area. Yeah.

My next question is just generally about folks' habits of walking outdoors. So, 'how often?' and then 'any particular places that you like to walk. Just, in general.

D4.1 - I live at Bitter Lake. And there is a ballfield that is about, it's about, a quarter of a mile, and...so I take my dog once a day... well I take him out three times a day, but at the end of the day we go around the quartermile, well twice, since I have him I...

CC - So walking near your home at Bitter Lake, going around the field...

D4.1 - Right. Along with my friend. We often go walking together.

CC - So walking with the dogs. Thank you D4.1. Any other folks? How often do you walk?

Where do you like to go?

D1.2 - We walk some almost everyday and....it seems like we have this... we live in, right, almost in the Downtown area and we've got this particular number of blocks, that is sort of our usual, our regular, although we change it sometimes; make it a little longer or we shortcut it if we don't have a lot of time and.... And then we walk around Green Lake, or we walk part-way around. We used to walk all the way around. Now we turn around and come back after a while, and really like that for getting to the natural areas are still valuable to us, not just walking in the city.

CC - So that contrast of a very urban environment, walking Downtown and then walking in Green Lake. And pretty regular walkers.

D1.2 - Yeah, and then, every now and then we walk, I don't know how far it is, but all the way to Pike Place Market which is an interesting place to be...

D3.1 - Yeah. It sure is.

D1.2 - ...very lively.

CC - Thank you. Anyone else wants to share about their walking habits, where they go, how often they walk?

D3.1 - Well, we're kind of fortunate because we live...we live in Fremont, and we're really close to shopping, you know, there's a PCC co-op, that's like a 15 minute walk to get to. So that's not a big struggle if you've run out of something, you go buy it. Plus there's a whole lot of bars in our neighborhood too (laughs). The access to...the library is close by...the food choices are nearby, lots of restaurants and it's also just really delightful to walk along the ship(?), you know,

in either direction. Or..And..Often times I'm on my bike, so I'm going to... I rode out to...this, this sailing...

D3.2 - Magnuson...

D3.1 -I rode out to Magnuson where they have that big sailing center to inquire about it. It's just a great, great ride, you know, back and forth.

D5 - Yeah, it's a good ride.

D3.1 -It is a good ride.

CC -I'm hearing a lot of walking in the neighborhood where folks live, pretty... on a regular basis.

D1.2 - I forgot to add that we can walk to our doctor's...

CC - Oh wow.

D1.2 - ...polyclinic in seven minutes. And we walk to the drugstore up the other way. I mean there is all kinds of things where we live, of course.

CC - ...living in very walkable...

D1.2 - And right through the Freeway park which is right next to Horizon House...

D3.1 -Yeah.

D1.2 - ...which is beautiful. Got to see that.

D3.1 -I remember we did that walk once. Oh, 'cause we went through, was this before you had moved in there, or didn't you..?

CC - Oh, you live there?

D3.1 -You've lived there longer, haven't you?

D1.2 - I've been there... I mean, we've been there a year and two months.

CC - And just so you think about Out & About walks, coming to visit everyone's neighborhoods maybe, almost?

D1.2 - Yeah.

D3.1 - Yeah.

D1.2 - That's one of the most interesting things about the Out & About walks, is that we actually get to know neighborhoods that we would've never even gone in, otherwise.

CC - D5 or D2.1, do either of you want to share about your walking habits and where you go?

D5 - Yeah, so, since I don't have a car, basically I have to walk everywhere. I take the bus to it. And so a lot of my walking is just attending to my survival. There's things like going grocery shopping and... I do, I walk with Out & About and Zoo walk and....mainly for the exercise, we walking... having been a stroke patient, walking is essential for me, so...I don't have that much opportunity to, just, you know, walk for the pleasure of walking, and just, because, just the time that I have, you know, to do everything that I have to do doesn't allow that type of luxury, so for the most part it is more or less taken care of by the Out & About walk and the Zoo walk, and I do walk in Green Lake, a few times every month, and even Carkeek once in awhile, I don't walk enough as it is, you know, but, so....

CC - Thanks for sharing that. I think we'll move on. The next question I have for you has to do with landmarks. So today on this walk in Columbia City we were very focused on landmarks and when you think about the places you've shared where you walk, how important are landmarks, do you think about landmarks...when you're walking in your regular places? And if so, what kinds of landmarks are you noticing?

D5 - Well...I...well, I've always travelled a lot. Primarily in United States, but I've been to every state in the Union and...couple of times for the most part, so I...and I used to be in an

organization..used to be the president of an organization that was nationally. So I would have to go to cities all over the States, you know, and basic... on business (...) so I have a lot of experience being in strange cities and landmarks were...are...have always been important to me for that fact because I'd constantly be in a foreign environment and to remember, you know, which way I was going and so it... you know, maybe couple of years later still may be able to connect to that and have a feeling of what was what based on that so...Yeah. landmarks are kind of important and that's what I was...when I was... today, selecting photos, I was looking at things that I would recog-.you know, if I had just been plopped down here and, you know, and just needed to remember this and that and whatever...it would be the ones that I'd picked, are basically something that was very memorable, and that, I think, would have survived over time, you know, so...yeah, that was, anyway...

CC - Thanks D5. Does anybody want to share anything else about...just in your regular life, walking, how important landmarks are, and what kinds of landmarks you notice?

D2.1 - Well walking is pretty (...) important for us 'cause we have two dogs. Ridley...small dog. Ruby is a big dog. And D2.2 and I take it to Marine (?) House (...) House we go to (...) How long is it?

D2.2 - It's 2 miles.

D2.1 - It is 2 miles long (...) So we did that (...) days ago. We did...pretty much throughout (...) the years that we've gone for a walk, we really like it, it's a long walk, and we enjoy...thought I'd just share that with...

CC - Thanks D2.1. So I'm hearing that definitely people have their, like, at least some folks have their routine walk and there are, like, certain places they go...

D4.2 - CC, could you just rephrase the landmark question? (...)

CC - Oh, yeah, yeah. In regular, routine walking, in our lives, I guess I was wondering, how important are landmarks to you and what kinds of landmarks?

D4.1 - Well, I...you know...I have to use the GPS. Because I can't remember how to get to where I want to go. I am...so, my GPS talks to me, and so that I don't have to be, keep looking at my GPS, it talks, and...

CC - (laughs)

D4.1 - So if I don't have my GPS, I would just be driving around in circles, and frustrated. So I try to use electronics as much as I can. Of course, I've got my cellphone. I do GPS on this too, but I prefer the GPS in the car. I try to find as many aids as I can to remember things. You know, in my apartment, there are, everything is in its place (laughs) and so, if I...if I have my cellphone, there is one particular place where I put it, so I don't have to go searching for it. So, I...make sure that I can find things.

CC - You brought up a really good point D4.1, a couple of really good points. And one is strategies for...for living with memory loss and the other is technology and how, in all of our lives, technology, you know...when we're finding our way, even, maybe we're not bothering to (...) landmarks, we can look on our phones. A really good point.

D4.1 - You know, the thing is that I live alone. I don't have a spouse or a child who lives with me, so I'm my own caregiver. And that's why I just, really....you know, really nitpicky on myself to make sure that I'm doing it right.

CC - Thanks.

D3.2 - I was going to say, something D3.1 and I have talked about frequently is the fact that we, well, we've been in our neighborhood for 30 years and we've walked a lot and obviously things have changed but they are changing really rapidly now. So, entire corners where, you know, you

always turned at this corner, it's the building and the thing, the thing, it's always there and it's not there anymore. It's something else. So now all of a sudden I'm like, "Is that the street?" (laughs) You know, and so we talk about that. Well, you... I can't make reference to things I used to make reference to. The businesses are gone. The public art though, I mean, we could still...you know, the Rapunzel neon is still on the Fremont bridge, the bridge is still the bridge, you know. The new buildings are putting up new sculptures, and so we try to notice all that all the time

D3.1 - Waiting for the inner urbanists...will always be there (laughs)

D3.2 - But the fact that...

D3.1 -that will always be there (laughs)

D3.2 - Yeah, but the fact there are new buildings is kinda...annoying, so we really can't make references to restaurants or bars or places of business anymore, 'cause not only do they change hands, the building completely disappears or turns into something else that is four storeys high or whatever. So, that's, that's been...that's changed the walks and we just never had to know place names before, so...

CC - Thanks for bringing that up. It's really helpful too, so, that our city is rapidly growing, rapidly changing, and even when you've lived in the same place and you're very familiar with the neighborhood, that it might look totally different after even, you know, just a short amount of time, a new building goes up or torn down.

D3.2 - Right.

D3.1 - It's not so bad that we, you know, we feel like we're lost in these neighborhoods, it's 'cause we...

D3.2 - Oh no, not lost. It just changes your point of reference... a lot

D3.1 - Right.

CC - When landmarks are changing. Yeah, that's really what's going on.

D1.2 - One thing I've noticed since we moved closer to the interior city, is that I used to know where North & South-East & West was....

D3.1 - Yeah.

D1.2 - ...because I could see the mountains on each side, you know the two ranges...

D3.1 - Right.

D1.2 - ...and where I am now I don't see the mountains and so I even forget which streets are going north and west, north and south, and which are going, what, east and west....

D3.1 - Yeah.

D1.2 - ...I've just really noticed how disoriented I am in terms of direction. Because I was used to seeing the water, you know and...whatever.

CC - Those distant landmarks that we rely on, that when we can't see them, feeling lost.

D3.1 - Like compass points.

D1.2 - Right.

CC - Well, thank you all. So, my next question brings us back to Columbia City where we walked today, right here, and...the question is just about how familiar you are, I think a lot of folks have shared that you don't live in this neighborhood. By a show of hands, maybe, who... I'll say a couple of things, so one: if you feel super-familiar with this neighborhood, raise your hand.

(indistinct laughter)

D3.1 - Not super.

CC - Kind of familiar with this neighborhood....

D3.1 - Kinda, yes.

CC - ...before you walked today, raise your hand. So we have one person.

D3.1 - Selling real estate for twenty years....

CC - (laughs)

D3.1 - ...and also going to the Columbia City Ale House after I do golfing....

(surprised reactions from group)

D3.1 -performed, I've sung, I've been on the stage of that, that, one performance space on the corner.

D3.2 - City Theater.

D3.1 - City Theater.

CC - So we have D3.1 as kind of, maybe even more than kind of familiar, yeah?

D3.1 - Yeah.

CC - ...spent some time here and familiar with establishments. And then those of you who just felt really like, "this is, this is new, pretty new for me. Definitely going to look at the map and follow the leader." (laughs) okay.

D1.2 - Just one other walk here.

CC - Yeah.

D1.2 - ...an Out & About walk that we had. That was the only....

CC - Like, a year ago, that kind of thing? (D1.2 agrees)

So rest of the folks feeling like, "Yeah. I walked here last year for Out & About. I don't really know my way around that well." Okay. So now, we're going to look at the photos you took. I know people have varying amounts of photos, so I want you to take a moment to look at all your

photos. You can do it by shuffling through them or laying them out in front of you. But I'm going to ask you to choose some that feel most important to you. As we walked today the instruction was to take photos of things that...that stood out to you, that interested you. It didn't have to be the landmark, that was...the historical information that was being shared about. It could be anything. And in looking through them, give it some time, think about ones that really feel like, "Yeah. this is something...just feels important."

(silent discussion among dyads)

D.3.1 - Do you remember where we saw this?

D.3.2 - It was.... a parking lot right outside the bookstore, here.... You turned a corner into the parking lot, I said, "There's some murals there. So looks like....the funeral home has maybe...so maybe somebody did a mural..."

So, this might be hard, depending on how many photos you have, but I want to invite you to choose 3-5 photos that feel just the most interesting or important or whatever...they just kind of resonate with you. And then we're going to talk about that smaller group of photos.

(silent discussion among dyads)

CC - It's really cool to see them all out here.

D.3.1 - Got to go with the Corvair

D.3.2 - (laughs)

D3.1 - 3-5 was your max?

CC - Yes.

D3.1 - This one. Curious about Igimo Art Station.

D.3.2 - You know what's funny about your Corvair is that you would think that car would be a temporary thing. But actually due to the age, the way it was parked....

D3.1 - Right.

D3.2 - It was parked as if it hadn't been moved in a very long time (laughs).

D3.1 - Yeah, when was the last time the ignition...

D3.2 - It could not be parked there a second time 'cause there's a dumpster blocking it (laughs).

D3.1 - Well, there you go! If I had the keen eye to take it...

D3.2 - (laughs)

CC - Once you've chosen your photos, the rest of the photos you can, kind of, put back in the envelope...

D3.1 - ...play poker with them?

CC - ...put them aside.

D3.1 - Okay.

CC - Was it hard to choose?

D4.1 - Yes! (laughs)

D3.1 - Not too....

D4.1 - Do I need to put them in order of preference?

CC - No...Just set it aside in the envelope.

D3.1 - That's way too hard on the brain (laughs).

D3.2 - (laughs)

CC - And then have your photos that you choose just kind of, in front of you and we're going to talk about those photos. So now my question is just to ask you about the photos that you chose. Tell us about the landmarks in them, why you chose those landmarks. Does anybody want to go first?

D4.1 - Okay.

CC - Okay.

D4.1 - Well, my first one is recycling, 'cause I'm kind of like an environmentalist, and so this is the recycle cans, all say "cups and papers"....and its... I like the colors...of the blue...

Next one is...this is...I don't know how to describe it...It's got a medallion but it also has shadows and lines, light lines and....

D3.1 - That's a good photo.

D4.1 - ...dark lines. So that's...

CC - D4.1, can I ask you why you chose that, like, what about it, whether it feels familiar, or, you know, why it caught your eye, do you think?

D4.1 - It feels warm. The sun is shining on...on the brick. But then there is dark, because there are shadows there.

CC - So, that kind of contrast.

D4.1 - Yeah.

And...next one, the clock....It's, it's like.... time is passing by!... And it's passing so fast! And that's what, that's why I picked this shot...because, we're getting, I'm getting older and I'm also...declining and this just reminds me that I need to cherish every single minute that I've got left.

CC - That is a kind of deeply emotional reason to notice that clock, the meaning of time, and the passage of time.

D4.1 - And then, this photo is of a statue, and it's a, I think it's a lion...a lion to me.

(agreement from the group)

D4.1 - And... and I guess for me this, this lion is about strength...It's about being strong in this Alzheimer's journey that I am on.

CC - Another emotional connection there.

D4.1 - This one, this is a...I don't know what this is, but this to me is a middle finger... to the world.

(group laughs)

D4.1 - Middle finger to the world.

CC - Should I ask why that caught your eye, D4.1?

D4.1 - Yeah he's (D2.1) got one too, you know, pff!... you know, I've got Alzheimer's....

D2.1 - You'd like to enjoy...

D4.1 - ...but enjoy, but also just, you know, living life to the...to the most that...you know, enjoy every second that I've got left.

CC - Thanks D4.1. And, while you were walking and taking those photos, I know D4.2 was asking you questions about, you know, why or... D4.2, do you have anything to share about what you were hearing from D4.1 during the walk?

D4.2 - Oh yeah! Very intuitive. Very expressive, and everything she said was really fun to listen to. I tried not to interject because I kept wanting to say something like, "Oh my goodness, that's so insightful!" (laughs)... I really enjoyed it!

CC - It sounds like intuition...that piece, that you are connecting with things on an emotional level as you see landmarks. Thank you. Anyone else? D2.1, can I ask you about your..the landmarks that you took photos of and what it was about them that caught your eye or...

D2.1 - Well, let me start with the funniest one... I looked up, this brick building and it had, and it 'has', some writings...up on top. And I looked up, and I couldn't tell, figure out what it says, but I looked closely, enough to see that it says, "Sex Sex Sex"

(group laughs)

D3.1 - I have the exact same photo.

(group laughs)

D3.1 - ...just saying.

D2.1 - I'm glad to have somebody enjoy the same joy that I have.

CC - So dare I ask D2.1 what about that caught your eye?

(group laughs)

D2.1 - "Sex," that's what caught my eye.

CC - This piece of art that said "Sex" caught your eye.

D2.2 - Did you like it before you noticed those words? Were you intrigued by it before you noticed that it had those words on it? Did you think it was interesting?

D2.1 - I thought it was interesting. I thought it was fun.

D2.2 - It became more interesting when you saw the words?

D2.1 - Yeah.

CC - It sounds like it was memorable.

D2.1 - Yeah. It said "Sex Sex Sex," I thought it was funny. Okay, what's the next one?

CC - Any other that you want to share about? Why you...

D2.1 - Well, I think....one of us is the same. D4.1 right here. So I'll put it over here (near D4.1's photo) for a while.

(group laughs)

CC - That was our point of interest.

D2.1 - And when you look at that thing. If you have it in front of you at all anybody?

CC - We have the... it's called "Washington"?

Walk leader - "Spirit of Washington."

CC - "Spirit of Washington" statue.

D4.1 - It looks like a middle finger.

(group laughs)

D2.1 - Exactly both of us have the same mindset.

(group laughs)

D3.1 - Not "sex", but "set."

D2.1 - Of course. That's what that is. I live with it. It's okay.

D2.2 - Did you see it that way before you heard D4.1 talk about it?

D2.1 - Oh no, I felt that way when I first saw it. I took that picture.

(group laughs)

D2.1 - I said "wow"! We didn't talk to each other about this.

CC - Again that kind of emotional response to it, that kind of stands out because....

D2.1 - Oh it does!

CC - ...it says "F you!" Okay.

D2.1 - That's me! Okay, here's another one. It's...it's not a very...

D2.2 - Do you want to share it?

D2.1 - I'll share it... I'm sharing... this is #16. And it's a powerful... for me, I think I'll throw it around and you can say...,this is a powerful picture, of a tree. Huge. Dark. Light. It just, it just...enormous in terms of a tree. The tree is not going to want me to go up the tree. The tree is going to allow itself to tell me, "Don't go up! I'll kill ya." If you look at this picture you'll see it...

CC - So... this tree stood out to you as a landmark because of that intensity of it...

D2.1 - Intensity...

CC - ...and dark...kind of...

D3.1 - Foreboding.

CC - ...Menacing.

D2.1 - It is. It is.

(group) - That's a good word, "menacing."

CC - D2.1, do you want to share anything about your other photos? The landmarks in them?

D2.1 - Well, just because it's funny. You (D4.1) and I have something in common.

D4.1 - I know!

D2.1 - Because we have the exact same photo.

(group expresses surprise)

CC - Kind of makes you want to play mix-and-match or whatever...so you have...another one of our points of interest.

D2.1 - And stop following me will you with these things (laughs).

(group laughs)

D2.2 - About why you took the picture...do you want to share anything about why you took the picture?

D2.1 - The clock? Why I took the picture of the clock? I don't know. I just thought it was nice.

It's a big green tree and it's got the light bulb. So I took a photo.

Okay and my last one is...in some ways it's very pretty and in some ways it's really ugly. So

I'll...throw it around and make your decision whether it's ugly or pretty.

D2.2 - What is it about it that you took it...?

(group) - it's one of the lions....you're right, ugly or pretty...

D2.2 - ...why you chose that one?

D3.1 - It's very Oriental, Asian.

D2.2 - ...'cause it's ugly?

(group) - Ugly or pretty.

D2.2 - You told me that it was very powerful.

D4.1 - Yeah, it's... I see...I see that lion as a protector, I don't know why...

D3.1 - Griffin?

CC - Thanks D2.1. Anything else you wanted to share?

D2.1 -oh, that's the sex thing (laughs) I don't have anything else.

CC - Can I...So you and D2.2 were talking the whole time you were taking photos. D2.2, anything you wanted to share about what D2.1 was noticing?

D2.2 - Well, I think that...he was looking for things or when I'd ask him about things that he liked, you know, he liked the tree and statue 'cause they were powerful. One of the things that he didn't share that I thought was really interesting was...he took a picture of the library and I asked him what he liked about the library he said that it was because people, use it. Young people, old people, everybody can use it... and I thought that was pretty cool.

D2.1 - I said it? Oh, hey, I said something nice!

CC - It kind of gets at, like, not just noticing the exterior of a building, but its purpose, its use.

So, kinda having an eye out for a place like a library... it's useful...

D2.1 - I spent a lot of time in libraries. To be a lawyer you have to spend a lot of time in the libraries. (laughs)

CC - (laughs)...Well, thank you. What about you D1.1? You have two photos in front of you. I'm curious to know about those photos and why they stand out to you. Anything you want to share?

D2.1 - One of them is this.

D2.2 - This light fixture.

D2.1 - And the next one is this.

CC - Uh-huh. And, do they have, like a relationship together or did you like them for different reasons?

D2.1 - Yes, different reasons.

CC - Can I hold...

D3.1 - Can you show them to us?

CC - So the light fixture here in particular on the library, and guess what we have D2.1!

D2.1 - I know.

CC - Another clock!

D1.2 - And one of the things that he said at the time about the clock was he liked how tall it was. It was surprisingly tall and big for a clock.

D3.1 - Is there another old classic clock in Downtown Seattle somewhere?

D4.1 - Yes...on Pioneer Square.

D3.1 - Yeah!

D4.2 - There is also one in front of the Ben Bridge Building.

D3.1 - Yes, yes!

CC - Another reason landmarks might stand out to us is that they remind us of other similar landmarks elsewhere.

D1.2 - And the other thing that he said at that time was the column...the way the doorway of this library...columns...it was just kind of a grand look, that was my word but he liked it, those columns.

CC - Those historical features that feel....

D1.2 - Yeah.

CC - ...you can feel the history of it.

D1.2 - Anything else? That's it.

CC - Thank you. D3.1 and D5, do either of you want to share about the photos that you chose?

D3.1 - Okay, I...this was sort of...well, I don't know, I guess I probably had like twelve and I boiled it down to five here, but I certainly have notice all the classic buildings and the library, the wonderful solid architecture and all that, but I kind of parked that and went in a different direction, just because... for not particular reason, but I just thought that the whimsy of...and this is, D2.1 took a picture of the same thing, they're almost identical.

These signs hanging from, from the stanchion that holds up a telephone pole, and then somebody...somebody had to have taken a ladder out there...to put up these...these signs saying "Sex" which were sort of graffiti-like. But they didn't graffiti the building, they just hung them from a utility which I thought was kind of creative and proper way to do things...

CC - Respectful...respectful graffiti (laughs).

D3.1 - I don't even remember taking this picture. It's just a place to lock up your bike. But I do a lot of biking and that's just a nice, modern art-kind of presentation of a bicycle, you know. It's just fun to look at. And it's solidity, you know. And one interesting thing about this, besides the two wheels, and what almost looks like an exhaust pipe, which is an oxymoron if you have a bicycle...

(group laughs)

D3.1 - ...but then if you look...if you look through the bicycle, you see the wheel on this little Honda or whatever car this is. So this is like another wheel symbol behind the two wheels of the bicycle.

(group expresses surprise)

CC - Cool...creative photo

D3.1 - I'm not sure that I really knew that when I clicked the photo, but now that I'm looking at it, "yeah!" you know, that...

CC - And D3.1, it sounds like, that's again an example of a landmark that's...kind of the usefulness of it...

D3.1 - Right....right.

CC - ...that it's a bike...bike lock...

D3.1 - Yes.

CC - ...but also then how it looks...

D3.1 - Exactly.

This one was pure whimsy... Large apartment building, but in the foreground was this goofy little business, I guess, Igimo Art Station. There seem to be some businesses in..in Columbia City that...you know like, kids doing art or creative stuff going on in Columbia City, is kind of the point I guess. So that's why, that's...I wasn't at all interested in the apartment building behind, it was all about this cool sign.

CC - So it's the...

D3.1 - It's the v-...there's vitality in the neighborhood, you know. People are learning things or trying new things or maybe, acting as teachers.

This one I just couldn't pass it up because...the era in which I... well, we're all the same era pretty much, but...I, I think you probably saw me traipse off to take a picture of this Corvair and there is a African-American lady, you know, just adjacent, and I asked... I was trying to be really respectful and ask permission..."It's not my car", you know, she was trying to blow me off, but I just, you know it's a classic old car, very rare, and that's just me being kind of a car guy.

And then you know, we all probably have one of these in our arsenal today.

CC - Another lion.

D3.1 - Yeah, of the ones that were...Weren't there 4 or 5 different lions?

D3.2 - There were so many.

D3.1 - Maybe more (laughs). But this one spoke to me. It's just rock solid and the lighting was good. So that, that's my little book report (laughs).

CC - Thank you for your book report. And, the two of you were in conversation the whole time, you were taking photos D3.1 and D3.2, anything interesting that came up around that conversation?

D3.2 - Uh....not really (laughs). We...I wasn't always with him. I tried to ask questions later to get...no, but he did a good job of...he said the same things. He did a good job of describing what, why he took them.

CC - Well, thanks for sharing.

D3.1 - Yeah.

(D2.1 and D.2. leave Focus Group to attend to grandchild)

CC - Okay D5.

D5 - I was looking at it as...more or less for the...monumental...of it.

So, the first picture was of the light rail (?) wall of reflectors...pavement reflectors.

D3.1 - Oh, on the other side of the road?

D5 - Yeah. If I was driving around a city that I didn't know, I would definitely, you know...that would definitely make an impression in my mind and the next time I saw it, you know, I would recognize it again. So...that's why I took the picture. I did sort of like that it was made out of reflectors, road reflectors and also that material is translucent and I'm very much attracted to the things that are like that. So that's why that one.

CC - Very eye-catching.

D3.1 - I was...I was fascinated. I think these are all made out of plastic...

D5 - Yeah.

D3.1 - They're not glass.

D5 -No, no. They're actually reflectors...

D3.1 - Yeah.

D5 - ...highway reflectors. So yeah, that, you know. The fact that it was a material that was for actually a different function, repurposed. And the fact that it is translucent...really attracted my attention.

Also...I think everyone's got a picture of the lions. There were several of them...it's probably about a dozen of them...

D3.1 - Seems like it, yeah...

D5 - ...this one I found the most unique. From the looks of it, it's probably the oldest. I don't know. I'm not an expert on it. But, yeah, it's bronze, probably Eastern, Thailand, maybe India. But that one in particular caught my attention.

What I did find...there was a yard.. a neighbor's yard, that also had a set of lions and it's hard to see...but yeah, it's...they were, you know...belonged to somebody, it wasn't part of a...the city

installation. That came right after...these...I also took these shots in order, I'm presenting in order they were taken. First we walked through the lions and then...about a block away, there was somebody that had a set of lions in their yard

D4.1 - They're kind of... looks like they're kind of in jail (laughs)... the fence...

D3.1 - That's a pretty...that's a good photo!

D5 -...behind the fence...

D3.1 - I didn't even catch that.

CC - Those stood out to you 'cause they reminded you of...connection...

D5 - yeah...that's very unusual 'cause they are...even imitations of these...they are hard to come by and expensive. I would imagine each one of these costs about 500 bucks a piece and that;s just the imitations. If they were real, it would be much more...It's unusual, you know, for a private residence to have lions, so, anyway...just to see all at one go, "ah, okay!"....

Also have another picture of the "finger". But I (laughs)... I don't see it, I never saw it as a finger.

(group laughs)

D5 - I... I look at it as a whale's tooth.

(group expresses surprise)

D5 - Or a fin of a....

D3.1 - ...surfboard or something...or a whale?

D5 - ...whale, yeah. But, anyway, I like the fact that the disc is glass and translucent and again going back to the...this thing that's something that's attractive to me. So, that's why I chose that.

And also you know, if I was drawing the city, that would be something that I would remember

and use that as a landmark, in terms of navigating my way around, this thing, you know that stands out.

CC - So thinking about the material of things... it sounds like there's some importance there.

D5 - That's, for me, that is...

CC - Personal preference.

D5 - ...what's it made out of.

CC - Thanks D5.

So the final question kind of brings us back to Columbia City. So, D3.1, you feel a little more familiar with this neighborhood, but a lot of folks felt less so, and the question is just, was it helpful to think about landmarks on your walk in Columbia City? And did that change your feeling about the neighborhood? Did it feel more comfortable to walk here? In the future to return here? Anyone have an answer to that?

D4.1 - Well, I, you know, I... I feel safe during the walk. And you know... I enjoyed it and I enjoyed everything that we saw. What was the question again? (laughs)

CC - Yeah, you're answering it, so just that feeling of comfort walking here again in the future...

D4.1 - Yes, yes.

CC - ...after noticing landmarks, and if it was kind of helpful?

D4.1 - Well, you know, it had a reputation. But I think, going through the walk, I felt safe, and I felt comfortable. So, I can see the changes taking place in the city.

D3.1 - And yet there were all these really old buildings that had been there a long time...bank and libraries and stately structures that feel like they're sort of protecting and giving credibility to the neighborhood.

D5 - Unfortunately that doesn't really mean much as far as the developer is concerned (laughs).

D3.1 - Yeah, oh yeah, that's true.

CC - That's actually, maybe that's a question I have, what would you tell developers about, like, what's important to...like, for landmarks? You were gonna...

D3.1 - Spending some money on art.

CC - Art is important.

D3.1 - Right.

D4.1 - And I... I think, well, I'm probably wrong, but I think that developers are required to have a certain amount of art...

D3.1 - That's true.

D4.1 - In the buildings or outside.

D3.1 - On projects of scale....

D4.1 - Right...

CC - Anything else that you would tell developers, or anything else about landmarks?

D1.2 - I don't know, if I can say something. When you asked the question I all of a sudden thought, "What would be... What would Colum- how would I experience Columbia City if it didn't have those things that were kind of unique to it..."

D3.1 - Yeah.

D1.2 - ...you know, the artwork and the things that were unusual or something about them that struck you. It would be so blah, so soulless...

D3.1 - Yeah, right.

D1.2 - ...or something, if it didn't have those kinds of things in it. It would be nothing except buildings that you don't ever notice even.

CC - So the art in particular, is that what you're...

D1.2 - Yeah, the art or unique things about unique buildings. I mean, things that...that stand out from all the boxes. You just have to have that break from plain old boxes and rectangles.

D4.2 - I think green space, parks...

D3.1 - That's true, we did cover...

D4.2 - ...it's really important to have walkable green space. To a developer... I would really encourage every developer to think on that.

D3.1 - Well, and the current PCC co-op is in a much better location. It used to be kind of, it was a much smaller store and it was like, it used to be five or six blocks east of there I think. And they chose to move to the really cool part of Columbia City. It was a good business thing to do, but also practical.

CC - Yeah, closer to everything.

D5 - Well I was... what I would tell developers... to build quality, I mean when they...100 years ago when they put up the library or something, they weren't thinking...well, now, they're just thinking of, "this building will last 20 years and we'll tear it down and build another one." And now one will last only 10 years then...and then it's just, you know...it's reflecting in your values and your attitudes about everything, you know, "this is disposable, we're building it to tear it down," you know, and that seems to me the wrong way to approach it, you know.

CC - That connects kind of too with the, I think D3.1_and_D3.2 had brought up earlier, just for things to last...

D5 - Yeah.

CC - ...so that they can remain landmarks instead of just...keep cycling through, tearing things down.

D4.1 - But there also has to be green. You have to have green space in the city...you know, to balance the concrete and the green.

D3.2 - So that little parkway...with the winding thing, was really nice contrast, I mean it was refreshing...

D3.1 - Yeah, all the houses across the lawn.

D3.2 - ...Yeah, it was such a change from the other.

CC - Having some variety, having some break from the concrete.

D3.2 - Yeah.

CC - Well any final thoughts before we conclude our focus group? Thank you all for your time, we really appreciate all the time you've given us and your attention... creativity with the photographs.

N. Phase 2: transcript of interviews

N.1 Interview with II

KS - What are some places that persons living with dementia prefer to walk in when they go outdoors? Down their street? In a nearby park? Elsewhere in their neighborhood? Or, outside their neighborhood?

II - As you know, I'm not an expert on persons with dementia. I just have a modest amount of experience with them. But, from what I've seen and what I have read, from people who are experts, my guess is that it is based on the quality of the environment...the visual quality, the tactile quality, especially the visual...because if an environment is kind of...scary...like, if the neighborhood were...if they lived in an urban or small town neighborhood that might have buildings next to a sidewalk and there is no greenery, and there is brick walls, some of which might be just without even any windows, my guess would be that's not as interesting an environment to invite them to walk outdoors.

There seems to be a fascination with nature and nature elements that I think has been fairly well documented, so if they had a choice of walking in an area that had a concrete sidewalk and a brick wall beside the sidewalk, without even windows. If the other side of the street had either a little park or just even an empty lot, some weeds in it, green bushes and old vines scrambling around, even a broken down chain link fence or something that has a sense of color and liveliness and nature-richness. I think they would be more interested in walking there. I don't think there is an automatic answer whether they would rather...Honestly, I think the environmental quality would trump all of that. If their neighborhood was beautiful, with sidewalks and big trees and beautiful lawns and flowers and shrubbery in people's yards, I think that would be a lovely place to walk. If their neighborhood is more urban, without too much

shade or many inviting features, I think they would rather walk in a park. But I have been in parks that are very...boring and dull and ugly, might have trees and grass. They are not all so inviting as a lot of neighborhoods that people live in.

So I think it all depends. I don't have any idea which would be the more preferred as an automatic choice, but I think that the quality of the environment, especially in terms of the level of nature content, greenness, canopy of trees, shade... I think all those things would be pretty strongly preferred not only by people with dementia, but by others as well. I think their choices are not going to be very different than my choices or your choices or ordinary person the same age who doesn't have cognitive impairment. One other thing that comes to my mind besides environmental quality and characteristics is accessibility. People with mild to moderate dementia may be allowed or able to access any of those environments but people with severe dementia are not even going to be typically allowed to walk in their own neighborhood or to walk outside their neighborhood. Obviously, unless they are with a care giver who is really, kind of, keeping an eye on them.

KS - What are some enabling and disabling characteristics of the physical environment that influence their outdoor walking?

II - Obviously, the physical things like stairs. Especially as people are older, the percentage and severity of dementia becomes higher, with age...Physical features like handrails...some of the dementia facilities I have visited had handrails at about 36-42 in. high, maybe 1 meter...so that people could... instead of just standing there, I think this was rather a little pond at a facility in the Pacific Northwest actually, maybe Vancouver island, near Victoria... and it was a small pond in the middle, just shallow, maybe a foot or so, with some wetland plants, but I think the idea was not necessarily that they needed the hand rail in order to not just fall down, but to stop and

look at something if they really wanted to appreciate a view, whether a view of nature or a view at a distance, having something at their waist, by their body, that they could put one or two hands on, would allow them to pause and relax, and enjoy looking, watching a bird or trying to see a flower that is maybe ten feet away... “Is that really the flower I used to grow in my garden?” Trying to recognize or make sense of their environment.

So, I think an occasional hand rail even in outdoor environments can be helpful. Obviously, they don't have to be everywhere. I don't know if you've ever seen those places in Scandinavia, where they have outdoor walking trails for older people, and they are through a nature setting. But the trails are asphalt, paved smoothly. They are quite smooth. You can do them with wheelchairs. And a lot of people who used them...I'm thinking, Finland, I saw them... they used their walking sticks...the little handle...strap wraps around your wrist, and you could steady yourself. And also, you get more exercise because your arms are moving, not just hanging down at your sides. But surprisingly, in that place almost all the walkers had that kind of device, and this was a campus that had a few long-term care facilities on it, mostly for aging. That same place had a very beautifully sculpted handrail that just went everywhere. It was stainless steel with a wood or plastic top that had acrylic or fiberglass or something that wasn't cold on the hand...was kind of an elegant design. So, even though the walkers were using those, one in each hand, they used walking sticks, they also had handrails. So, they had two different mechanisms to make it possible for people to keep walking even into older age.

And I think it might have been a comfort to anyone older because of...I guess you are familiar with postural vertigo. The fact that older people can be perfectly normal one minute, and all of a sudden they are dizzy. They might not have had a spell like that for a month or six weeks. All of a sudden, they don't know why, the blood flowed to the brain, temporarily

impaired...or could be inner ear infection imbalance, and suddenly they feel dizzy. So even if they are not walking along with their hand on the handrail every minute, just seeing that handrail there, they think, well, I can walk over to them and hold on to it for a minute so I don't fall down. So they might stay there for a minute, feel okay and resume normal walking, without any assistance. At stairs, you obviously need handrails but I think even out in the open when people are farther from buildings and farther from support from others, it is helpful to have that.

Second thing would be shade, there must be enough shade, maybe something like deciduous trees, so that there is more sun in the winter and shade in the summer. One thing that helps enormously for anyone that is older. Many of the medications that are taken by older people are sunlight sensitive, they become critically sensitive to exposure to sunlight and they can get in very bad shape and their health can get really bad if they have too much sunlight. Probably the worst place I ever saw in that regard would be an assisted living facility in Houston, Texas. We were doing some research there and they had a memory care wing...they had this wonderful healing garden and wandering garden. Houston is very hot. We walked outside. There were French doors with big windows beside them, so they were very inviting. We walked outside and from the edge of the building, almost all the way to a hedge in the distance, maybe ten or fifteen meters it was all paved concrete, no tinting in the concrete, no texturing, just pure, off-white concrete and no shade whatsoever. No porch to make a transition zone, no shade structure, no shade trees. Over at the edge of it there were some shrubberies and some trees at the edge. But the whole central part of this was incredibly bright and sunny, just like being out on the beach with white sand at noon. When I went out there, I don't think I had my sunglasses with me...I was just almost blinded, I said, "it's so bright out here and people with dementia take this"

and she said, “well, we have a little basket hanging on the wall next to the door with sunglasses in it.

Generic sunglasses may often distort the images you see, they are probably low quality and most people would lose them or break them. People with dementia are not going to have the forethought to realize that they are going to need them. They are going to go out without them...Concrete paver slab on top with some plants in the middle that were pretty non-descript, totally not inspiring, some cover that was just green and not that beautiful. No trees, no bird-feeders, no bird-baths, no seating right outside the door, no seating right inside the door, there was no shade, so shade is really important. Clare Cooper Marcus developed this tool called the AGAT....an assessment tool for outdoor spaces for people with dementia....

Third thing, there's only three things. Some handrails to stand up with, definitely some shade and seating... Because you are talking about older people, the need to sit down can suddenly overwhelm an older person...have the horrible experience of suddenly feeling weak, that they can't stand up anymore. Sometime you need more than just a handrail. An example that is my own mother who lived till 96... She hadn't had a problem. She would've probably lived longer. She had no dementia. She was still driving a car until a couple of years before. She and I used to be able to walk and shop for eight hours at a time, even when she was in her early nineties, you know, 91, 92. When she got up to about 93...her health, due to aging, not any condition...it became really difficult for her to stand up. I mean she could stand up fine, she cooked at dinner parties for friends. But, we'd be walking and all of a sudden she'd say, “Honey, I have to sit down now.” She became weak and suddenly couldn't stand up anymore. We were down in San Antonio at The Alamo. She literally was about to sit down on the sidewalk... She had to sit down. It wasn't a matter of falling over, or leaning on to something.

She simply had to take... She was a small, thin person, it wasn't like she was obese... That happens to older people when they are more frail. As old people have dementia, they might not eat as well, might not go outdoors as much, so they might become frail rapidly.

KS - How important are landmarks to persons living with dementia when they go on walks outdoors?

II - I think they are pretty important. I think they are half the equation. I think landmarks themselves, the more noticeable, the more unusual, the more unique they are. The other half of the equation is the configuration of the visual scene. And we deal with this a lot in the design of interior spaces, large buildings where there are a lot of hallways and a lot of floors, where wayfinding is a major issue. Landmarks are very specific, discrete, unique and separate for each person. It's that red building over there. It's the clock tower. It's the empty lot with the mural in it, or something like that. I think the overall configuration is also extremely important. So just to keep in mind and address in your dissertation...

I'll give you an example from inside. In a nursing home, in the old days they had the K pattern, where there is a nursing station in the center and these hallways radiate in different directions. If you are visiting somebody and you go and use the restroom in the public area which is next to the nursing station in the center and then you want to go back to their room? You can't find which room. And so, the silly things they use such as color coding almost never work, in my opinion. I don't think people pay attention to them as they form a small part of the environment. A blue stripe on the floor in one hallway and a red stripe in the other hallway might work if you stood there and looked at the restroom, and went back to where you came from and made yourself memorize....in a big parking garage at an airport, "Okay, I'm on C4,

terminal A, level 17 or something like that.” You have to force yourself to do it. It’s not intuitive...

I think something that does matter is a landmark at the end of the hallway. Maybe one hallway has a big greenhouse window at the end. The other hallway has a fountain with a different colored light on it. Another one has a sculpture that opens out into a different kind of space. So, the landmarks make a difference. Imagine yourself looking down these radiating hallways, which one did I come from. If you saw something unusual you would remember, "Oh, when I first walked in to their hospital room or the nursing home room, I noticed that big statue at the end." Or that big green thing that hangs down...the other hallways had it. So the configuration of it, like spatial enclosure...does one area narrow in at the end and a smaller area that is dark with a bright light shining down in one spot, so it’s the overall spatial characteristics of that hallway. I think it’s one of the most important things, I think, and it’s true, in neighborhoods, parks, as much as it is in interiors. I think landmarks are an important part of that and they are probably the second most important. I think you can forget about signage and color coding.

KS - What are some landmarks that they are likely to notice during a walk outdoors?

II - I think that if they are bright colored or light colored or different from their surroundings, they're going to be noticed. Unusual...that one sculpture that looked like a piece of rock on top of another rock, it doesn't stand much because it’s dark grey rock and it’s against a dark green background and you can hardly see it in that photo. But in reality, if the sun was shining, that would stand out like a sore thumb...As people age, their cone of vision moves downward to include the paving you are about to walk on. A young person, a little child, they're used to looking up all the time, because everybody is taller than they are and they are never worried

about falling. They fall down everyday and get back up again. Older people are the opposite. If they have one bad fall it could very well mean the end of their independent life. They are stuck in a nursing home for six months from a broken hip.

So older people get very, very concerned about falling, their cone of vision moves downwards. So it almost has to be at eye level downwards. The important parts of it need to be in the lower half of the visual, it can't be... You had one building that was up high, had very Roman or Grecian columns...I don't think older people can see it. I think it has to be lower in the cone of vision, the lower half of the visual scope of what you see. Being brighter colored, not lighter or dark and dull, because older people's vision...things look much, much darker to older people than younger people. The lens of the eyes thickens and yellows. And at the same time when they are in an outdoor environment, a glare, just from the sky even if it's not sunny, a glare makes everything else appear darker. For a younger person standing right next to them....so two people next to each other, a thirty year old and an eighty year old, just the light from the sun makes everything the older person is seeing much darker and blend in together, because the eye cannot adjust to the two different light levels, whereas a younger person, the glare doesn't make other things less visible. That's why older drivers have a much harder time driving at night. They need more light, and it's not that bright out...even a little glare from the oncoming cars makes the stripes on the road almost disappear.

Bright colors can help make things much more attractive. By, attractive I don't mean pretty, I mean attracting attention, that makes you look at it. Like the one image you had with those brightly colored...if you did a black & white version of that...shades of grey and black, it would be much less appealing to somebody with dementia. And I think to older people in general, there is a certain amount of evidence that older people are attracted to brighter colors.

Clare herself has done some research on the flower colors that are preferred by older people...that's something pretty anecdotally noted, that reds and yellows and brighter colors are often much more appealing and again it might go back to the lens of the eye becoming thicker and yellower, so it looks pale. Lavenders just don't look good. They might look like a dirty white or something.

And something animated like the stone lion was...a creature. I think there is some evidence that animals and cats and dogs... and there are a lot of innovative technologies now, you see them in the conferences on aging. Like a seal or an otter, or a white fluffy toy, that is animated and blinks its eye, that people will handle those and talk to them, like babies. Something that is like a living creature, not like that stone thing...it's like a dead monument...

Houston had some kind of art installation...these cows all over town... not as big as a whole size cow but maybe four feet high or some thing, so pretty big, almost the size of a calf...one would be silver and gold, with autumn leaves all over it, one would be striped, one would be reflective so you could see your face in it. It was somebody's idea of art. But something like that would be engaging because you can go up to it. You can touch it; the tactile quality. It's usually set in the middle of the greenery, behind a fence where you can't get near it. Something that you walk past it, and say, "yeah, whenever I reach this rainbow cow, I'm almost back home." They were made of steel, heavy cast metal or acrylic. They were pretty durable. I don't think they got vandalized at all. Something like that would be more expensive than most things...It's nice to show the nursing home, the movie theater in the corner...but you as an architect or an urban planner, you don't really have full control over commercial buildings.

When somebody buys that building they decide they have to paint it white or

blue or grey in order to get more customers. You're not going to be able to tell them they can't do that because you need it for wayfinding. So, I think it's a very productive field to think of what kinds of smells or interesting street sculptures could be added. Because you can actually implement that kind of plan...The cows were all over the town. You could have local business owners decide which cow would go in your corner. They would have buildings, sidewalks, parking meters, and street, and they were kind of about in that zone...Not next to the building but close to the curb. They wouldn't block off people coming in or getting out of their cars...Something that might be feasible as a product of your research that the world could be a little better because of your findings that people could put them to use and do something with them.

KS - What are some ways in which they use or interact with landmarks during a walk outdoors?

II - Perhaps audio interaction... I mean tactile, refers to a texture that invites touching...

horticultural therapy for people with dementia...by going out and gathering plants with different textures and they sit in a small group with her, she passes around these soft fuzzy leaves and things that are slightly prickly or very smooth and shiny or something that's fragrant...Definitely tactile...interactive.. if there was a large stainless steel button you could push and the cow could moo...or do something... you know a lot of museums with children have interactive features. I think somebody with dementia would enjoy doing that perhaps. But somebody like you or me would like to try it out.

It's too hard to do aroma in a public area. If you wanted to have planters with mint...almost have to have them up at eye level or face level...sit in a wheelchair or standing. So you could conceivably have plants with an aroma. I don't know if you could have an interactive installation that you could push a button and it gave out a...spritz of aroma...there's a

perception, as I've been working on outdoor space for older people, not necessarily dementia, but including them, but more focused on those who do not have...even people without dementia, they say about two-thirds of those have some cognitive impairment. People talk about...we'll grow rosemary...mint...the aromas they'll walk through a garden, it will be aromatic. I have a really good sense of smell and I'm an avid gardener. We are in Washington state now and my garden is filled with mint...they very seldom give off an aroma automatically. You have to touch the leaves...Older people have deficiencies in sense of smell. It's one of the sensory features that goes downhill...you're not going to have a field of honeysuckle, when they smell the honeysuckle they're going to know to turn right to go to that building, that's not going to happen...

KS - Now I would like to talk briefly about your survey responses. The first five pages of the pdf, sent to you in the email earlier today, contain the five photographs of landmarks that you found to be most noticeable in descending order of appeal, as per your ranking. We will talk about each of these landmarks sequentially. I would like you to reflect on the issue of wayfinding in regard to these landmarks; how effective they are in their current state as wayfinding cues, as well as think of ways in which their design may be improved to augment their effectiveness as wayfinding tools.

II – (Columbia Funeral)

There is a huge shade tree at the right side of the sidewalk...really creates a zone that I immediately want to go to and stand under on the sidewalk, because the tree looks like it protects me from the traffic going by...all the bushes are trimmed in wild shapes, they are kind of interesting. This is definitely more pleasant. On the left side, where it starts to go uphill a little bit, that chain-link fence is a little bit off-putting. If they didn't have that there and for example had a picket fence....wooden pickets that have comfortable home-like look, that would really

enhance it. In that area just put in maybe a small tree... in among the shrubbery...it would feel like a cozy cottage.

I think the idea of the funeral home is meant to psychologically put somebody off, perhaps, but on the other hand it is best employed to attract attention. Obviously if you are a much older person you might think I don't want to go there, but on the other hand if they are going to notice it...I think the tree makes a huge difference...if you ever cut down that tree that's on the sidewalk, I think the whole place would start to look entirely different. I think they (persons with dementia) would notice it more than ordinary home. I think the architecture is unusual. It's got two little dormers on the upper floor. It's got a sign in old-fashioned writing which you don't see very often. It's got round and shaped topiary bushes which makes a difference, they are pretty uncommon. Most people don't have those. And there are many of them. The red tiled roof and those little green awnings...old-fashioned, you don't see them anywhere...1920s, 1910s, and the turn of the century, they were pretty common in New York City, Chicago, everywhere, noone has used those in years, very unusual.... I think they are intended to have a comforting and old-fashioned look, those are the things that would make it noticed and remembered.

(Columbia City Mural)

Looked a little bit depressing which is not a safe place for older people to be. And those weeds look very decrecent. They don't look like a place you want to be...It depends on how close you are. If that mural had been painted next to a sidewalk that people move right past, that would be a little more appealing because they can stop and look at the details. But at the back of a parking lot with weeds growing up...they're very unpleasant...litter. Older people hate litter and hate leaves. The metal poles they are mounted on are decrecent...not very safe

there. I think the idea of a mural was more appealing. If you had a really pleasant setting for the mural...a lot of people would be afraid to go back into the parking lot because of the litter, the weeds, those metal bars and there's no windows there, I don't feel safe there.

I think people would notice that, but only from this direction...That looks much more pleasant to me, because even though there's cars parked in front of it, you do see the weeds, whenever I looked around...Quite a busy parking lot with stores and things, so I feel safe. I see a nice green tree that I can be under when I'm looking at the mural, and the mural is right at the edge of the sidewalk, so I'm quite close to it...I definitely like this much better now, and I think it will be a useful landmark.

But you cannot see it coming the other direction at all. Walking the other direction you can't see it...would never see that at all...from the other side of the street you can see it a little bit, but that's a fairly small mural, but still, you could catch a glimpse of it, it might help. You definitely see that whole open shopping center...with all the parking and that may be also part of the whole landmark...if you're standing on the opposite side of the street, you would see the opening, the mural, the red and green awning on the left side, the parking, the trees, and that becomes a landmark.

(Seattle Public Library)

I think the big tree partly hides it, but it's a big green space and I don't think there are other green spaces right near it...I think the green space would help attract people to notice it...I think the unusual quality of the building, there is not too many buildings that look like that. It's set out by itself with just open space and trees around it. I think it would be a pretty good landmark... I think it stands out pretty well. I think it's a good landmark...The library

worked because it wasn't too far from the sidewalk. And it had a really green lawn in front and it was clear on both sides, on one side anyway.

(Ark Lodge Cinema)

For me this doesn't stand as much of a landmark at all because it's a similar color to the buildings next to it...This side of the street is hidden by the tree somewhat, but the height of the building isn't very different from the ones near it. The base is just basically white, just like the rest of that block. There's nothing wrong with it, but I don't think it stands out very strongly...this is more passive. I wouldn't expect it to stand out at all as a wayfinding tool. Everything is white on white with the dark grey doors, and the whole rest of the building...the rest of that block looks similar too.

(Spirit of Washington monument)

...would be a lot more visible in any case. Especially if you saw it three-dimensionally, in brighter light. It would sort of move as you walk towards it, because it would move in reference to the background. You see how it's almost invisible...the middle part is up against the green trees, the patterns on the other part are kind of subtle. So you don't really see it that well. It may happen to be in the park already, but even in the close-up view, it doesn't look that dramatic. I think the dark grey color is part of the problem...

(Columbia City Theater)

...what is interesting about this one is the slight diagonal wall that steps back and creates a wider space at street level with an angle. That's the only thing that's really interesting about it. As an adult without dementia, I would probably remember that, because of its spatial configuration...I don't think it stands out a lot if I were right next to it on that side walk I would view it...but if I were on the opposite side of the street I wouldn't notice it

especially...not impressed with (it) as a landmark...there wasn't a very bright color. It wasn't as large. People in the way would make it harder to see...People (who) are older are looking down more, and this just doesn't have any bright colors. Not as strong (a landmark) as the other ones, the funeral home or the library.

(Bike Rack)

....The bicycle is kind of small for someone to see it...if it were not the same size, maybe four feet high...this is just one soft color....kind of micro, but it's thin, you don't see it until you get sideways to it. If you're on the opposite side of the street the car would hide it from me...not impressed with (it) as a landmark...I think it needs to be more overt and obvious. If you were to paint it red, I think it would stand a lot more, a red and yellow...I think it's supposed to symbolize the green environmental characteristics of bicycling, but the green is so soft and so close to the grey sidewalk that I don't think it's that visible. Maybe if it's fluorescent green that could help. Not as strong (a landmark) as the other ones, the funeral home or the library.

The problem with this bicycle is from across the street it could be entirely hidden by a parked car. And if you're walking down the street and there's other pedestrians around they could be easily between you and it, and you wouldn't notice it. You don't really see it from a distance, you only see it very much when you're close to it...because you have to look sideways at a distance from it, it just looks like a little pole. The perspective makes it skinny...I wouldn't notice that in a million years. It's too small. The way it's painted, it actually blends into the background. It looks a bicycle someone parked there... I wouldn't notice it...Not a street sculpture or landmark, it's the kind of thing you see everywhere in Seattle, you see bike racks everywhere, so I wouldn't notice it at all...Things have to be taller to show above parked cars and they have to be brighter and stand out...they aren't very unusual. Bicycles are parked everywhere

in Seattle, they are parked all over the place, because it's a bicycle city, so I wouldn't notice a bicycle.

(Sound of Light mural)

I think it's extremely effective and noticeable and memorable from this view, walking on this sidewalk, on this side of the street...From this angle, you definitely see it. From across the street, you see it a little bit...from the other side, I'm sure it looks invisible doesn't it, all you see is the grey...Older people are not going to be like children or teenagers where their head looks around a lot and they look around and up and down and stuff. Older people are just going to walk along...They look down...they don't look to the side that much...that wouldn't be a very good landmark from this way. From the other way, it's exceedingly effective, one of the most effective of all. From this direction, it's nothing...it offers places for people to hide and step out and mug someone at night...It's not that visible from (across the street)... you almost want to have those things turn, facing the light rail...because they are designed to work in only one direction...not the other direction at all, if we were designers chosen to improve this...take that same kind of pattern and wrap it around the corner...so you have a piece that looks like about 2 or 3 feet wide on the ends, only facing one direction.

If you were to take it and wrap it around the corner, do another piece the same size, facing the street, then you could see it from walking the other direction and you can see it from across the street, as it is, it doesn't function very well at all...not (fill the grey patch with) the whole thing but just the piece the same width as what we have, not the entire thing...when you're coming down the sidewalk where you can't see anything, you see those pieces, you can walk past and touch them as you go...

(Pride installation)

I think the white one on the corner is a lot better landmark...because it's brighter color, it's larger, it's closer to the pedestrian. It's more animated and more unusual...we've all seen pictures of lions lying down...the one in the corner, it's got it's hands up on a ball, so it's more active, it's more dynamic. I think it's definitely better....being brighter, being more dynamic, being more unusual, being more interactive...

...the lighter color of the concrete or stone. Look at the strange face and the teeth showing and the paws on that round ball...the other is much more passive, laidback and dark-looking. It's farther back from the corner, so clearly the white one is a much better choice. And I think it would work because it's big enough and bright enough and you could easily see it from any part of this intersection, including walking across the street. In fact, I think it is probably the best landmark, so far, of anything you've found. It's unusual, bright, it's large, the lines of vision, you could see it from almost anywhere...If we were back there walking towards the intersection, we could see that white one quickly, we wouldn't see the sleepy lion, until we were almost past it...going to be very visible so, that has a lot of the characteristics you're looking for in a landmark, I think. The lines of sight, the brightness, the largeness, the unusualness and the kind of animation.

(Rainier Arts Center)

It's got to be closer to the road to work...has got trees on both sides. It's really far back. I don't know that I would notice it. Frankly the bus stop is almost a better landmark, that little blue bus stop right there. Maybe they could paint the bus stops different colors, if one was totally bright blue and another was totally bright red or put a big sculpture on top of each bus stop. one looks like a fish, one looks like a whale, one looks like a bird...thinking where you

can take ordinary features of the landscape and modify them a little bit...(the sculptures) they're kind of invisible too...maybe in a brighter sunlit day they would show up a little bit...

I was thinking of right on top of the bus stop, welded to the top of the bus stop, one single thing that was definitive...these don't look like anything to me, they're kind of flat, but if you had a similar one that had a bright sun on it or a star or a fish, just a single one...just weld that metal roof to the corner. You could say, "Oh, it's the fish bus stop" or the "moon and stars bus stop" or "the rainbow" bus stop, something that had a sculpture right on it. I don't think those are very effective at all...I think somebody young would notice some, I don't think an older person is necessarily going to see them. I would put it right on the front corner of the metal...in the center, or one on each side, so you'll really see them...

(a landscape architect) has used interesting sculptures in the outdoor...they have a little overhang for people to rest in hospital garden. He's done some very dramatic beautiful sculptures. Something like that would be fabulous on a city street as a wayfinding device. They're really well done. In the hospitals, I thought they went a little too far, I thought they were a little over the top and maybe a little, in the street they'd be fabulous for people with dementia... the bus stop stands out because it's a bright blue, fairly bright blue, and it's right next to the walkway, and then the land, the context of the land opens up here, in this corner, I can see into the park...

N.2 Interview with I2

KS - What are some places that persons living with dementia prefer to walk in when they go outdoors? Down their street? In a nearby park? Elsewhere in their neighborhood? Or, outside their neighborhood?

I2 – It's a very general question and I'm thinking about the experiences that I've had mostly with, I would probably speak mostly about research participants. And that people would really tend to stay much closer to home. In part, because it can be difficult to get to some place that is away from their neighborhood. Or close to home, perhaps, also I'm thinking about a group that's here in Vancouver that I've done research with that meets in the Downtown core... so, in quite an urban area of Downtown Vancouver. And so, it isn't their home neighborhood, but perhaps you may think of it as their second home neighborhood because they are there two or three times a week and part of what that group does is go out on walks as a group... so, not individually. And they walk through what is a very urban area, but...it's quite unique to the place.

It's Vancouver. It's very near to the waterfront. And there's also a lot of park land. So, it's green spaces, blue space by the water, there's people out walking their dogs, there's people cycling. But at the same time they're also crossing busy streets. They go to an ice cream parlor. It's quite unique kind of environment.

But it's also a very rich and vibrant space with lot's going on and that's really appealing. I was struck when I looked at the pictures that you sent earlier, some of the public art, I'm looking right now at that first picture with the mosaics going down the side walk. We had recently published a paper that explored the role of public art for this group in particular when they're out walking about because Vancouver has a lot of public art in this area and it's always really engaging for this group.

Other things we have seen in the research that we've done is the real appeal of being out in nature. So, areas that aren't strictly speaking quite urban, but are familiar locations, but out, like trails through the woods and things like that, people walking their dogs for example...or going to the beach, walking along the beach...And there's a lot of opportunity like

that here in Vancouver. And I'm speaking mostly of Vancouver, that's where most of my work has been done. And it's a nice temperate climate. People can be out most of the year walking about...in places that are quite beautiful. People come to Vancouver from all around the world. It's for a reason, it's a beautiful city. The people that we spent time with really enjoy being out in that beauty.

And then perhaps the other thing that I would talk about is just walks in, as you mentioned, in the neighborhood. So, close to home. They tend not to stray very far. And they may have a destination that they are going to, but more likely, just walking around the block. I'm recalling one woman who spent most of her time at home alone. She had mild to moderate dementia. Her husband was working. But she would go out and just walk up and down the street. She lived in a suburban neighborhood. And she had taken it upon herself on the week when the garbage pickup, the recycling pickup would happen, she made it her job to return all the bins...down by the street. So she would take them up the driveways and replace them for all her neighbors. It was also something to do that was meaningful that she was able to do on her own...

This particular woman also had an indoor walking group. We've seen that a little bit. I suspect if I was being interviewed from a place like Toronto that might be more common, perhaps, in the winter. And we've seen that a little bit. This was a group of women that walked in a mall, I believe and she would join them and walk inside...People are mostly drawn to the out where it's beautiful and where they can get fresh air and they can meet the dogs that are walking and those kinds of walking.

KS - What are some enabling and disabling characteristics of the physical environment that influence their outdoor walking?

I2 - I'll talk about all the barriers first. People with dementia are often older, and even people who are younger will tend to be slower. It just takes longer. They're just slower. So, traffic patterns...the duration of traffic lights. I'll go back to the group that's walking in the downtown urban core. These people would never be able to do that on their own. Now, to be fair that group also has a number of people that I would characterize as having more advanced dementia. But even the ones with milder cognitive impairment, it is such a complex environment that the group leaders are constantly worried that someone will, as they say, wander away and become lost or become distracted by something and lose the group. And they have had it happen. So there's a perception by the group leaders in that case that it's a very risky environment, but at the same time it's a very positive environment. So it's important that they're out there but there are so many factors that present particular kind of barriers that make it more difficult for people that wouldn't be able to do it on their own. They need help to be able to parse the environment.

Now that said, thinking about that urban environment again, some of the enabling factors are, familiar landmarks, are one. Those can change too, because it's also an environment where there's new construction happening. But generally speaking, some of the really big things like, "we're going to the Cambie street bridge," so that would be a familiar environment. Some of those landmarks are important. And some of them are there because The City has made a conscious effort, so it isn't just a bridge that ultimately serves another purpose. But there are things that are meant to be landmarks. They're like historical markers, that the group will stop, they'll read the history of that particular environment, so that becomes a place that people know.

There's park land. There's place where there is a dog run. And it's not fenced in

but it's a big open space. There's benches where people can sit down and rest. There's just a lot of activity happening. But I think there's enough space there and it's a real social kind of activity. So it's not confusing. And it's really engaging because people are there doing everyday kinds of activities and engaging with the neighbors really. They come to know the people quite well. Pathways that people follow, that really helps. So in this case, people are out walking in a group, and they need to keep kind of together, but it's also a very natural kind of thing, they're not walking in a regimented way, because they are walking along a path. And the water is on one side and the green park land is on the other. So there's something about the way that it's constructed that takes advantage of the natural boundaries of the seaside that really helps. People can find that they can go a little bit slower, they can stop and pause for a time if they wish in a very natural way. There's a lot activity on the water that is really interesting and engaging but they know there is a barrier there and they can't wade out into the sea obviously but it's a nice place to stop and look and have conversations about the boats and the paddlers that are out there.

I mentioned the art before. I think some of those big curious kind of abstractions...being quite important and we've seen that in our work. These kind of odd abstract things prompt conversations. And I mentioned briefly but emphasized having a place to sit and pause. So, places that are comfortable to sit and to have a conversation. Because as much as being outside is partly about the physical activity, it's also very much about the social activity for this group, both within the group and engaging with the people in the neighborhood.

And I also used the example of people liking to go out and walk along the beach or walk in park land, whether it's the seaside or through the woods or through a park. And one of the most enabling factors there is some place that is familiar...people that go out and do the same route, kind of over and over again. When we've interviewed them they may not be able

to tell us where they've gone, but if we go with them they always know where they are....just a deep sense of familiarity, which would be the same sort of thing for that walking around the neighborhood piece. And why we...have not seen as much people seeking to be outside far away from home. But when that's happened, it's because of someone that can take them there. So I would consider that. If someone doesn't have that opportunity, that gets in the way. In terms of social factors, it's being willing and to let someone take those kinds of risks...

Here's one thing I have to say, and it's coming from a project that we're doing that isn't necessarily focussed on dementia but we have at least one person who has mild dementia as a result of a stroke. Some of the stuff that's come up has to do with traffic and bike lanes. The perceived risk of those for people who are older and slower and have cognitive impairment; it's been something that's been happening in Vancouver a lot over the past few years...implementing bike lanes, and it's really changed the pattern of traffic. So these guys are going fast, they're not where you expect them.

The encounters with bicycles is also an issue for that urban group that I've talked about, that path that goes along the sea side, and the park land on one side and the water on the other, is divided in half, and half is supposed to be for cyclists and half for walkers. But you can well imagine that sometimes they encounter each other and it's often a point of tension. So I would say, cyclists, and how that's being managed in the urban and suburban environment is a very big issue. And the last thing that I would add might be less of an issue, but it has to do with public transit...in terms of built environment I'm not sure I have too much to say about that. The bicycle lanes are more of an issue.

KS - How important are landmarks to persons living with mild to moderate dementia when they go on walks outdoors?

I2 - I think, I assume...it's based on having seen it quite a bit, that they actually are really important and it's not going to necessarily be in the form of declarative knowledge...being able to identify a particular landmark outside of the context. But when we hang out with people and go for walks with them, when we're out with them, I see it as being really important. And people may not necessarily always remember that they've seen something before, but will note it. And I think it really offers a sense of real familiarity. It gives people a sense of where they are. And it may not necessarily...

I've done a project recently and it was indoors and it was looking at art work. And one of the questions, we had a guy who was an architect and a design guy who was on the research team and he was very interested in that question of wayfinding. He thought, "Well, we're in a nursing home setting and it can be hard to find your way around when you have cognitive impairment. Would the art stand out and help people with wayfinding?" And what we found was, in my way of interpreting this at least, is not wayfinding in the usual sense of the word, but definitely people used it as landmarks. So people, for example, in this case, it's not an outside example, but I think it would transfer quite well and if I thought about it very much I'm sure I could find examples from other projects where we've been outside with people.

They kind of have a sense of what the next place is where they can stop and take a rest, that moving through an environment, moving from one place that's familiar to the next...And that's why the public art stuff has really stood out. I'm thinking way back to a project I did, it was the first project. So this woman would go to the park. It was a big, this is Golden Gate park is what it was, so a really big urban park. She couldn't tell me at all where she was but she knew a particular lake was a kind of landmark for her and she knew when she approached the

lake which way to turn so that she could follow the path around the lake. And when we came back there was a grocery store at a particular corner. And she knew that grocery store and they knew her. She wasn't quite sure what bus to get on, even though she did it all the time. But she knew that grocery store and said, "I will go in here and ask." She knew it was a safe space and she went in and she asked for the cashier. The cashier clearly knew her and said, "Yes, you're at the right place. Just get on the bus that's at the corner." So, there were people at this place that were familiar to her that would help her figure out where she needed to be next. So that grocery store was, I think of that as a kind of 'landmark'. The examples I'm thinking about are urban spaces...thinking about those natural spaces...I haven't thought about it so much in that context.

KS - What are some landmarks that they are likely to notice during a walk outdoors?

I2 - I'll probably be repeating myself here a bit. I think the public art and stuff that is more abstract. We have a good example of a piece now, I suppose one could say it is a particular kind of abstraction, but it uses language, and it's more of a poetry kind of piece. It's carved into the wall along the seaway. And that worked less well. It doesn't stand out visually as much. So it's a kind of visual abstraction, but isn't potent.

I'm looking at that picture with those mosaics and it's really bright and it stands out. We had other examples of where things are odd or quirky. Just visually they stand out. Other landmarks... places to sit and rest. Honestly, bathrooms, that's something I haven't mentioned before. Particular buildings that are known to have public bathrooms will be another kind of 'landmark'. People will have a sense if they are on a regular kind of walk and there's a place to stop and go to the bathroom, that becomes a sense of knowing how long you've been out, like, "Oh, we're kind of half-way there." The urban group which is the one we've done the most explicit work around the walking piece also has as a kind of landmark, they have a

finishing point. That's not actually where they end the walk. They still have to get back to their meeting room. But they stop and have an ice cream at the gelato place every day when they go for a walk, they stop at the same place. They get there a different way sometimes. But they always stop at the same place. And visually it kind of doesn't stand out very much. It is on the street, but the main entrance is actually inside, but it becomes this kind of marker that the walk is over, and they'd stop and they'd sit down and have this social event. It's nothing that 's all that special from a built environment perspective, but it becomes an important kind of 'social landmark' almost, in a sense... a "social-mark", I don't know if there's such a thing.

So I've talked about places to rest, the art. Some of the big features...the ocean, the bridge, in the urban area, buildings, less so, because it's a very dense urban core. And home of course being a very important landmark. I'm trying to think about intersections and things like that. I would say I've not seen that so much. There's a gentleman who would go for walks with his dog behind his house and there was some bush back there and he would go down over the embankment towards a creek. The creek was a really important landmark for him. It was like a destination more than anything, which is interesting. I suppose, what made it a destination was, it wasn't built environment by any means, although there was a kind of path that he followed to get down there...

The language thing in the abstract art piece...so, that one, if you read the paper we talk about it. It's a piece of art, and it's necessarily abstract, really about the meeting of different cultures in a particular place. So, from our perspective it was quite interesting, because that particular place where that piece of art was, was sort of at a juncture, the path formed a corner there and there was place to sit, and they would sometimes stop and play ball there. So...it was a kind of meeting place. It was interesting for us to kind of think about how this became a

meeting place for people with cognitive impairment who normally would be quite disenfranchised. But it was about English and the Indigenous First Nations people coming together. That's what the art was about. The art didn't work, people didn't get it. And yet in the activity that happened there in a way maybe it did, because it was structured in such a way that there was a place to sit and gather.

So maybe I'm challenging my own interpretation of that. The abstraction, just generally speaking, I think the way we have understood that and what we've seen is that it's curious, it's hard to make sense of. And I might imagine, with dementia sometimes it can be hard to make sense of a lot of things. But I think there is a freedom that people feel in looking at an abstract kind of artwork and here we're talking about public art and public space, outdoors and the kind of freedom for people to go and say, "What the hell is that? That's strange!" In a sense knowing that there's not a right answer here. And that it's okay to have a conversation of what that might be...

I do believe that there is more that perhaps people with a certain degree of cognitive impairment when given the opportunity to encounter that and to engage in conversation that they feel freer than some of us might to have conversation. That kind of abstraction seems more engaging based on what we see people saying, how they would stop and consider something rather than a piece of art work that is sort of more traditional. We don't necessarily, in the Vancouver space at least, have good examples of that.

In that particular area where people are walking there's not like those old traditional statues of some historic figure...that's not true! Actually we do. There is a statue of Terry Fox who is a really famous Canadian guy. There is a little bit of abstraction in the art work itself. But it very clearly depicts him. People know him and it's often that they will go out and

they will probably have forgotten that they said it before, but they'll look and they'll say, "Oh, that Terry Fox, he was a great guy! What an amazing thing he did!"

The abstraction is one piece that I've been particularly interested in. But it isn't always the case that non-abstract art doesn't work as well. This question about something curious and unusual vs. something very, very familiar, I actually don't think it's an either/or. I think the curiosity is actually appealing...I think there is a lot more there that we can understand and take advantage of. I might imagine, and I'm using that word very purposefully, that there is something about the curiosity, the inability to parse it, that does in some circumstances become a really, I think there's real pleasure that people obtain from that. I suspect there's something about older brains that find that more appealing. And perhaps, people with dementia. That said, what's familiar also has an advantage; the ability to prompt real reminiscence...thinking about older memories.

So I think that's what made me, when I looked at that picture with the movie marquee, it looked like an old movie theater, not like one of those new cineplexes where you go into a mall and there's 15 huge theatres. But one of those old street fronts that had the title of the movie over top, I might well imagine that something like that would allow people to harken back to when they very young. Now, there's something to that kind of familiarity that can also be very valuable. I would think that both have equal merit in terms of exploring these ideas and thinking about urban design.

KS - What are some ways in which they use or interact with landmarks during a walk outdoors?

I2 - There is something about the ease of being able to get around...I'm thinking about the picture which you had with the big wide intersection with the Chinese lion on one corner. That's a really cool landmark, and yet, a really big scary space. I would see that intersection as perhaps being

quite a significant barrier. So is there something about the way in which the landmarks are in fact situated in the broader environment that becomes really, really important to consider...

I'm looking at the mosaics. Any one of those would be kind of cool. They're interesting to look at. But the way that first photograph is taken where it extends down the street, I want to go for a walk when I see that. Whereas that lion is kind of curious, but if I was on the opposite corner, I don't know if I would be led to cross that big busy street. So, it isn't just the landmark but how it is situated in that...I was also reminded in your photographs that it's all so deeply cultural too. Like those buildings, they are of a particular time and place. That reminded me of that very much.

I would predict, yes, that there is a difference between the walking experience of groups vs. independent walking, just because of the kind of being at ease, being with people in their own neighborhood, and recognizing that they're likely living at home with family who are for the most part comfortable letting them out, "letting them out," that sounds terrible. But knowing that they're out and about and feeling okay with that, once you see the individual has a kind of comfort, but they're also in a family situation where there is a kind of comfort, where they're going to be okay.

While there are some members of that walking group, there's always maybe one member who is maybe able to make it home on their own. They can take the bus and walk home. But most of them, they don't live nearby. They are coming by a shuttle bus or something into a downtown core, and are likely not all that familiar with it. So, the group itself, I expect, becomes quite important to their feeling of being comfortable. They wouldn't be comfortable, I expect, going out on their own. We haven't asked that of people and we haven't really asked that question from a research perspective. It's an interesting one.

KS – Now I would like to talk briefly about your survey responses. The first five pages of the pdf, sent to you in the email earlier today, contain the five photographs of landmarks that you found to be most noticeable in descending order of appeal, as per your ranking. We will talk about each of these landmarks sequentially. I would like you to reflect on the issue of wayfinding in regard to these landmarks; how effective they are in their current state as wayfinding cues, as well as think of ways in which their design may be improved to augment their effectiveness as wayfinding tools.

I2 - (Sound of Light)

There's A that's looking across...All the greenery and some of the dry grass along the bottom kind of obscures some of it....And I do not from the perspective of C of course it's completely invisible. It's an interesting thing in terms of wayfinding...if someone was walking in the right direction it works really, really well. If one needed to get back to where they were coming from and turning around, of course it might not at all, I didn't consider in my first answer, when I first answered that...Regarding design improvements, it depends on what the purpose is. The purpose is ultimately to have something rather lovely along a sparse section of road way...and if you wanted it to be seen from both directions, perhaps. I do notice, this is less to do with walking, but the art can be seen by walkers, but not necessarily so easily by cars because it looks like the cars are heading the other direction along that side of the road. It rather depends on if it was to be used for wayfinding or not.

(Ark Lodge Cinema)

I feel this one's quite good. It's a building that in a way seems to anchor that block. It's very clearly named up high and it seems that it's possible to see at least from a short distance away at least to be able to read that. And the marquee is quite noticeable. I guess at

night, knowing that it could be lit up to be seen. And there are what look to be movie posters at eye level...I'm looking at picture B and there is that window there and then some blank space with what looks to be a fire alarm. Some more signage there might be helpful, that's more at eye level. It's possible if you were walking on that side of the street that it might not be quite so noticeable. It's quite distinctive from across the street. But a little bit more either in the doorways or along that corner of the building.

(Pride installation)

It disappoints me that there is no obvious place from what I can see to sit...and I could be wrong about that. There might be a bench, but I don't think so. So there's no place to kind of reside with it...to draw in. It's a big intersection and as a landmark though, the way that one lion sits out in front, I think that really works well. And it's right underneath what looks to be the street sign. So one could well imagine the combination of reading the name of the street along with the lion can really help. That works. It's kind of unfortunate what looks to be like a utility box of some kind sitting next to it.

And then there's other art work that kind of hides in the back. Kind of unclear to me what this space is intended to be...Art work being in the proximity of each other may take away from the distinctiveness of individual elements. Coming from a Vancouver perspective it is distinctly cultural. So I wonder if it also carries meaning as to where it is in the city, if there is a Chinatown nearby, for example. And if not, it seems a little bit of a curiosity...I don't know too much about the Chinese community in Seattle but there is a big one here and most people here would look at that and think that it would actually carry meaning, that there might be something related to Chinatown or the Chinese community nearby, and if there wasn't that would be a little

weird. So I don't know what to say about that because I don't know anything else about the context and where this would be.

(Columbia City Mural)

It was looking really great initially and then to see where it was actually situated in a car park here. And so, perhaps, not so much, considering that it is opposite...I'm looking at picture C, so there's all these bright little markets on one side and on the other side this very bright and evocative piece of graffiti, but it's half hidden by cars, and the cars would be moving in and out. It wouldn't be a safe space to walk by any means. So, yeah, I question that in terms of...it could be better, in terms of serving as a landmark.

(Columbia City Theater)

I'm looking at picture C now, it's a lovely little building, but it's tucked in between a number of other lovely little buildings. There's some good signage there. And there's some good windows. It isn't clear from the photographs how much people can see in...Those windows are really the big feature that might serve to distinguish it. I thought at first that it was quite a bit lower than some of the other stuff but of course it's not because the building to the right is just as low, the Ale House has a second story. I think there's some potential with the windows to make this quite good...to be able to see in. I'm not necessarily thinking about signage per se. But it is inviting to go in. That was the impression I had of this one. I thought it had a lot of potential to invite people to enter.

(Rainier Arts Center)

What it has going for it is of course the great big honkin' sign on the front. And it's down low. And as I look even in picture B where the building itself kind of recedes into the background and it may be just a function of how the photo has been taken. But even that sign

still stands out. If you're looking for that that could really work. But where it was...for some of these I could have gone either way. With the parking lot in the back, again the low signage I think is quite good, but the building itself perhaps not. Picture B, it sits quite a ways back from the main street. It's really unclear how one would even get there.

When I didn't choose it, it had to do with how uninviting it looked. The signage is worked, is what I would say. But otherwise, it's quite a big foreboding looking building and with the choice it wouldn't be what I would choose. But of course it doesn't look like a building that's brand new either, so they're working with what they've got. For picture C there's some nice signage down low, but nothing on the building. And it looks like it could be some rural community center from the side. I think something more on the side... it's at the back. It kills me because the building in the front looks so grand and then this looks like nothing. It actually looks like it could be two different buildings, so something more on the side there to indicate that this is the same space. Other than the signage which serves that purpose quite well I think.

(Spirit of Washington monument)

The sculpture was really, really cool but it didn't stand...I was influenced by picture C where I could barely see it. It kind of disappears into the landscape...It is quite curious. It meets some of my other criteria. It's a curious thing. It is alongside this lovely path. There is something about the size of it in the grand landscape and maybe I was quite influenced by C and B where it starts to recede a little bit.

(Seattle Public Library)

It looked like an old East Coast New England kind of building to me. There was nothing too distinctive about it. The stairs looked to be quite a barrier to get in. As a young person I would value that. It doesn't look all that West Coast to me and it does remind me more of New England, so it might serve a reminiscence function for most people. But it didn't stand out too, too much.

(Columbia Funeral Home)

What a bizarre, bizarre building! The way it's situated, it almost looks like it's on a peninsula, from the photograph. Maybe, it's just the way the parking lot is located there. It does stand out in a strange way. It looks more like a restaurant or a seaside restaurant. It looks very odd.

(Bicycle)

No go. It doesn't stand out. It hides. It's weird. It was cute. But as a landmark it didn't work for me.

N.3 Interview with I3

KS - What are some places that persons living with dementia prefer to walk in when they go outdoors? Down their street? In a nearby park? Elsewhere in their neighborhood? Or, outside their neighborhood?

I3 - Well, in general, it would be the same as most adults and seniors who would be going to the different places in their neighborhood depending on their lifestyle choices and preferences. But a few places we can easily mention that they would go to on a regular basis would be going to the grocery, going to the pharmacy, sometime they might go to the library and shopping centres. Park would depend on whether there is one nearby or whether it is accessible. The park issue is

dependent on the location of the individual. But typically, I would say, going down the street. Again, it depends on the walkability as well. Walking or transit or driving would obviously depend on the infrastructure of that neighborhood. Those are the destinations we can comment on based on our own work and other people's work...going to the grocery, going to the doctor's office, going to the shopping center...and to friends' and family's places in the city. So those are typical scenarios. And I think if the community is walkable then we can extend that to walking to a park if there is one nearby. Walking to a transit stop, walking to a cafe and so on... That's a generic answer.

Obviously there would be variation depending on personal lifestyle choices. I know people who go to gym, take their car out to swim, every week, few times. The person has early stage dementia. But she's among ten or twelve people I know. So, it depends. So I think there are some core, not 'core', but 'common', more common destinations and there are secondary destinations one could identify...I think there are some common destinations that one could identify as general, common locations that people go to, and there are secondary or less frequently visited destinations as well, depending on personal lifestyle choices or preferences, like going to a gym, or going to a swimming pool or going to a senior center. They are based on personal preferences and that might be a minority compared to some of the more common ones where most people or majority would go to.

KS - What are some enabling and disabling characteristics of the physical environment that influence their outdoor walking?

I3 - We don't have a lot of empirical evidence in this area. I would speak from my personal experience in interaction with individuals who have early stage dementia or anecdotal experience

from others. One of the issues that we have found from anecdotal experience is the disorientation. Unfamiliarity of places, spaces, because of there is no familiar cue, the building doesn't look...they're not quite sure where they are, because of unfamiliarity of the environment. It could be a new environment. It could be an old environment as well. Sometimes people get disoriented even in old places as well things look different and for some reason there's no cognitive connection happening at that point. So disorientation would be one important one.

Other one would be getting services and having difficulty communicating, like going to a bank and having difficulty understanding "how do I...forgetting my pin for the credit card" or forgetting all the tasks that they wanted to do...multiple tasks at the bank or going to the grocery and then forgetting things that they need to get. So those are common elements that I can think of.

Also transit is another big issue we find in metropolitan areas where people are reluctant to take the transit because they don't have the confidence in order to provide the right fare or talk with the bus driver if there is any issue of disorientation. People end up taking taxis. So having services in different locations, lot of interactions can happen in different location service, on transit, in banks, grocery stores and so on and so forth. So in general, in my experience, they would try to go to the same destinations and not go to the new places. But that's how people cope. But as an issue, as a challenging issue, that would be one service.

Another one is crossing the street. I have found some individuals having difficulty, depending on the neighborhood, that if the crosswalks are fairly long then they feel more uncomfortable and less confident in crossing even though they have been doing those crossings in the past, before the diagnosis. So it's not a matter of, obviously we're talking about people who are physically able to cross, it's the cognitive uncertainty that's posing a barrier for

crossing longer crosswalks in certain locations. I think those are the three things that come to mind at this point.

KS - What are some cues in the environment that people use to cope with or overcome disorientation?

I3 - The ones I know of, they would typically call somebody, they wouldn't...I have found people telling me they don't feel comfortable asking strangers in the streets. So they would rather call a friend, mobile, to ask, "Can you help me find where I am" by describing the location where they are or "how do I get to where I want to get to from her?" Connecting with a friend is a common way of coping.

Another is, as I was saying, typically they don't deviate from their familiar paths or destinations as well. It's also connected with transit. If people are using transit they would go use the same bus, go to where they want to go to and then will come back on the same route, either by bus or by walking. So, sticking to certain paths consistently is one strategy people take to not get lost, or potentially lost. I know, there are some individuals who actually...this is one way of coping, not going out as much and relying on online shopping...groceries. So they used to go out more and now they are less confident, unsure and they had some issues occasionally, having awkward interactions with certain shops or restaurants and typically would not venture out unless they are with friends and family. So that's a negative example of, or negative impact on quality of life, in my opinion. But that is another way of coping. Reduced mobility, and reduced independent mobility, so to speak.

KS - How important are landmarks to persons living with mild to moderate dementia when they go on walks outdoors?

I3 - This is one area we can draw from the research that we know that has been done in care homes and assisted living, where people have been studying landmark-type features within the interior and we have some empirical studies and obviously some anecdotal evidence on what works, what doesn't work. So I think we can draw from that and project what might be helpful in terms of the landmarks in outdoor community environment.

Yes, so, landmark, as a general design principle, it has value and we need more empirical evidence in that, even in the interior. But what we know, for example, is that colors are not very helpful. So quite often facility administration and facility managers talk about using color as cues...which works to certain extent for cognitively intact adults but not so much with people with dementia. When we talk about color, we talk more about meaningful objects that might have a color theme. So you can have a nautical theme and work with shades of blue in a certain setting or a certain corridor or wing. Or a theme of forest or nature, green vegetation and nature and work with the color green.

Even in that the issue comes back to what might be familiar for that individual or for that group as a general expectation in terms of their past lifestyle or life experience. So I think that's something we can draw from and say that, yeah, are there cultural motifs, symbols, are there historical artifacts that people can connect with based on the region, based on the culture... based on the geography that they would relate to. So, again I think the issue as a generic concept is the meaningful object that can work as a landmark.

And the other thing that we know from the interior as well, as one might expect again which is quite intuitive is the location of the landmark. So, has to be within certain strategic location, within the circulation path or next to destinations that people frequent more or that might be more relevant. It could be in terms of a community center. It could be a major

library or something. So, a more public oriented interest location would be important to think about.

One is again the meaningfulness of the landmark, the location of the landmark. When you're talking about outdoors obviously...is the scale of that landmark and that is something interesting because I think you want to argue for a larger, working with big scale landmark that could be more prominent and dominant in the setting so that people would easily notice and potentially use that as a landmark. I think there is some truth to that. My hypothesis is this would be a combination of size, meaningfulness and appeal. Appeal is probably not the appropriate word; more like, to what extent is it memorable, which can be based on history...based on the sheer design or something else that would draw me to that landmark.

Because I think we are talking about the importance of relational scale. The landmark scale, vis-à-vis the human scale. It could be a huge building or a huge tower, but that may not work at the human scale on the pedestrian level. So, I think scale is important, but it has to be modulated with, enhanced with meaningfulness and the memorable quality of it through design or something else. Scale issue is an objective issue but the actual content of the design and the landmark would depend on where you're building it and what's 'the people' and what's the history and so on

KS - What are some landmarks that they are likely to notice during a walk outdoors?

I3 - It's something they can recognize based on their life experience and exposure. So I think that is one area. The other area that we need to look at, in my view is...I wouldn't call it unfamiliarity, but the potentially innovative nature of sculptures...we don't talk about but sometimes we see sculptures...public art, that are quite unique because of how it's designed or how it's placed and so on, and those are often quite controversial. Some people like them, some people hate them. I

think what it does though, is an example that they are quite unique. So I think that's another interesting area, in my opinion, to explore for people with dementia as well. Yes, we know about the familiarity aspect and the recognition of things that they have seen in the past, but what about uniquely different landmarks? Would those be noticed by people with dementia? I don't know. I think that is a reasonable hypothesis to be tested.

The other thing I would just quickly add is, I think, it's also important to think about landmark as destination...we can think of landmark just as a landmark..."I recognize that. I use that as an orientation device in my cognitive understanding of the space, where am I,"...but could be a destination, I think that could add the value of a landmark. I'm speaking from other work that we have done and from general experience, but not specifically with dementia folks. But people tend to go to, if there is a landmark that is, let's say, it's an information kiosk or there's a cafe. If you think about Europe for example, in many European cities you have these cafe kiosks, specially in Germany, for example, these small corners, they are really tiny cafes, more like a take-out coffee shop. You can't sit there, but there might be benches nearby. But you go and you go grab a cup of coffee or tea. So, those are quite often human scale and easily identifiable as you are walking on the street. But they have a function, which is getting a beverage. So I think that would be an interesting potential because then it becomes more memorable based on visitation and functional...like an amenity in the neighborhoods.

So another landmark that we have seen people noticing, not dementia per se, but adults in general is reading spaces, outdoor reading areas...it could just be outdoor bookshelf or outdoor bookshelf plus shade or cover with some benches. You go and you sit down...but it could be a small, very tiny pocket park... or extended sidewalk or wider sidewalk or ideally it could be a small park where you have people coming anyway and they sit down, but

you have the function of grabbing a book or magazine and sitting there for x amount of time to do quick reading or just spend some quiet time there. Then it's a destination to go and sit and/or read book...or watch activities going by...

I was mentioning location in terms of destination, but obviously the other important locational criterion in my mind is activities happening on street and in urban places in general that is what's happening...the pictures I saw, you address that issue or are interested in that issue, is the context. The context, I think, is really important in terms of drawing people to that landmark, noticing that landmark more or less. So if there is an activity going on, natural function or something else, nature feature, whatever that might be but something that's happening there that would draw people there and actually keep people there sometime. That would make that landmark much more memorable. I think that's another issue of how much time am I spending at or being around the landmark.

A hypothesis could be that the more I spend time around that landmark because of other functions, that are directly connected with the landmark or are available in the vicinity would likely make that landmark more memorable. So, the context in terms of function, function cannot be in the context, but in the landmark itself but within the context, it could be other functions or other activities or other natural objects that could draw people there...would increase the value of the landmark...It's increasing the amount of time I'm getting exposed to that landmark. We talked about scale and design and all of that before.

KS - What are some ways in which they use or interact with landmarks during a walk outdoors?

I3 - Well I think one area that potentially could be explored is informational support. We have these orientation kiosks in some cities. Not kiosks per se, but some kind of information area, where you can find out where you are at that point and what are the nearby attractions and so on.

Those help both tourists for sure and sometimes locals as well. That's also being used for walkability. How many destinations...how far can you go within a 5 minute radius? Where can you go? If you are a tourist you can easily find out...It's a useful tool. But I think it can be more interactive for somebody with dementia.

I'm thinking about what else a person with dementia might look for. If somebody is lost and not sure where they are, are there other ways technologically that one could have information on that board where I can maybe ask a question. It can be just saying the question or typing the question. Perhaps it can be some kind of A.I. that I can interact with. So the interaction piece is I think important and I think this could tie into the landmark area. It can be physically distinct landmark or it could also house or have an informational kiosk located within it. The informational support is an important topic we need to look at as a part of the landmark. The value of the landmark could be enhanced by the informational support.

Food. Food is an important area. Talking about examples like mobile food trucks, are interesting ways of creating landmarks. In general, in my experience, the food trucks I have seen in North American cities, and I think it's also city policy that if you are a food truck owner you typically would locate your food truck in a certain location for certain amount of time...for a few months you are in a certain location and then you may lose that spot, and have to go somewhere else. There are high traffic zones, radius within a given city, in Vancouver those are based on the highest bidders, so they get that and so on, I think there is some consistency at least for a temporary time period. These food trucks are not there for the whole year. They may not be coming back to the same location again next year, but at least, during the summer months they can be in the same locations and the design of food truck is something to think about. The function is there. You can get food, quite easily as you're walking by, but also the design, and

making it more welcoming and people can sit down and having some benches. And those... can create the effect of a landmark..the function itself.

I think that goes for, a certain extent, food outlets in general...McDonald's.

One could say, McDonald's is a landmark because of the golden arches; so there are certain icons in the food chains that are noticeable than others. But I think that can be used as a design principle or planning principle for thinking about encouraging businesses or certain types of businesses to think about how they can work with the storefront to make it more outstanding within the walk. This could be an interesting...I don't know how you would come down to specific policy itself, because obvious important issue for landmark; a good landmark stands out from the surroundings. So if on a given block all the shops are having awnings and interesting things with the storefronts that they may not be the best approach. That can be one approach that that block stands out from the rest. I think that's fine. But within a block, it could be ways of creating certain specific, more frequented destinations to be a certain landmark which could be assigned or worked with by The City. I think that's another potential...having functions embedded with the landmark and having existing infrastructure or adding elements to the existing infrastructure, like storefronts, can create landmark effect.

I truly think that function is a really important element in making landmarks.

I think this is what those of us who are interested in environment and behavior issues, we always talk about how the environment is embedded in the social context and vice versa, so one could argue for distinct obelisk type landmarks and tower type landmarks rather than those. But I think we need to do more work in including or integrating landmarks with public functions and civic functions, to make these more usable, more frequented and by virtue of that more memorable. I think there are different ways of thinking of landmarks.

KS - Now I would like to talk briefly about your survey responses. The first five pages of the pdf, sent to you in the email earlier today, contain the five photographs of landmarks that you found to be most noticeable in descending order of appeal, as per your ranking. We will talk about each of these landmarks sequentially. I would like you to reflect on the issue of wayfinding in regard to these landmarks; how effective they are in their current state as wayfinding cues, as well as think of ways in which their design may be improved to augment their effectiveness as wayfinding tools.

I3 - (Ark Lodge Cinema)

The structure itself is quite prominent. It has a prominently designed structure. Physically it's imposing...the whole fenestration, the windows, a lot of details there...specially from a distance, one would potentially notice those things. So it stands out from the rest of the buildings on that block. Also, color wise it's contrasting with the nearby building, and height wise it's imposing as well. That's why it's different than the rest of the buildings...the function. It's a movie theatre. That is a function, people will go there and into the building...they're more likely to remember that as a functional aspect that this is a building that I have been to or been inside. It's more likely to work as an important anchor in one's cognitive map.

I also noticed a few other things on the sidewalk. You have a bench, also red, right opposite, right there. And I may not go into the theater, I may sit there. It's interesting that the bench is actually facing the theater, which is somewhat unusual. Quite often we see benches facing the street, facing the actual doorway. So, if I'm sitting there, I would be staring at the posters, the function of that...the bench itself is quite interesting. And the bus stop nearby. So

people are gathered here, I would imagine, to get on the bus. If they are gathered there they would...it's a bus stop bench,

I see now. There's a bus shelter and a bench. The shelter is little on the side. That's not exactly where the bus would stop, but regardless I'm sure depending on the weather condition, people would be under the shelter. So the shelter as a structure would draw people there....the bus stop and the shelter and the bench together, in some ways, all would... I think the bench would be regardless, if somebody is not using, or getting on the bus, they might just go and sit there. The bus shelter would be used for people who are using the bus....The function of a bus stop right in front of that building would draw traffic there and increase exposure of the building for them which would increase the chances of making the place more memorable...

It looks like a restaurant on the right hand side, the cafe or could be a restaurant, there's also a bench outside that shop. So I would imagine these are retail function, restaurant or other things...people come, these are not like office or storage area, these are destinations for people to come to. So, this place has a lot of potential, this building has good potential of being memorable...the sidewalk itself. This sidewalk is wide enough for people to come and there are trees. Right now, the picture was taken here in winter time, so once spring, summer comes, it's much nicer with the trees...which looks more inviting to be there...it's a nice shaded area for people to go to. It's an interesting location with multiple functions that will draw people.

This looks like a historic building. But I don't see any information plaque or sign or anything like that which could easily be placed in the front area, somewhere, which would make it more interesting. I would, as a visitor or even as a local, I might have noticed the building or liked the building but I might not know the history of the building. Historical

information of the building could be added to make the place more memorable, as I know about the building more...The color of the doorways are kind of neutral, the drab side. It doesn't blend in with the main building color. But it doesn't stand out either. So I would consider having a brighter color on the doorway. The shaded section would also be...one thing is working with the color of the door itself. It could be bright yellow, it could be orange, something like that...color-wise as a destination, I think, is interesting.

It's fine as far as the familiarity aspect goes, I'm talking about the banner area, where you have the name of the movies or the shows that are going on. That's a nice touch of history...If anything could be done on the side, on the cantilevered portion coming out, would make it more memorable and more interesting...There are ways that one could look at, with color, with design, to enhance it, more interesting. I would argue that the bus shelter itself could be enhanced by design. And of course you can get into that topic and find out ways of how we can enhance the visual appeal or memorability of a bus stop...this could be a unique bus stop next to a unique building, multiplying the effect of each other's potential as a landmark.

I don't know if it's possible to add other benches here but I think on the left hand side, there is a slight recessed area, there's something that could be done, potentially there too. I think you could possibly put another bench if The City allows. Not sure about that, but worth exploring. The trees are nice, trees are helpful. But then again, you could also add planter boxes. I'm talking about the buffer area, so where the bench is, where the lamp post is, these areas you could add planter boxes with nice flowers and that could aesthetically enhance the quality of that place.

(Columbia Funeral Home)

It's somewhat set. It's an interesting looking, good-looking building...very nicely landscaped outdoor space...the ground space, that green space, patch of green that is an ideal spot for landmark. The big tree is nice, very nice. We're not talking about an imposing structure or anything but something that would blend into, but also stand out. It's a tricky area because, very nicely landscaped area. It's most likely the property of the funeral home. It's not a public property, it's not a city area. But, wouldn't it be nice to have some benches there. It also depends. I'm not sure to what extent this is an area where people, but I see on your plan, there are some houses nearby. So it's not a high density area so to speak, some traffic. It would be potentially nice to have some benches there and one could argue possibly a destination with some function. But I think the issue is obviously it's a very nicely landscaped area, so maybe not a function but more like a few benches and a natural looking shelter could possibly enhance that area...small gazebo or small structure that would blend in nicely with the nicely landscaped area but also give a spot for people to go to and sit down.

(Pride Installation)

(It) is interesting because you have a suburban type environment, wide motorways, wide roads, sidewalks, but really minimal function happening, development, and I don't see anybody there walking. There's some people I see, some houses on the other side and cars parked it. But on the other side, we have some office and other types of buildings. So it's kind of a mixed scenario, but really, it's not highly pedestrian friendly, but there are definitely some trees and some areas which could be enhanced.

Obviously, the reason I like this is the sculptures and their locations, their size, their design. Those are quite interesting. But this could be enhanced. It's almost like a mini-sculpture park. With different kinds of sculpture, but I don't see any seating areas here. I don't

see benches, they might be under the trees in C...I think there are some benches...But the benches don't look that exciting or interesting. It's a really nice corner. It's a good location, intersection of streets. We've got some interesting sculptures, we've got some trees there. Why not have more convenience for people to sit and spend some time there.

One could think about and try out a function...depends on traffic. Seating is something that could be tried. The history part...I would be curious to know more about the sculptures. They look quite interesting and quite diverse. I'm not sure whether there is a certain theme or are they representing different artists or what. So, it would be interesting to add some well designed informational plaques and know more about these things. Some informational content, some places to sit...They've put some effort and that could be enhanced with some places to sit. I think it depends on the residential context.

The question is what level of traffic do we have here? If there is some traffic, some pedestrians, then another function might be added. Like, a small kiosk, cafe-type place. But that's something that one could do a survey with these people who are on this street and nearby areas and see whether they would come and gather...It is more car-oriented, at least the main street...the side street not so much. It's on the edge of an interesting area, but it gets into more car-oriented street. So, something to look at, what function might be helpful or potentially more usable based on some community feedback...the separation (between the two individual sculpture courts) by road is wide enough...they are adequately apart from each other. So, that's fine. Location-wise it works as two distinctly different mini parks, where you are having a sculpture garden or other function.

Not sure about the quality of the sculpture and what else, what exactly is

happening. That is actually more interesting in some ways I guess, because you have a bus stop-type thing, some shelter, I'm not sure of the function...looks like a bus stop. There may be something else, just by the lamp post something there...that location is also very interesting and maybe more interesting as a landmark location than this side. Both are close to each other. But that has a bus stop. people are standing there. On the other side I see the light rail stop, further down. It's quite possible that people would cross the street from the other side than this side...That location has a lot of potential as well. So these are interesting areas, both of these corners are...could work as good landmarks...the issue of exposure.

To what extent I can see a landmark is dependent on my mode of mobility. Am I walking? Am I biking? Am I on transit? If I am on transit or automobile, that's one way to experience this environment vs. I'm walking. So, some of your examples were mostly car-friendly neighborhoods. That's kind of a negative in a way that I may notice while driving through this neighborhood, as opposed to I'm walking. This is a combination, because some functions, people might be walking, because bus stop is there...there are some housing there.

Also the road, the main artery is pretty major traffic path. But it has some interesting potential depending on what is the level of pedestrian traffic that comes through here...maybe people don't just pass, maybe people can park or they don't park here, they don't see a parking lot per se, but people who are nearby, if they are getting on the light rail or the bus they might be coming and going through this particular spot. There is some potential for sure.

(Sound of Light mural)

This is an interesting one. We see these things sometimes in some of our cities. The question is how valuable are these as landmarks. They are visually interesting and you are likely notice them. Nobody is walking by. I see a guy walking by there. But that's a rare

individual. But I think most people are driving through this area. It is better than a very tall blank wall. That's fine. This has a lot of potential. I'm talking about the other face of these blocks. If you think about it, this puzzled me a little bit, the direction of the traffic is opposite. So, in order to notice these, what you have there, the multi-colored patterns, you have to be on the other side of the road. If I'm driving, I'm not going to notice those. I'll be noticing at some interesting staggered planes. Why not do something there? I can't see those patterns. I see those vegetation, they look ok. The greys don't look nice. That's a really interesting canvas for interesting murals.

That would be more effective than what they have done here on the shorter ends. If these were done in other areas that are pedestrian friendly, they have to be blended in. This was possible here because of this whole, some barrier...but you may not have such a big patch. But unless it could be part of a blank wall, and that's one area that one should look at...That's fairly common in urban landscapes. A blank wall and there's some nice examples of murals in different cities. And this is a very nice art work. If it was done in a more simple, straightforward blank wall, which is part of an active neighborhood.

(Columbia City Mural)

What you have as an example is pretty good. I think it's the history of the city or something like that.

N.4 Interview with I4

KS - What are some places that they prefer to walk in when they go outdoors? Down their street? In a nearby park? Elsewhere in their neighborhood? Or, outside their neighborhood?

I4 - Based on my knowledge of dementia or Alzheimer's...they may walk out of their neighborhood. It's dangerous for them. For safety issues, we suggest the neighborhood for this

kind of people. Gated. In the real world they may not have the gate. So, they may walk out. So everywhere is possible...

KS - Are certain locations preferred?

I4 - Older people love to talk with others. They love to go somewhere they can meet others or have something to see, anything interesting to them. So if you have something like the library, a school or community center or grocery store, anywhere they can find people, talk with them. It's possible...Social environment...community space for people with dementia...very important things regarding their individual background or personal experience of life. So everyone is individually different. Sometimes we may do some personal, background research for individual patients. They definitely have something in common. So your research is very meaningful...

KS - What are some enabling and disabling characteristics of the physical environment that influence their outdoor walking?

I4 - This has two sides. On one side, we want people to be able to walk around, do some physical activity, or enjoy active living. On the other side, people with dementia, we want to keep them in a safe area or inside their neighborhood... based on my research, we find that if they have walking destination, they definitely want to go there, enjoy...walking or active living. They can walk and meanwhile go somewhere for their daily living, especially for independent living, in older adults. Walking destination is critical for active living... we don't want them to fall. So, the surface material is critical.

While they are walking, they may need some seating area...screen, especially in Summer, in Texas or in California, the sunshine, or for the rain. We need a restroom...that's something along with the walkway. And also the stop sign on the traffic signals is critical. So

those are characteristics regarding environmental design and planning, but for people with dementia or Alz...barriers, so that we can keep them in certain area...So that's why they call it wandering garden. If you go to some senior living facility, they specially design the wandering garden. Everything is a circle...everything is closed inside the garden. That's the "both sides".

KS - Is this specifically for people with severe dementia?

I4 - It's sometimes hard to tell. When you see someone with dementia or Alzheimer's, you don't know the things inside the person. Sometimes, what they are doing, that's a surprise to you. It's hard to tell, in what level, whether or not the level changed. So, safety is critical...You see a lot of news, regarding older adults getting lost, their families cannot find them. It's hard.

...their destination, their walking destination for their daily outdoor activities is critical. So you may define certain type of destination. To older men or older women, the destination may be different. To people with different background, different education, different socioeconomic factors, income, culture... is different...whether or not they have grand children...whether or not they have friends nearby... In your research, you say that's a new neighborhood, they are not local people...as visitors. That's different...different situations, different requirements.

KS - Do you think there are coping strategies that people would employ when they are in unfamiliar environments?

I4 - ...From the perspective of disease, we may want to do some colorful landmarks. Things that stand out from the surroundings...simple, clear and colorful...maintains a positive meaning...something reflecting their background, interesting to them. That could be very factors for landmarks...Different landmarks work for different people.

KS - So, is it hard to generalize what might appeal to people, in terms of life-history and personal background? Or is it possible to arrive at some broad themes that would generally appeal to older adults with dementia?

I4 - If you define the possible confounding variable, age, type of disease, education, income, culture...you can do that. It's possible to find something in common...Colorful, brighter colors, bigger in size, simple, clear...I think it's possible if you define the confounding variables.

KS - Are there other spatial factors that people would consider as critical to their walking experience?

I4 - In general, neighborhood safety...safety features...safety from crime, from traffic. That is related to the street...the planning of roads in their neighborhoods. That's the general safety issues...Then we're talking about walking destinations. If you want them to go outside safely and actively...they must have a reason to do that. So they need a destination, to go there. Grocery store, or a safe park. Community Center. Maybe a school...Kids in a day care, maybe allows them to play with seniors. That could be their walking destination. Or supermarkets.

For people with Alzheimer's we want to think about safety first. If they go to some grocery store, if there is something risky, we have to think about that. We define "destination" for this group of people. We need to define the type of destination...Safe, first.

These are the general things we need to think of for this group.

KS - Can you cite some specific examples of threats to personal safety of persons with dementia?

I4 - If you have a lake in your neighborhood, you don't want them to go there. If you go there with them...you don't want them to slide inside. Park sometimes is unsafe. Someone may be

wandering there. We think about designing the environment for them to walk. That's why we design a wandering garden. Not that interesting to me. But they want to ensure safety first in senior living facility. Safety always goes first.

After that we want to do a better job of designing the environment. The pictures that you selected for this research were colorful, meaningful. They reflect some cultural background. The colorful columns. There were interesting sculptures. We need to do some research for this group, thinking about their background...research about the backgrounds of the target population, their culture, their needs, their income...

KS - What are some landmarks that they are likely to notice during a walk outdoors?

I4 - If we think about the general preference for people, access to nature...Bird-feeders...Green areas. Nice, well designed gardens. Seating areas, where they can sit to enjoy the trees, birds, flowers...In my research, level of environmental complexity. How do you design the environment? You need details. If it's too open, too general, or the environment doesn't have anything... to look at...they just walk through. You want them to stay there for a while. So, you want to design some details that could be attractive to people with dementia... and interesting.

KS - Could you think of cases where environmental complexity was achieved, that would draw the attention of persons with dementia when they walk outdoors?

I4 - I didn't do any research specifically with people with dementia. I did research with older adults that may have early level dementia or Alzheimer's. That's possible. I found that levels of complexity in environmental design is critical. For instance, if they walk on the street, they see the facade of the neighborhood buildings...historical buildings, something very interesting compared to modern building. They have detail. That could contribute to the levels of

environmental interest...the vista of the street, the landscape, the details. Local weather...whether or not it is a good day for them to go outside...all related. That is something we can think of in neighborhood planning or community design. The indoor-outdoor transitional areas are also critical to encourage people to go outside...

KS - Could you think of ways in which access to the neighborhood could be facilitated through the design of these transition spaces?

I4 - In my research of residential neighborhoods and residential buildings for seniors, we design a porch and outdoor corridors...If you ever go see senior facility, in the entry area, we always see a lot of seniors sitting there, watching outside. They want to see people. They want to see what's happening around them. They want to enjoy the sunshine. See the traffic. If we design open transitional areas with good views to the outside, that's very helpful...Older adults are so vulnerable. We don't want them to get cold. The weather...safe and healthy inside....mainly got the view to the outside. But some days, they can definitely go outside, if we give them the chance to see what happens, "Oh, so nice. What a nice day outside"...They're encouraged to go outside.

KS - What are some ways in which they use or interact with landmarks during a walk outdoors?

I4 - Something interesting to them. Something that makes sense or meaningful to these people...something that's individually different...well-defined background factors can define specific things for them.

KS - Now I would like to talk briefly about your survey responses. The first five pages of the pdf, sent to you in the email earlier today, contain the five photographs of landmarks that you found to be most noticeable in descending order of appeal, as per your ranking. We will talk

about each of these landmarks sequentially. I would like you to reflect on the issue of wayfinding in regard to these landmarks; how effective they are in their current state as wayfinding cues, as well as think of ways in which their design may be improved to augment their effectiveness as wayfinding tools.

I4 - (Sound of Light mural)

It's unique to me. The surface of this landmark is dense to me. Some people may not like too many things concentrated in one small area. They may worry about the density of the surface. They may or may not, that depends. I like it. But I think the maintenance of the landmark can be better. I see they're trying to do some green surface but it's not well-maintained. The local weather might be very cold...need to think of the type of plants, local, can be green in the original design but in reality it's wild.

I worry about the safety of the sidewalk. For young students it's fine. For seniors the distance between the sidewalk and the road is...very close by. No separation. If my mom walks there, she's healthy, but I worry about her safety. The design works for me...some seating area, some separation, the distance between the sidewalk and the road, if they can, should be larger. They can set up some separation...rails...Ensure safety by design.

More trees...screened seating area. This landmark has been designed continuously from one point to another road. We can see setbacks...give some space for people to sit, take a break...resting area. If it goes too continuously it's too long for older adults. They want to take a break; if they can design some resting area, set-backs... They can stay there and enjoy the design more. That's similar to the design of corridor. When we design the corridor in senior living facility, if the corridor is too long, you set back somewhere. You put the door or

entry area somewhere. You give some space, some welcoming area, so people can stay there...It's similar to this street design. Outdoor seating with shade...Maintenance is also critical.

(Spirit of Washington monument)

I like this landmark because it's very simple. Just like a pencil on something, it's kind of funny....has details. The most important thing to this is that it stands out...so clear. It's easy to remember. For people with dementia, that may be more important...very different from other things. One of the possible reasons that it is clear and stands out, is the contrast between this sculpture and the surrounding. this sculpture is modern-looking and the background building is traditional...so stands out.

Also the surroundings...don't have other things close to this...If you want the people to stay there... how to remember it? Give them a chance to remember it. Give them more time to remember it. You may want them to stay there. Design some reasons for them to stay. So maybe some seating area, or some possible point for them to look at it...This sculpture looks like, "I'm just there, standing there by myself"...too lonely. Give some associations. Some seating or some surface...just small, 2 feet or 3 feet...no space to stay close...you just pass it, don't want to make friends with you (laughs) It could be better. But this one is clear, that's why I like it.

(Seattle Public Library)

This building makes sense to people like me. I love the library...nice green area, open space surrounds it. So this one stands out, simple and clear. For people with dementia or Alzheimer's I'm not sure whether or not they are interested in this. If they have hobby to read a book in the library they may like...This building is kind of aged, it needs some maintenance. But, the good thing is it has details. I think it works because it is big in size, compared to the small sculpture. This is a whole building and also has details...meaningful...historic. I think to people

with dementia, they may not think that much, like I just did. They might just walk through...Not sure about whether or not they have good sight.

If they walk on the sidewalk they may be able to a thing nearby or someone close to them. That's why I am thinking of the first two landmarks, because they are touchable...because they are just beside the walking surface. You can touch it, they are close by. The library is big. We can easily see it. It can be used as a very good landmark. For people with dementia, I'm not sure whether or not they can pay attention to something in the distance. That is probably 100-200 feet from the sidewalk.

It depends on the people or the type of their dementia. I think it works for a lot of seniors. Generally they like something with a cultural background or with history. The first two landmarks are modern, simple, clear and stand out, close to the sidewalk. That's good. But historical things, bigger in size, the building also works. I am just thinking about the distance. That's the reason I put it as the third...I don't think we can put the building closer to the sidewalk, because it's a building, it definitely needs some setback from the road...

People with dementia while walking, whether or not they would pay attention, is the question. If it's close and touchable, it's in their line of sight....whether or not when they look far... can remember something in the distance. That's something we need to think about. The distance...And the speed at which they walk, whether or not they pay attention to something in the distance.

(Columbia City Mural)

I like the drawings. They are very colorful. They are very active drawings...It looks unsafe to me. It's not that clean, it's not that well-maintained...the wall...not that many people nearby, just a parking lot. If I was there I would think about safety...The drawings are

beautiful. It looks like it's in a small open space...these grocery stores, some small business center. The surface is not facing the street...if they can do that along the road that may be helpful.

(Bike rack)

This one is good. I like the design of this bicycle. It's just too small. It's designed for someone to park their bicycle. I like the design itself very much. It's very interesting and creative. But if we use it as a landmark it may not work because of the size and location. For some people that used to ride bicycle a lot they may notice that.

It's a nice design, but it's not for landmark. If we can increase the amount... put a group of them along the street, that may make sense. If you keep repeating the same thing along the street, that could be a characteristic of this street, people could remember, especially for people with dementia or Alzheimer's.

(Rainier Arts Center)

The building with four columns...It's good to be used as a landmark; compared to the library. I think this is similar. This has a grey color on it's facade, kind of hiding in the surroundings. But it's a nice design. The Greek order is interesting to me. But for people with dementia or memory loss, you want to use colorful things as landmark. The distance between the building and the sidewalk...I'm not sure whether or not people pay attention to something in the distance.

(Ark Lodge Cinema)

The cinema had lots of neighbors...merged with the neighbors. If the pedestrian likes to see movies, they may pay attention to it. I'm thinking about the surroundings. It's too similar to other things. If you want to make it as a landmark, visually, make it different from others. Change the color...make it more bright, make it more attractive.

(Pride installation)

I like this. It's very cute. I have this in my house, similar things...I like this design. But I just think it's too small. To people from Eastern culture, we like it, it makes sense to us. For others they may not pay attention the small things. If we design it in Chinatown or Indiatown, or someone where people are of Eastern culture...I'm also thinking about the surroundings, give a platform for the sculptures. I like that they grouped them together. The design could be better. Define some platform for this group of sculptures. That's something about the street design. The landscape architect can do something. Give them details....well-defined corner. Give them some name. Think about surface. Use some colorful bricks to define the surface for these sculptures. Give them a home. Define it.

(Columbia Funeral Home & Columbia City Theater)

They merge with the surroundings, with other buildings. I think the easy way we can do something is think about the surface or pavement of the sidewalk, because they walk on it. Different pavement, different color, put some words there; help them with wayfinding. That will be easy and economical...if we do something specifically or directly related to their walking, that may make it easier, we don't need to change the building. We can ask the building to support our design, to change their front yard, or their entry garden, or put a sculpture there. Improvement of their landscaping is something we can do. If we do something closely related to walking, that makes more sense.

N.5 Interview with I5

KS - What are some places that persons with mild to moderate dementia prefer to walk in when they go outdoors? Down their street? In a nearby park? Elsewhere in their neighborhood? Or, outside their neighborhood?

IS - Places of interest. Shops and shop windows with things to look at which attract their attention and engage them. The operant term is 'engagement'. I don't have a lot of experience with people living at home with mild cognitive impairment and where they would like to walk. But let's assume, a place like a coffee shop and a store, and in home. I don't have a strong sense of what motivates them to get up and take a walk out of their home, unless it's something that engages them, like doing a task, like going shopping, or walking the dog, or going to a store.

KS - What are some enabling and disabling characteristics of the physical environment that influence their outdoor walking?

IS - The author of "The Image of the City" has pathways, edges, nodes, districts and...landmarks. When we plan our gardens for people with dementia, we plan them with those five characteristics. The nodes are clear. They are 90 degree angles not a fork in the road with a choice. The districts have clear definition, like a planting area or a front yard or a park-like setting. The pathways are also clear. They start some place and they have a destination. And the landmarks are either small landmarks like a statue or large landmarks like a cupola or the center of a park or a big store. But in the garden we have other landmarks. And the edges are very clear as well.

The enabling environments are, to my mind, those 5 characteristics that Lynch outlines in "The Image of the City" because they actually reflect brain functioning. He was studying both cab drivers and housewives and looked at how they perceived the city and explained the city and saw the city. Since what we're trying to do with people with dementia or

mild cognitive impairment is give them environments that are, what we call, 'naturally mapped'. The definition of a naturally mapped environment is one in which all the information you need to navigate the environment is in the environment. The 5 characteristics of Lynch and the naturally mapped environment are the enabling environments.

The ones that create more challenges are things like, needing to cross a busy street and not knowing how long it's going to take. Or forks in the road which are equal in decision with no knowledge about what leads where. Pathways that curve and go around corners where it's difficult to know what's around the corner...and if you're going around the corner knowing where you came from... So seeing the landmark, seeing the destination, is important. And if they are circuitous it becomes more of a problem.

And places without landmarks, whether they be small landmarks or big landmarks and with no emotional content. Most people with some level of cognitive challenge are older. And they have other physical problems. So, for example, they might not be able to walk as fast. Or they might not be able to carry something up a hill as fast. A regular stop light that changes every 45 seconds or something might not be enough not because they have cognitive challenges but because they walk too slowly. A pathway that does not have any place to sit down and rest; for somebody who needs to rest every so often, is just as much of a barrier to use, having nothing to do with the cognitive, but having to do with the ancillary challenges the person faces.

KS - How important are landmarks to them when they go on walks outdoors? What are some landmarks that they are likely to notice during a walk outdoors?

I5 - Landmarks are essential. My understanding of a cognitive map is that it is not actually a plan of a place you're walking. But it's a series of landmarks. So we say we'll go from my house to

the corner, from the corner, to the store, from the store, to the traffic light, from the traffic light to the school, from the school back to my house. Those are all landmarks. Recently I was talking with a neuroscientist, last week, who said, “no, actually, some cognitive maps in people’s minds are actually maps.” But I would argue that those maps also have landmarks in them.

Perception means first you have to have an impact on your retina. The second is, you have to notice it. The third is you have to recognize that it’s light or a building or a person. And finally you have to say, “ah, it’s the school. Or it’s my cousin Bill.” So, landmarks that can elicit the four stages of perception are more impactful than those that don’t. In other words some very interesting place that nobody notices is not as good as a less interesting place that somebody notices. Your vision has to see it. You have to notice it. You have to recognize it. And then you have to understand it...

KS - Are there certain dimensions in addition to viewing the landmarks that might add to their attractiveness. For instance, interactivity, tactility?

IS - Ok. So there’s a certain amount of research done on museum displays. Gary Winkel, who’s an environmental psychologist...did a study at that time of museum exhibits. And what he found is that the exhibits that were interactive, the exhibits that were said to have surprise; so if there was an exhibit underneath a...you had to lift a black curtain and look inside, was more interesting than when you just passed by. So, clearly those are the same characteristics. If they are more interactive, they are attractive...you can say ‘attracting’, which is attracting attention. Or you can say ‘attractive’ which is nice-looking. I was using the term ‘nice-looking’. I was saying the more artistic or the more colorful, those are some of the characteristics that would attract people’s attention. But other than that, I’m using...the perceptual process, what the object is out there, it’s easier to say, “Does this one or that one look more engaging?” than say...because a tree in Fall

with lots of red and yellow colors next to a boring building might be...but on the other hand if the person wants to go to the store and the building is the store, he might not even notice the tree.

KS - So, it's highly situational...?

I5 - Yeah, I would think so.

KS - You talked about recognition being one of the components of the four-mode pathway of sensing things. Could you comment on landmarks that look unusual and unique and stand out in a way, because of their abstract quality...Do you think there is merit in public art that might invoke curiosity that might not necessarily have ready associations within people's cognitive maps?

I5 - We have developed museum programs for people with dementia. We have found that the totally abstract ones were the less engaging. And that the ones that were more engaging...the artworks were ones that had the strong narrative, a story they could tell. Or objects they could see.

So, for example, in the example you gave of the mural on the wall that was painted by some community groups in the parking lot. You could go there and see stories. Somebody is happy. Somebody is sad. Somebody is fighting. Somebody is quiet. Somebody is playing a game. I didn't look very carefully. That's narrative. And I would think that that would be more engaging than...the other one which I thought was quite pretty, which I said was more attractive, which was the Indian banners out of stone along the highway. Bright colors might take the first step, which is "Oh, there is something going on there." But then having the stories to tell becomes more interesting. Or, having emotional content. So, whether it's the mural or whether it's the library or the funeral home, which might have an emotional content. Those are other aspects of the landmark that are like a painting; what engages people.

KS - Now I would like to talk briefly about your survey responses. The first five pages of the pdf, sent to you in the email earlier today, contain the five photographs of landmarks that you found to be most noticeable in descending order of appeal, as per your ranking. We will talk about each of these landmarks sequentially. I would like you to reflect on the issue of wayfinding in regard to these landmarks; how effective they are in their current state as wayfinding cues, as well as think of ways in which their design may be improved to augment their effectiveness as wayfinding tools.

I 5 – (Bike Rack)

I'm looking at the objects alone. If there's lots of cars passing by, it's very busy, it may be less of a wayfinding element. But, to take It's amusing. It has a kind of humor to it. So I think someone would look at it and say, "That's a bicycle, but it's not a bicycle." So that's why I chose it. And it's a piece of art.

I guess the other thing would be, if it were a brighter color...or if it could be sat on. It's a little high. But let's assume the bar in the middle would be more like a girl's bike, where you can put your foot over. It could be more interactive. You could make it so that it's a seat that actually is comfortable and if you're carrying a bag, you can put the bag someplace. So, let's say it had a basket on the front. And so, turn it into a seat. It is not just a visual thing and a bike rack, but something that somebody who's older could use and could see evidently what the use is, like the basket in front to put what you're carrying. A seat to sit in. And the color to be more awakening. Reds and yellows, bright colors.

(Sound of Light mural)

It doesn't look very well as a wayfinding tool because it's half a block long.

Unless somebody is, I don't think of it as wayfinding as much as it's pretty, it's attractive. It looks like it's in Seattle or some place with an Indian tradition...large Indian beads. One of the reasons I said it might be interesting, is the bright colors. I don't see this as a wayfinding tool, but I do see it as attractive and I do see it as something somebody would remember walking down the street...

KS - If it were to be applied in a wayfinding system, would it be less continuous?

IS - It would be less continuous, it would be an object, Maybe three or four of them together.

And that would be, "Oh yes, you go down to the Indian murals and you take a left." As I look at this, I think it goes quite far down the street. It looks like there's a dozen of them. Now, if you're driving to work, I'm assuming that these people are not doing that, and then it would be a landmark for people driving by. Oh yes, that's the Indian beadwork street.

(Columbia City Mural)

There's a story. There's a narrative. There's a street. There's people coming and going. There's a little pirate flag. In the front there are these kids who are playing with some weird person behind her. This was not on the street. It was in a parking lot. But it's colorful enough that they would walk towards it, say, "Ah, it's here." But again, the location, it's a little difficult because it's not on the way to some place. But I think if it were in the right place as something people would remember. And they would come back to it, each time they passed it. They would see more things and get engaged with it.

KS - Would the design improvement be to strategically relocate it?

IS - Oh, yeah, absolutely. You have to go off the road to walk into this parking lot.

(Pride installation)

This is the Chinese temple guard. I think it would be a good landmark. Do I

call it attractive? I don't know. For some people it might be strange. One of the principles of attraction is strong emotional content. And clearly this has strong emotional content. It's located at a crosswalk. I think it's a very strong object. The scale of the landmark is at the object scale. I think, it's quite a strong one. To most people it would not be seen as pretty.

KS - Is it important for something to be pretty or beautiful to leave an imprint on one's cognitive map?

IS - No, not at all. The mural above, it has a story on it, and it attracts attention. So, the way this is located is, it is on a corner. There are a few statues there. I don't think it has to be attractive. In fact, if I were to say, "would people remember this as a landmark?" I don't know...It looks like it's out in front, in some kind of museum...maybe just museum objects. It's not the most beautiful of things.

KS - Since it doesn't have the narrative of the mural, do you think it might not have as much of an impact?

IS - If this is a neighborhood and somebody says, "I'm going for a walk" they might say "I'm going for a walk by those statues" "...by those weird statues", "...by those Chinese statues." I would say it might be a landmark...they do have this emotional strength to them. If I'm not mistaken, they are supposed to frighten the demons away from coming into the house or the temple.

(Ark Lodge Cinema)

It's an interesting building. It's a movie theater. They'll remember it's a movie theatre...landmarks that are familiar, the movie theater, the park, the grocery store, the pharmacy. In people's lives those are positive things...From an architectural point of view, the elevation is quite pretty. But I don't think anybody, whether they have dementia or not, when they are

walking by, and you say, “Do you think that’s a pretty building?” They’d say the mural is prettier than this.

KS - In terms of recognition...this used to be a Masonic Lodge in the past, and it has been adapted since for a cinema to be housed in it. Do you think that it might confuse people with dementia that are walking past? Are there distinguishing features that might help people realize that it’s a movie theater?

IS - Personally I think they’ll think it’s a movie theater. If I would show this to somebody, they’d say it’s a movie theater in an old building, is I what I think. I’d say, “It was a Masonic Lodge.” They would say, “Why is the movie theater in the Masonic Lodge.” It would need to be recognized as a lodge.

(Spirit of Washington monument)

...what somebody thinks is a nice sculpture that looks like a blade with a hole in it. I just didn’t think it’s pretty. I wouldn’t stop at a museum. And I don’t think it stands out very much, unless there’s something strange about that, I don’t know. It sort of blends into the countryside. You don’t see it so much in the distance.

(Rainier Arts Center)

It’s a nice building with some Greek columns. I didn’t think it would stand out as much, although, there’s a shot below it, where you can see it across the street, between the trees. Maybe, I don’t know. That might make it more visible or remarkable. Although the side of it is not remarkable at all, the side view.

(Seattle Public Library)

I thought these buildings were just the same. Maybe, saying, “Oh! That’s our

library.” If they know the area. Otherwise they would say, that’s a nice building. Maybe it stands out enough. If I went by it, I’d say, “There’s a library.” And if you came to me the next day and say, “Was that very attractive?” “It’s a library!” It’s not a library designed by Frank Gehry.

(Columbia Funeral Home)

The funeral home might be. I don’t think it’s attractive. But that could stand out, both because it’s a funeral home, also ‘cause the neon sign over the green. It stands out. It could be a familiar place.

(Columbia City Theater)

It was so embedded in this streetscape that I wouldn’t notice it as being anything special. The Ale House looks very interesting. And there’s the theater. If it’s one of many things along the street, I don’t see why they would pick that out as especially important or interesting.

N.6 Interview with I6

KS - What are some places that community-dwelling older adults with dementia prefer to walk in when they go outdoors? And what criteria would they weigh their walking destinations by?

I6 - Places that are familiar. Places that preferably are green and lower-sensory demanding, and places that have well-defined perimeters.

KS - Are these criteria that people with dementia would consciously identify? Or is it something that they intuitively look for?

I6 - I think it would be intuitive. I think it would be environments that have been designed by trained professionals that anticipated the needs of people with dementia.

KS - Are there any specific walking destinations that you have come across in your work with people with dementia that they have mentioned as being preferable?

I6 - I do. So often, local neighborhood community parks tend to be perfect places.

KS - Do they walk in these parks regularly? Is it periodical activity or is it just something that they do when they feel like it?

I6 - I think it generally would be with family members taking their loved one on a walk in the neighborhood park.

KS - So it's very much a planned activity?

I6 - Oh, absolutely! Otherwise, if it is the person with mild to moderate dementia, it would be most likely be walking in their backyard garden or walking in their senior living community in a designed nature environment.

KS - What are some enabling and disabling characteristics of the physical environment that influence their outdoor walking?

I6 - Enabling characteristics would be...clear perimeters. Defined space. Frequent resting places that are comfortable that would be benches with full backs, benches with appropriate arms, benches with appropriate kick-off space underneath. And those benches would be strategically placed for the view that would be an activity.

Some of the other cues would be to avoid sensory overload, the well designed place might have three gathering places. We want it to appear like it is an activity that one could do instead of so large, with so many opportunities of activities that it might be overwhelming and

not help the person engage. I think the other thing about these well-designed places is that they would be designed to provide engagement in all four seasons, to keep that person walking through all four seasons.

KS - Could you think of some disabling characteristics that would impede their mobility?

I6 - Oh yes. Inappropriate walking surfaces... unsafe walking surfaces that one is not able to survey the immediate environment and feel safe. Too much sensory stimulation...too much noise...too hot, not enough protection from sun...where the opposite would be well-planned shade with the bench. And as well the bench in the sun for the people who need a sun break. So I think safety cues would be most important...safety, protection and comfort cues.

KS - I'm wondering if there are coping strategies that persons living with mild to moderate dementia in the community would employ when they are confronted with these disabling cues. Are there ways they can compensate for the negative effect that these shortcomings in the design of the environment might have?

I6 - My experience has been that they compensate by not engaging. They also can become fearful which causes anxiety, which exacerbates the anxiety they generally already have with dementia. So, I don't see them as being able to cope. I just think they don't have the resources to cope. So they disengage.

KS - I'm particularly interested in how landmarks might be useful to persons living with mild to moderate dementia in the community, to find their way around and navigate their neighborhood. How important are landmarks to them when they go on walks outdoors? Have you heard from people that you work with about the role that landmarks play in their lives?

I6 - Oh yes. I'm looking at slide number 1 (Spirit of Washington) and I thought it was a good landmark in that park, very easily comprehended. That's a rock and I know rock. It's familiar. I

can see that landmark from most places in this well defined environment within this perimeter. So I could wander in many ways but find my way back to that landmark.

KS - Is there a connection between the landmarks that people use in wayfinding and navigation to their walking destinations? So, for instance, do they employ specific landmarks for specific walking destinations? Have you seen such correlations in your interaction with people?

I6 - Oh, especially if people can learn those before the dementia process has developed so much that they can't do that anymore. Yes, if they've learned landmarks, if they've learned a path. If they've learned a trail or a way they can often maintain that. And key landmarks help them. But I think they have to have learned that before. Because when I am working with dementia clients, they don't remember in 15 minutes that we just planted a tomato and a raised bed. They certainly don't remember the next day. So I think landmarks, always, whether it's a building...it has to be a pretty significant well-defined landmark and they have to have learned it before the dementia process.

KS - So, I'm assuming that these are time-tested, well-practiced, familiar landmarks, routes...

I6 - Yeah. Exactly.

KS - What are some landmarks that they are likely to notice during a walk outdoors?

I6 - Something familiar, something that is clearly defined...They don't have to go, "Oh, what is that?" "I don't understand what that is." Something that doesn't require them any effort...it's effortless. "Let's walk down to the big rock" or "let's walk over to the pavilion" or "let's walk to the 3-bench area" or "the gathering place". But it's something you can name and call and see and touch, would be a landmark. That would be a helpful cue. And it's something that would maintain through the four seasons. So it wouldn't be something that died back, like a particular

perennial. A flower that died back wouldn't be...that might be a summer landmark, a bed of rudbeckia but it wouldn't do you any good in December.

KS - Could you talk about the potential differences between built, or man-made, landmarks vs. natural landmarks, landmarks in nature?

I6 - Yeah. In my opinion, those landmarks in nature are probably going to be built...they're going to end up being built landmarks in nature, because people with moderate dementia are not going to be wandering around on forest trails. It's going to be things in their built environment, in their neighborhood, if that's their primary residence, or if their primary residence happens to be a care center... So I think we're going to call pretty much all of those built things at this stage in their dementia.

KS - So they are consciously designed?

I6 - Right. They are not going to be things on the hiking path.

KS - Nothing that spontaneously grows on it's own I suppose?

I6 - It could have been some Douglas-fir trees in your neighborhood park. "We're going to walk to the fir trees." But those were probably consciously planned, but it could be fir trees, "the big patch of fir trees," "we'll go into the big grove of fir trees today...we're going to walk that far."

KS - How important is it for people with dementia to interact with landmarks in more ways than just viewing them? What are some ways in which they use or interact with landmarks during a walk outdoors?

I6 - Yeah, I think viewing is going to be the first, big, most important cue. They need to see it and recognize it before they are ever going to go walk towards it, touch it. So I think a very clear visual is going to be key, so that means one clear visual, not many around it that look similar, but one clear visual...We need to keep using all of the senses, as long as possible, and especially the

senses that still are the strongest...And we need to see if we can re-engage or rebuild some of the senses that are declining. I'm thinking of the well-defined walkway that's safe and then if the landmark is right next to the well-defined walkway, one wouldn't have to walk 50' across wet grass or swampy grass. But some of the important landmarks are edging right on the walkway or a little niche bump-out, then people could engage more with the landmark. I'm looking at picture B at Columbia City park (photo of Spirit of Washington) right in the middle of that there is a rock. That's our landmark. But if that were even right at the edge of the walkway or if there were a bump-out, a little niche where people could get over to that, where they could spend more time learning about that important landmark that helped them get through the park.

KS - ...'cause as it is, there doesn't seem like there's a place to pause.

I6 - A place to pause. By that landmark there should probably be a couple of well-placed benches. So people sit down and engage with the landmark. Take a break. Engage with each other. Learn more and try to imprint more of the environment right here at this landmark, because as their dementia increases, in a year or two, we hope we can imprint more simple knowledge so they can maintain this walking. So at that bench, I would think about things at the landmark they could touch. Maybe at the landmark, there are some azaleas that are going to bloom bright red in the spring. So I would think about a little bit more at the landmark. The landmark gets me there, but when I get there, wouldn't it be great to have something in Spring, Summer, Autumn and Fall...resting, sitting at a bench at that landmark, even more powerful and engaging with all four senses.

KS - I was wondering about what you mentioned just; trying to register as much as one can before the dementia progresses. In your experience, how far along are people in their dementia

journey before they have come to a point where it's no longer possible to take in anymore new information?

I6 - That's interesting. I wouldn't say there's ever a place, well, there is. At the end stage, yes, when they're pretty much comatose. But you're talking about mild and moderate...they can still take in some information. Very clear, sensory, that's often dependent on the kind of socialization they have. The kind of social support they are getting with one other person. The relationship too...that's why the bench is important, whether two people can sit down together. So you have to be supporting all of the elements of a holistic approach, which is physical, cognitive, social, sensory...

As far as the physical setting too...because we have to maintain those social relationships too, it's usually with one other person that are going out on this walk. But, looking at pathways being at minimum 5' so that there is the social connection and socialization is supported. So they can walk together. And then sit together. And engage in the environment together...the sensory aspects of the environment and all of the realms of wellness and holistic health. And then get up from the bench and walk down the path further and keep going down to the grocery store where you're going to get the 3 groceries you need and then walk back home. You're thinking about how to make environments where people are going to be out walking every day.

KS - In your experience, do you find that people consciously walk for the 'walking of it' or is it more or less integrated into their activities of daily living, so walking as a means to fulfil their daily needs?

I6 - As dementia progresses, there tends to be a diminish in motivation. A diminish in following order, routines directions. So if we can prevent some of that happening by maintaining strong

behavior patterns of following routines, getting up everyday, engaging with the world. Everyday walking. Everyday deciding what is the weather, then putting on clothing and getting dressed to go out and do the walk everyday. And then to have an interesting place to walk that is safe. This is very complex and that's why so many people move into that behavior of just sitting in their chair all day.

KS - I'm wondering if the will to be out and about and mobile is contingent on the way their surroundings are as well...maybe it's a cycle...a loop?

I6 - It is a loop, yes. If you had good, strong, healthy behavior patterns before, you're going to probably continue those. But you will need some social support to do that. If you didn't have good healthy behaviors before, it might be a little harder for the people helping to care for this person, to get them out walking everyday. But we know that upright and moving everyday is essential to every person's good health. So this is why we have to design very close nearby nature to support health and well-being.

KS - How would certain ancillary ailments that might not be related to their cognitive losses add to the nature of their interaction with their surroundings? Have you seen that sort of added influence in the work that you do with people?

I6 - ...that as they decline physically? They may need a wheelchair. They may need a walker. They may need a cane. And there are more reasons why the walking path has to be at least 5' wide and absolutely safe. More reasons why there need to be bump-outs off the path to sit down on a bench and rest. And more reasons why the nearby nature doesn't have to be vast...it can be a 50'x100' green space.

KS - As you know the pictures shown in the survey were taken by walkers in a walking program for persons living with early-stage memory loss in Seattle where the prompt they were given to

take pictures was to find any landmark that was interesting to them, which they went on to discuss at a focus group, post-walk. But I wasn't able to get at was whether these 'interesting' landmarks would serve as wayfinding cues, and help navigate in their neighborhood...which is the reason why I'm having this conversation with researchers and practitioners, to see how these landmarks may be better situated in the contexts they're in, for them to aid in navigation. Please look at the pdf I've sent you. The first five pages of the pdf, sent to you in the email earlier today, contain the five photographs of landmarks that you found to be most noticeable in descending order of appeal, as per your ranking. We will talk about each of these landmarks sequentially. I would like you to reflect on the issue of wayfinding in regard to these landmarks; how effective they are in their current state as wayfinding cues, as well as think of ways in which their design may be improved to augment their effectiveness as wayfinding tools.

I6 – (Spirit of Washington monument)

See the bench over on the other side? That's good because the care giver and the family member and the dementia client could sit there and look at the landmark. And it would be even better if to the left of that landmark there was a 6 x 6' bump-out, hardscape, with two more benches where people could sit as a small family group...two benches about 5' apart.

KS - So, closer to the landmark?

I6 - Yeah. So you can sit by the landmark and have an even more profound experience and learn the landmark and that could be kind of the gathering place.

KS - Are there any other enhancements that could be made to the landmark?

I mentioned the sidewalks being wider. That would enhance the family group. I think that landmark is just terrific! It's not too abstract either. It needs to be familiar and comforting instead of going, "What on earth is this?" or "What on earth were they thinking?" or "I can't figure this

out.” And that’s distressing for a person with early or mid-stages dementia because they already have enough loss. Here they can’t understand something else. So, I would never get any more abstract than this. Everything else should be very, very familiar.

KS - How do we delineate the middle ground between what is familiar and what is abstract, in terms of things that would stand out to them, something that they wouldn’t completely ignore if it’s so taken-for-granted...?

I6 - If you can’t describe something it wouldn’t have meaning. It would make you feel more anxious. That’s why so many people in late-moderate to full on dementia, late stages, pick up baby dolls, because they can remember that, it’s familiar. They pick up the kitchen apron because that’s familiar. They pick up a magazine because that’s familiar. They don’t pick up abstract art. They don’t pick up Rubix cube...stuff that they’d have to process. Think about something familiar from the past 50 years.

KS - So, rooted in their personal history, that holds meaning for them?

I6 - Yes, and is unambiguously positive and easily comprehended. Absolutely nothing abstract.

(Seattle Public Library)

Well, you can see the green space. To me, that’s the grounding element for seniors, for people with dementia. But then you’d have to think too if you were in Manhattan. Well there are some green spaces there. Not as much as we’re used to here in the Pacific Northwest. So I’m always thinking green space is anchoring. Green space is familiar. The architecture of the library is very familiar. The green space around the library is not 60 acres of vastness. It’s a small green space with one or two easily comprehended paths. So you don’t feel like you’re going to get lost.

KS - Do you think this landmark would serve well as a wayfinding cue for people that are trying to navigate?

I6 - Absolutely. It's a tall enough building. You can see it. It has repeating patterns with the windows. It has a high pitched roof. There's nothing else around it that has the same architecture. It isn't like rowhouses. I think it has a stand of large trees that can help wayfinding, but not too much. It's not like going in to a deep forest.

KS - Just enough to frame the building?

I6 - Or to lead you up to the building. So everything needs to be strategically placed. There's a reason. And good landscape architects know how to do that.

KS - Are there any other enhancements that could be made to the landmark?

I6 - I look at the front entrance and it doesn't appear that there is an accessible entrance that could be frightening to many people with dementia that have a walking gait problem or drag a foot. So the accessible, universal entrance needs to be clearly visible. People need to be able to use and access without having to think it through. Not adding more problem-solving. "Where is the accessible entrance?" They shouldn't have to figure out the environment.

KS - Something is naturally mapped and inviting and welcoming?

I6 - Yeah. You don't have to problem-solve how to get in this building.

KS - I would add too that the architecture of this building is familiar. It's very familiar to the age cohort that are now in moderate to late stages dementia.

I6 - So the style and the aesthetic is meaningful and would resonate with them?

That's right.

(Rainier Arts Center)

It's got a wonderful green space near it where you can sit out there and look to the landmark. The landmark is clearly identifiable by its architecture. That's a form we've seen for hundreds of years. People in this neighborhood have seen it...that building probably might have been built in the twenties. I think it's a very good landmark. I'm looking at the street where you can even see it from the street. There are a number of paths towards the building. And there is a picnic table or a bench, looks like a picnic table, down in the forefront of the Arts Center. But I think it's a good landmark too because there is a bus stop, and you can get yourself oriented if you needed to take the bus after having gone to this site.

KS - Does the way it sits in the landscape, sort of in a solitary fashion, help people concentrate and focus on it?

I6 - They can fit. Things have to fit. Good designers, architects and landscape architects generally know how to, they can easily comprehend it so that people don't have to problem-solve. "What is it" and "How do I get there?" This landmark, for people with moderate to late stages dementia, it needs to show more clearly how everyone can access this building. I think it's simple. It has long meaning in our architectural history. People who now have dementia, probably in their 70's, 80's and 90's...I think it's a good one.

(Bike Rack)

That's kind of an innovative idea, I thought. And it's in a little green space. I think it's easily identifiable. I think more than anything, it's just a great little piece to stop and engage about, "Isn't that fun?" or "Isn't that cute?" or "Isn't that just a fun way to do something? Isn't that a fun way to make a bike rack." It's just very simple. And simple is better. And using what space you have. That's a tiny space. But someone thought of an interesting way to use it.

Right next to it, there appears to be the Paperbark Maple, that's an interesting landmark too, with their interesting bark. That whole set is a pretty good one. And, as well, it has those masses of shrubbery that help keep people safe and back away from the traffic.

KS - So you're looking at the setting itself as a landmark, the bike rack in the midst of the shrubbery and the maple?

I6 – Yeah, and an interesting landmark that you would want to walk by. It would be delightful if there were a little bench right behind that bike over in that smaller landscaped area.

KS - The past 3 landmarks are more or less distant or slightly huge in scale, as compared to this. Do you think that one is better than the other, or they both have their merits?

I6 – There are landmarks all along the way on a walk. Not too many but carefully spaced. I think this is part of the whole system to encourage walking.

KS - ...having a hierarchy of landmarks.

I6 – To learn your way and remember your way...

KS - You also talked about abstraction earlier. Do you think that this is a good example of 'controlled' abstraction, that hasn't gone beyond the point of recognition?

I6 – Exactly, excellent example. Good you picked up on that.

KS - Anything beyond this would distort one's perception of it as a bicycle, I suppose.

I6 - Yeah. If it had square wheels. Somebody just went too far. And people do those things... Things need to be realistic, unambiguously positive.

KS - Are there any other enhancements that could be made to the landmark?

I6 - Other than a bench, to be able to sit down, just across, that little bed behind the bike. Taking time... As people lose cognitive function, they notice less around them, so they tend to hurry

more or just have a real tunnel vision straight ahead. That really doesn't support quality of life or engagement. Taking in more, it helps actually.

KS - Are your clients prompted by cues like seating themselves to pause and reflect or is it mostly something that is made possible by a care-partner presenting the opportunity of pausing?

I6 - I think it's a combination. Farther in dementia, they pretty much need another person to do that. But if the bench is just so available, so comfortable, sometimes that can be enough of a cue that people will sit down. A lot of time when we're working with people with moderate dementia..."Come over and let's sit on this nice bench." or "Come over and let's sit on this bench in the shade under this tree because it's too hot to be out here."

(Columbia City Mural)

This one scared me. It would be challenging for anyone with moderate dementia to walk in this environment because it doesn't feel comfortable. It doesn't feel safe. There's limited green. It isn't comforting. There's not a bench. There's not a place to rest. Notice the cars are parked right in front of the artwork. That artwork might fit someplace else. It looks like there is so much hardscape and so many opportunities for cars and there's not an opportunity for people, and definitely for people with moderate dementia.

KS - Would you suggest relocating the mural for it to work better as a wayfinding cue?

I6 - Oh yeah. The mural could work better in a park, in a green space. The cars are parked at the mural. There isn't even a walking path in front of the mural.

KS - I suppose you would also advocate seating around the mural if this was in a park?

I6 - If you're going to invest this kind of money you want people to enjoy it and remembering that a person with moderate dementia might tire easily. They might shuffle their feet. They might be using a walker. They need to rest. So every one of these landmarks means resting places and viewing places and places to engage. There's no place with this 'cause the cars are in the way.

KS - The last five pages of the pdf consist of the five landmarks that you didn't select as noticeable or appealing. My final question is the same as the previous one. Please explain why these landmarks would not be helpful as wayfinding cues for persons living with mild to moderate dementia walking in the neighborhood? Are there any suggestions that you might have to improve their potential as wayfinding cues?

I6 - (Ark Lodge)

It's in a setting where I can't see green space at all. It's on a major thoroughfare. It looks like a four-lane street both ways. So that's dangerous. Look at the front of the Lodge. Oh, this is a Masonic Lodge isn't it! Look at the way the bench is facing. The bench is facing the building. You could have a bench there, but it needs to be looking at something. This is not in a green setting and not in a safe setting at all. I wouldn't see it as a particularly restorative or a good wayfinding piece.

KS - Could anything be done to remedy this?

I6 - Maybe turn those benches, so if there really is a view, if you just want to watch traffic. Maybe even a couple of large containers of plants, something to talk about. All they can talk about here is the traffic. Traffic, noise which also means you get a lot of distraction.

(Sound of Light mural)

The artwork down the street...To me, I thought, “well, that cost a lot of money”...It just kept going and going and going. I thought, “why would you invest that much money when there is no place to sit and enjoy it. And to a person with moderate dementia it might be a cue to them, “I just need to keep walking the next 3 miles. There’s no end in sight,” which is not a good message to give. I don’t know why someone would invest that much.

KS - How do you think this could be meaningfully adapted for it to serve better as a wayfinding cue?

I6 - Well, if there were a space to put a bench to look at it. It could have 5 pillars. I can’t tell how many, but it must have 25 or 30 pillars. 5 pillars and 1 bench could make an experience.

KS - This points to the piece on overstimulation that you mentioned before?

It’s not helpful. And I’m looking below at that four-lane road that you can’t even cross to get over there. There’s not a crosswalk. And there’s no place to sit on the opposite side of the road to look at the art. It’s just ill-placed art. It would’ve been better if they had planted some trees that provided four seasons of sensory stimulation. This wouldn’t be a place we’d walk with someone with moderate dementia. It’s a really unsafe environment.

(Pride installation)

The Chinese lions...I know there’s some green behind them. But their situation at this huge hardscape, this huge concrete. And it looks like it’s light-rail in the middle, and four lanes of traffic. When you have to process four lanes of traffic and the light rail, adding any more stimuli is probably not a good idea. I think these are ill-placed. If they were over on the other side of the greenscape, I think they could be enjoyed if there were some benches with backs and arms, so you could sit and contemplate these little...To some people they might be frightening, to

some people with dementia. To me they're kind of cute. But that is another thing to think about that some of these could be frightening. People, in moderate dementia, sometimes have hallucinations. They could see these as monsters or dragons that are going to kill them. I think these are ill-placed. They don't help. Not much could help with the wayfinding of this intersection, it's very dangerous for anyone with moderate dementia.

KS - From what you're saying, I'm gathering that they might not even end up walking in this busy, traffic-heavy route.

I6 - You don't want to walk in these kind of places.

KS - Maybe a more narrow street, if they were located somewhere there, it would probably be helpful?

I6 - Yeah, and in a green space.

(Columbia Funeral Home)

It's in a huge hardscaped area on a busy street, another four-lane street and it looks like a two-lane street; wouldn't be the kind of place to walk...all the sheared shrubbery. We know that in restorative environments the natural form of plants tend to be more restorative. There's nothing about the shrubbery that looks natural. It doesn't look like a *Taxus baccata* yew. And I imagine they sheared a hydrangeas into circle balls. And they've sheared some rhododendrons into circles. And it's just hardscape. It's not a safe place to be, to walk to, or in.

KS - Do you think the way these shrubs have been sheared would prompt people with dementia to pause and look at them and think that they are interesting, or maybe not?

I6 - Probably not. I think a green park setting would be much more restorative.

KS - Could anything be done to remedy this?

I6 - You'd have to start over.

(Columbia City Theater)

It connects to the bus stop, so that's good. It's small. There is a tree there, but again, in a hardscape...Four-lanes one way and two-lanes the other way, it wouldn't be a safe place to gather or walk. You could park your bike but there's no place to sit unless you go to the Italian restaurant next door and order. It just appears there could be too much going on there. By the time you add bike parking, a bus stop, it's a very tiny place. I think it could get very congested and it's very close to the street. So I wouldn't think that it would be a safe place to walk. And again look at the way the benches are places. So you're looking at the brick wall. If you turned the bench you would be looking at traffic.

KS - Could anything be done to remedy this?

I6 - I think adding anything else would make this even more complex and harder for a person with moderate dementia to figure out. There's so much signage. There's so much going on. It would be lovely if it were greener. But it doesn't look like there is an opportunity to add much more green. And they're lucky to have a few trees at front, those are lovely. But for people with moderate dementia, this is too complex and unsafe.

N.7 Interview with I7

KS - What are some places that community-dwelling older adults prefer to walk in when they go outdoors? And what criteria would they weigh their walking destinations by?

I7 - If you look at people that are diagnosed with dementia, or the diagnosis of dementia, 2/3rds live in the community still. Only 1/3rd live in the care home environments. I think that's specific to the UK, but it just shows how important understanding the community, the design of the environment, how that's designed to support people that might have memory difficulties.

With regards to preferences, if you were to look more generally at healthy young adults or healthy older adults, there are preferences that have been shown, for example, landmarks that are positioned at intersections. I noticed in some of the pictures, there were grand buildings at intersections, at crossroads. So for young adults and people who are typically aging, those landmarks would provide them with quite a lot of information, if you're looking at navigation, so being able to navigate comfortably in the community. That ability to recognize, at that decision point, at that intersection, being able to associate a landmark with a direction becomes quite difficult if you're experiencing signs of dementia.

So, those who are showing early signs of mild cognitive impairment or dementia, those abilities to combine direction information with landmarks becomes quite challenging. So I found some of the pictures and the different comparisons that you presented interesting. So it isn't actually experimentally known yet whether landmarks that are positioned, say, along a route rather than landmarks that are at decision points, whether those are more beneficial. Because we know that the ones at the decision points are harder.

So, I think in relation to...I made some notes about 'visibility' and about how stable certain landmarks are, it's got lots of components that feed into what makes a good landmark. Positioning is one. Saliency. How much it stands out from the background and the rest of the community. Uniqueness. For example, a Costa or a McDonald's wouldn't be a very...When you're in a new town there are lots of different Starbucks or McDonald's. So being able to differentiate between the different landmarks and making sure there are enough unique spaces is really important.

KS - What are some enabling and disabling characteristics of the physical environment that influence their outdoor walking?

I7 - I'd say there definitely are. It depends on whether the person is, say, a resident, so they're really familiar with the environment, somewhere where they've spent many years or whether it's a new environment. And those differences between, if you're visiting an environment for the first time vs. somewhere you know quite well are quite important, especially for people showing signs of dementia.

We know that older adults who are aging healthily, it's significantly harder for them to learn a new environment. To remember the route, they need to see the route many more times, they need much more exposure to the environment. This becomes even harder if the person is experiencing types of dementia, and particularly Alzheimer's related dementia, because that affects the part of the brain to do with our spatial memory. Because people know that, well I know myself, I don't feel confident driving in new towns, so I don't particularly like doing that. I think older adults know that as well. They know what they're capable of and what's challenging and what might be confusing and disorientating.

Because of that a lot of people decide not to venture into new towns. Because they know that they have that difficulty they are less inclined to go and explore new places and they tend to stick to the routes that they know so they don't shortcut as often. So even if there is a quicker way to get somewhere they'd much rather stick to the path that they know. Also, I'm not sure how it would relate to cities and towns in America, clearly they're much larger than what we have here in the UK.

But having much shorter paths with fewer decision points, so fewer of those intersections, because they're challenging, that's quite important as well...Some research that I'm aware of in museums. Making sure there's enough seating along paths. Most people with dementia are over the age of 65. There's a small proportion who are younger than 65. So,

mobility problems, difficulties walking for long durations, that's another thing to consider. But making sure there are spaces, benches positioned along routes. There's also 'access to community toilets'. It's not so much to do with landmarks. But all these aspects feed into what makes a community dementia-friendly and accessible and usable for people with dementia.

Referring back to landmarks, just making sure there are enough unique spaces. Enough memorable areas and places along the route that do stand out. I think that's really important, and also signage. Being able to have signage alongside landmarks is important because if someone's got problems with their visual perception, the language abilities may be stronger. So reading directions may be able to compensate for their visual difficulties that they have.

KS - I'm interested in knowing if there are particular landmarks that older adults with dementia are likely to notice when they are walking outdoors.

I7 - There's a lot of research that has looked into global, compass landmarks. So, say, there's a landmark you can see from multiple angles. Those kinds of landmarks...in Britain it would be the London Eye. So you're walking around and you can see the London Eye from many places, so you know, "Ok, the River Thames is there." So, those kind of compass-like landmarks are important for localizing where you are in the environment.

With regard to local landmarks, again, it's all those aspects. If you're choosing a specific landmark, it's got a stability to it. So it's not something that would move. Say, in the care home environment, you've got really nice table that's very bright and colorful, and the care staff decide to move it to another place of the development. That would be very disorientating

because you will remember, “Ok, I head towards that table to reach this location.” But that table is then moved that would cause disorientation...

KS - You made an interesting point about the distinction between landmarks and walking destinations. So I was wondering if the lines are blurred between the two. How might the nature of the activity and purpose of going outdoors be linked to perceiving certain elements in the built landscape as landmarks?

I7 - I've done some interviews and given questionnaires to older adults with memory difficulties. And depending on the length of the route, some of the participants have completely forgotten mid-route, they've had mind blanks of where they're actually going. So they sometimes could get what the destination is at the end, but sometimes they can still remember the directions through the route. Others have talked about inclinations. So if you're walking up hills. And also some cues as well, where the sun is, where the natural light is coming in from in a building, where the windows are, which spaces are darker, which are lighter. So I'm not sure if a wooded area, if that's covered and shady, maybe that too acts as a cue and as a landmark.

KS - Was the first example with respect to well-practiced routes that people employ in their daily routine or were these relatively unfamiliar terrains?

I7 - These were new routes that people learnt. So I taught them a route, showed it to them until they'd learnt it and then asked them questions on aspects of their route memory. And then following that, then had a questionnaire as well which might bring those qualitative components out.

KS - I'm wondering if those momentary lapses might occur in well-practiced journeys as well. If so, would there be a vital role that the landmark plays in helping them?

I7 - I think possibly. I'm not sure if that has been researched. Sounds like a great project. I mean there are examples. You see quite a lot of self reports where people have shared their experiences of symptoms of dementia. It quite often is that people have learnt a route. It's very well practiced. It's habitual. And then they end up somewhere else. I know of a report in my local town. So a gentleman woke up in the night. He had dementia. And he walked to the beach. He just walked the route to the beach and just stood by the beach. He just went to the beach. And his family didn't know where he was. But they knew he loved the beach and they found him there. So it's an ingrained route.

With regard to the first picture, the one with the nice patterns along the wall, definitely, if you're walking along that route and if you're viewing it from that angle in the first picture, it's a very important landmark, because firstly it is unusual. It also acts as a boundary landmark. There's image C, where you can't see it, but it's still a boundary landmark. So you're still walking along that wall. There was research by Kevin Lynch. It kind of relates somewhat to that. That's where I saw some similarity, and also, how unusual the wall is.

KS - Is there a certain dimension other than the visual component that might add to the attractiveness of landmarks and how memorable they may become for persons with dementia walking outdoors? What are some ways in which they use or interact with landmarks during a walk outdoors?

I7 - You can use all the senses if a landmark has multiple qualities to it. For example, tactile, in some care homes they started to have different textures along the walls to provide an additional cue for people to know which corridor they're at. I think tactile is a good one, but also, how meaningful the landmark is to the person. There are some landmarks from the ones you've chosen which are so unusual. They really stand out. They're very salient, very unique. But, in

relation to meaningfulness, it's hard to tell how meaningful they are to the people who walked along the route.

In my interview study, it was interviews with residents with memory difficulties in a retirement setting. The corridors had pictures of water lilies. It was quite a repetitive environment. They had different water lilies, different flowers along the routes, framed in the same frame. But there was one location where they had pictures from the local community. And there was one resident who had a diagnosis of dementia. And she was so drawn to the picture of the local community. She appeared quite quiet during the interview. But when we came on to discussing that picture, she was talking to me about how her grandma lived next door. She was able to relate to that picture. It brought a whole different meaning to...it looked like just a standard picture to me, but to her it meant much more.

If there's a way that residents from the community could get involved, if there was a trade, a profession that was quite dominant in that area, having landmarks that bring up those discussions. For example I now work in Northampton, and there it's got this very big history of boot-making and shoe-making. If they were to inject some landmarks that relate to that industry that could potentially be discussion points.

KS - Do you think that meaningfulness could be brought about in other ways? Is abstraction in art work something that could potentially lead to meaningful place attachment, as opposed to things that people might be more familiar with?

I7 - Yeah. There's been some work by the Museum of Modern Art (MoMA) in New York. It's not so much to do with landmarks, but every Tuesday they invite a group of people with dementia. You come along and have a talk of the art exhibition. And they phrase the questions

such during this tour that it allows the people with dementia and their supporters to really think abstractly of what the art means.

This is something that could be done in a community sense. So you could have people walk along a route and provide prompt questions as to what those landmarks mean to them to see whether there is any overlap between the landmark and what their views are. There's also a project in Scotland. I think it's called "Dementia-friendly Neighborhoods" and they had a project where they gave people with dementia cameras and they said, "Take me for a walk. And along that walk if there's anything you want to take a picture of, do take pictures."

I went to a conference and they presented this. There was a picture of a plain plot of grass that they walked past which to me and the researcher, who took the couple out for a walk, didn't mean that much. But they then went on to discuss that and it was there they had their first date. It had real sentimental value to them. So it's hard to say which areas have meaning for people because it will be different for everyone. It may be that areas which don't typically look like they'd stand out or would have much, or they're not that salient from a visual perspective, they might have a lot of meaning and sentimental value to people with dementia and their supporters.

KS - Does this harken to the aspect of long-term being retained in dementia?

I7 - What happens with dementia is that the more recent memories that first start to go. It's the little tasks, like, forgetting where you put your keys, forgetting where you've put things, and then it becomes more progressive. So, remembering what you did last week and then gradually if you work backwards that's how it affects your memory. So those earlier memories, if it's people living in the community, it will be those earlier memories that really stick.

If there's a town that... they've knocked buildings down, they've changed the

road system, I can imagine that would be quite challenging for somebody with dementia. If it is a town that has had a lot of change, finding ways to really make sure that people with dementia become as familiar as possible. Providing the opportunity to show them the route or to show them a way through multiple times would possibly support them more.

KS - As you know the pictures shown in the survey were taken by walkers in a walking program for persons living with early-stage memory loss in Seattle where the prompt they were given to take pictures was to find any landmark that was interesting to them, which they went on to discuss at a focus group, post-walk. But I wasn't able to get at was whether these 'interesting' landmarks would serve as wayfinding cues, and help navigate in their neighborhood...which is the reason why I'm having this conversation with researchers and practitioners, to see how these landmarks may be better situated in the contexts they're in, for them to aid in navigation. Please look at the pdf I've sent you. The first five pages of the pdf, sent to you in the email earlier today, contain the five photographs of landmarks that you found to be most noticeable in descending order of appeal, as per your ranking. We will talk about each of these landmarks sequentially. I would like you to reflect on the issue of wayfinding in regard to these landmarks; how effective they are in their current state as wayfinding cues, as well as think of ways in which their design may be improved to augment their effectiveness as wayfinding tools.

I7 – (Sound of Light)

I think "C" could be changed, where it's plain, vs. on the others it's not, and it's bright, it's got that pattern on it. As long as the residents are able to remember that the pattern is on this side of me. "C" could be slightly improved by having another pattern put on it to make it stand out more. My thinking is if you have the same style or pattern as on A & B it

could be disorientating. But as long as people are able to remember it's on the left of me when I'm going to town maybe, and it's on the right of me as I'm coming back.

KS - In your experience or have you come across research that points to people's proficiency in judging left vs. right?

I7 - Yes. There is a navigation strategy that we use called the associative cue strategy. And that is where we combine the landmark information, say, "the church" and turning left at the church. So you remember by, "When I'm at the church I turn left." I've found in a study I've recently published in November that people showing early signs, those earlier signs of atypical aging, so cognitive impairment and dementia, that ability significantly decreases, so the ability to associate and combine those directional and landmark information. There's another strategy called beacon strategy which is where you remember, "Ok, I head towards the church." Rather than associating the direction explicitly with the landmark, you just remember, "I head towards that, that's my goal."

KS - So it's almost like embodied route memory, rather than consciously constructed route memory?

I7 - Yeah. It also relates to that global landmark, if there's a landmark that you can see, like the London Eye. I know if I want to go to the River Thames I just walk towards that because it's acting as a beacon and it's a global landmark. In relation to this you could possibly, if you didn't want the potential for confusion, in that people got confused which way they were going, you could put a different pattern on those grey panels, or something. Just to make it stand out. Or have a strip across them so that it's the same pattern but it's not in the same position, so that it doesn't look identical. You could have the pattern that's shown in B, but rather than have the

patterns going upright, have a pattern that goes across. So that it's similar, the two are linked, but it's not exactly the same that people would get confused.

Maybe there's no confusion, and one way you could test that is if you could get a virtual model of that wall and then manipulate it and have people learn the route and see whether there are any differences in performance based on whether how it is now vs. if you've got a different pattern going across it, or if you've got the same pattern going on it.

(Spirit of Washington)

This one was quite unusual. My only suggestion from a visual saliency point of view, you can see it in the distance, but if you've got visual difficulties...Older adults have, not just people with dementia, but everyone, as we age, our vision decreases. So identifying the differences in color, where it's grey it could be perceived as difficult to see from a distance. So I think the unusualness of it, and a given its location, you can see it as you're coming into the park as well. So I think it's got very good stable location.

KS - Do you think something could be done around that sculpture to better delineate that space?

I7 - From a wayfinding point of view, I'm not sure. It's a good landmark, but where you've got that path. In picture B, I can see that one path goes along and then there's another path that cuts across. I think that is a good landmark 'cause people will know, "Ok, I head towards that sculpture." It's in a good position. I don't think you need to do anything around it because where it is, it's visual from quite a few perspectives and it's along that route. So people can see, "Ok, if I want to go that way, I go along the path that goes past the sculpture." I think it's fine how that is.

You could maybe, in picture C, have a symbol there on the signage. It depends

though, it's not a functional landmark. For example, there's a cinema or a town hall. So those functions have got purposes. So people would be going there explicitly for that purpose. So this one I'm not quite sure, maybe people would sit around it. It could be a landmark. There could be a picture on the signage. Or if there's a tourist visiting, if that's an area of significance, having that symbol on some signage which is earlier on along the route before you come in. That's something that people, if they are visiting the town would like to see. Yeah, I think that would be good, given how unusual it is as well.

KS - In picture B where you see the Columbia City Landmark District sign, would your proposed sign be combined with that or a standalone element?

I7 - It could be...In B, the "Columbia" sign is tucked in a bit. If there was something that's next to that, or an arrow, something that makes it a bit clearer. I think that would be quite good. For new people who are unfamiliar.

KS - Does this landmark hold it's own against other buildings in the vicinity?

I7 - I think it's very unique. I think it holds it's own. It's on it's own where it is in space. It's alongside a route, which is good. If people are coming to visit that potentially, if there was a sign, with a clear kind of arrow and signage with that picture, that would be quite supportive, especially given that it's color and that it's quite difficult to differentiate it or it could be for some people with visual problems.

(Pride)

I thought they were very unusual. Given where it's positioned it's at a decision point. Even though I have said that the ability to associate landmarks with directions is quite difficult for people with dementia. It's much better that there are landmarks at those decision

points than not have them there. It's much better to have people just having to remember directions alone. I quite like that they were there, they were positioned there and that they were quite unusual. From a color perspective they are white aren't they! If there was something else at the corner to make it a little bit brighter that could possibly be beneficial.

KS - In terms of surface articulation, the paving maybe...?

I7 - It depends if you want it for wayfinding or if you want people to enjoy it as a landmark. You could have a route kind of depicted along there for people to follow. If you want people to spend more time there you could have more information about what it is. Sometimes if there are dark holes or dark squares, they can be perceived as holes by people with dementia.

Here, in our supermarkets, the black mat that you have when you first walk in.

A lot of people would find that quite intimidating. The shadows from the trees could be quite possibly problematic, because shadows aren't very good. People perceive them as holes as well. But you can't prevent these kinds of things. There's only so much you can do. But it's just something to be aware of, if somebody is showing difficulties around there, could be because of that.

KS - The issue with the shadows is an issue of visibility?

I7 - Yes. In picture C, there's a concrete box and there's a very, very black line from where the shadow is. People might avoid walking to look at those landmarks, they might be outside to avoid going in there, because it looks like that path has been cut of, or if somebody has gone to have a look another way that could pose a barrier. You're outdoors, there's only so much you can do. If there are shadows there are shadows. But it's just something to be aware of.

KS - I guess trying to eliminate any extraneous obstructions would help.

I7 - Exactly. Just being aware of them, that it could possibly cause a challenge, given how shadowy it is around there. But it's right by the crossroads, so if people are crossing the roads, people will see those landmarks and especially that first big white one that's there. "Walk towards the dragon..."

(Columbia Funeral Home)

I like this one because of the positioning to be honest. I think this stood out maybe because of the very clear signage that's there, very easy to remember. And also it's an at intersection. Most of the landmarks I've pointed out are along a route. It would be one of the stepping stones to help them get to where they are, rather than the end location. Maybe have some signage on the other side, where there's a canopy...so that it's quite visible from different angles, because you can see it quite well if you're walking up that hill.

But if you're walking down that hill I'm not sure how well you'd see it. I think it looks very clear. It's got the big flag outside as well. You could provide a bench there for sitting because I would imagine it's somewhere along a route....haven't seen many benches at most of these landmarks, so having somewhere to rest.

KS - Where might the bench be positioned?

I7 - By that tree, it's quite pretty and peaceful and looks like it's kind of along the route as well. If there was the opportunity to have a bench around there, that would be quite helpful. I think those are things that are quite often forgotten, benches and toilets. Those are things that have been highlighted quite a lot at meetings that I have been to.

KS - But often overlooked, I suppose.

I7 - Yeah. They are trying to have schemes here in the UK called “Use our Loo” where shops put a little image of the toilet in their windows, so that people with dementia, when they are out in town they don’t need to be planning, “When am I going to go home to use the toilet.” They’ve got more time to enjoy the town, and also to provide a bit more of a sense of community as well...looking out for people.

KS - How is this information disseminated? How is the community made aware of the scheme?

I7 - That scheme was run by the Alzheimer’s Society, one of our leading dementia charities that focus mainly on the social perspective of improving from the patient’s perspective. They provide a lot of support for people with dementia, online. It was in the South of England where they implemented this, in some rural villages and towns. And they’re looking to roll it out across the rest of the UK.

There’s been a recent book as well by Mary Marshall in November. It’s called “Let’s talk about toilets.” She talks about having toilets accessible but also having toilets designed. I think the charities are trying to get involved and talk with local companies to try to get them to be dementia-friendly. Because it’s good for them. That is a component in ‘dementia-friendly’, having an accessible toilet that people can use and feel that they are not being an inconvenience if they come in and ask if they can use the loo. It’s all part of the dementia-friendly communities bracket, which would fall in with what you’re doing as well, with this research. I’m thinking more generally in terms of dementia-friendly rather than wayfinding, if the car park (at Columbia Funeral), the spaces closest to the door had disabled parking. That’s just a thought.

(Bike rack)

I liked this one. I thought it was quite unusual. It’s quite small. It’s not that

visual if you're not walking along that path. But if you are walking along it towards a location, I think it would be quite important. Also the direction, you can tell what direction the bike is going in as well. If you're walking backwards you'll remember which way. It's quite a modern bike. Just thinking how well people interpret that as a bike. Because it's a very minimalist approach to what a bike is. So maybe capturing some people's views as to how well it looked like a bike...It's an unusual type of bike rack as well. I don't know if they have multiple bike racks like that throughout the city. It's very salient.

KS - Do you think it would help to have this as a prototype that crops up in different places in different neighborhoods so people recognize it that way?

I7 - You could have that and maybe have it in different colors, trying to make it as unique as possible.

KS - The last five pages of the pdf consist of the five landmarks that you didn't select as noticeable or appealing. My final question is the same as the previous one. Please explain why these landmarks would not be helpful as wayfinding cues for persons living with mild to moderate dementia walking in the neighborhood? Are there any suggestions that you might have to improve their potential as wayfinding cues?

(Ark Lodge)

I was quite torn with this one because it's an absolutely beautiful building and it's got quite a classic look as well. I think the people who are residents of that town, this would provide quite a good landmark. I think it's somewhere that they visited and that they know. Compared to cinemas in the UK, it is a very beautiful grand cinema. So I think I was quite torn with this one. So for people who are looking up rather than looking straight ahead. So that's another thing as well.

We often forget that older adults tend to walk, or people that have got mobility problems, they may not necessarily look up as often as younger adults do. Making sure that the lower part of the building, the pavement have got landmark information is really important. This building is beautiful but if you were to look up you would see how unique it is but it's like an arthouse cinema. So, it's hard to pinpoint with this one. I think it's beautiful and it does act like a landmark.

KS - Do you think the marquee is always way too high for older adults with dementia to be able to see it?

I7 - Yeah. That's a good point. If there was a smaller alternative with the names of the shows that are being shown which is at eye level I think that would be really helpful, to make sure that they can see that. Because if you're just walking along that, I know there are posters of shows, but I can't see any clear signage seeing "Cinema" or so; just making it possibly a bit more explicit. There's that last banner on the corner, if there was something maybe there. Or the show, cinema timings...maybe have something there, because it's the corner of the building too.

KS - So explicit signage at the corner would be helpful?

I7 - Yeah. At eye-height as well.

(Rainier Arts Center)

I think they needed to have a little bit more information on them. They needed to be made a little bit more salient. With the Rainier Arts Center, it was slightly tucked away, so I wasn't sure how people would see that. So that's why I said I wasn't sure for wayfinding, how clear that is. So, maybe have signage earlier on, somewhere where people would visit. Signage at that intersection where people do walk and decide to turn to visit the Rainier Arts Center, maybe with very similar logo or signage as what's on the building.

(Seattle Public Library)

The Public library...there is a sign there. I didn't think it was very clear. If you look at C, I feel that sign could be made bigger. And it's not visible from the other side of the road. Maybe having something which is a little bit more clear and distinct. That would be good.

(Mural)

I really liked it. I thought it was really cool. But it was off the beaten track. Unless you're going into that car-park and say, "I'm going to the car-park with this artwork," I'm not quite sure how much that would stand out, maybe if it was continued and made a bit bigger. Or you could have a community project. You could have people with dementia involved in the painting and the extension of the artwork.

KS - Are you implying that it could be wrapped around the corner of that building, the part of the building facing the sidewalk?

I7 - Possibly. If that's a public footpath, the bit that goes around, then yeah, that would be good. It's very nice and looks like it could be continued.

(Columbia City Theater)

The last one, the signage was on the top. If it was a little bit clearer, lower down, because if you were to just cover up that sign, you wouldn't be able to tell that's a theatre, so maybe having the signage a little bit further down. Maybe having something on the road that says, you don't want to have an obstacle on the footpath, but something which was a little bit more along the route that made it stand out a bit more. Maybe like the theater timings of what's on, or a billboard.

N.8 Interview with I8

KS - I would like to begin by asking you a few broad questions regarding outdoor walking patterns, preferences and behavior for community dwelling older adults with mild to moderate dementia. What are some places that they prefer to walk in when they go outdoors? And what criteria would they weigh their walking destinations by?

I8 - I am going to try and answer these based on, as much as possible, my own expertise. I haven't really worked closely with persons living with dementia, as I noted. But I have worked with older adults that have some other sorts of ability challenges. So typically, I would say, probably, in an area where it's kind of close surrounding area, where there's a lot of green space and it feels safe and secure. And also, if there is perhaps some sort of purpose, either going to get groceries or going to join an activity, or if it's part of a walking group. So, a lot of seniors that I work with live independently in a building. So they would get together and go for these walking groups. But again, the seniors that I work with are quite independent. That's my experience. I have a family member who's living with dementia at the moment. And he is having difficulties even walking because he has Parkinson's as well. The ideal scenario would be to walk, but very small distances.

KS - Could you expand on the instance of comorbidity. So, in case there are ancillary health conditions that persons are dealing with, are there certain coping strategies that they might employ when they decide to walk outdoors?

I8 - I would say, to be around people with familiar faces, a familiar family member. It's going back to that issue of feeling secure and safe...If they have difficulties walking alongside, difficulties that's related to their dementia, then to have someone that can even provide that physical support, whether it's having someone to hold one arm as for additional support. And

also maybe a lot of information in advance about where the destination is, where you're going, what the purpose is. Of course, there's also facilitators if there's really nice weather, for example, on a particular day.

KS - Could you talk about the differences between the walking experience for walkers in group walking programs vs. those that are walking independently, on a regular basis in their neighborhood? Would people go to different places based on whether they are in a group or walking by themselves? Are there differences in the way they would plan their walking route? Any such broad trends that you might have observed?

I8 - As I was saying earlier, it's really to link to that idea of feeling safe and secure and being part of a group. It's also a bit of a motivator as well, to go out. If you're with a group that has similar characteristics then you are also moving at the same pace. So that's quite important, so you're not feeling like...for example, if you're walking with someone that's, perhaps, a lot more able due to many factors it could be because they're younger or more active, then you're always perhaps feeling like you're dragging the other person down. Because you're walking really slow. And the individual might be having to really slow down. It's about feeling comfortable and confident as well, in your own abilities. So if you're with a group that has probably similar ability level characteristics, then you probably feel more comfortable. And I think there's also of course that social aspect as well.

KS - ...of that shared experience in being with people, interacting with them, I suppose?

I8 - Yes

KS - At this point I would like to shift our focus to the external environment and how that impinges on people's walking patterns. Could you identify certain enabling and disabling characteristics in the physical and social environment when people go on walks outdoors?

I8 - Sure. So, I think if we start with disabling features it would be very typical everyday things like steps or some hills, for example...Busy streets. So if you live in a really quite busy area and there's a lot of commotion then that would be like a deterrent. The weather, of course...cold and rainy days, that would definitely be a deterrent. Some enablers... having that social support. Some group of people or an individual that you can trust and you can go walk with.

In terms of the environment, there's a lot of green space and park that's nearby or interesting things to look at during the walk. If there's places that you would normally go to, like if it's a church that's nearby and you usually walk there. In a supermarket that you normally go to where you kind of know the staff or a local cafe, somewhere where you normally go.

So it's that sense of familiarity and also the sense of belonging, because it's your community. That's where you walk. So you know people. It's a way of going to that place and having that social aspect. Or if it's not interacting with people, it's also watching people as well. So if they are sitting at a cafe, you see, perhaps, the same people walking by, maybe. Or it's just observing. So, even though a person might have mobility challenges, the simple act of being able to observe is a form of participation.

KS - What I'm hearing is that being outdoors isn't only about physical activity and being on the move, but it's also about pausing and taking in what you see, so that might entail sitting and taking a break from one's walking route, I suppose.

I8 - Yes. For sure.

KS - You touched upon specific markers, like the church, the grocery shop that people might go to. Would you characterize those as landmarks or walking destinations, or perhaps both?

I8 - Yeah, I would say both, to be honest, because it's a mark of familiarity in relation to the place that you're living in. But it's also a destination because there's a purpose, and there's like an end goal of getting to that particular place.

KS - In your experience, have you seen people walk outdoors purely for leisure or to satisfy a different need, or a perhaps a combination of both?

I8 - Yeah. I think, for example, the seniors that I work with who are more independent, they acknowledge that and have a good understanding that exercise, any form of exercise, helps improve wellbeing. And so they would make a conscious effort to go out for walks to get that bit of exercise. It's based a lot on the individual, as well.

But, I don't know if persons living with dementia, I guess it would be how far into the stages they are. I guess, perhaps in the earlier stages, if it's easier to go outside and exercise, there's that motivation. There's that awareness of going out for this purpose to improve my wellbeing...it would come more naturally as part of your everyday routine. But for individuals that have never really had that exercise focus or incorporated that piece into their routine, then, it's definitely more difficult later on to start and just incorporate that into your routine.

KS - Have you found that older adults' ability to drive has changed over time, and perhaps that has impacted their mobility practices in the outdoors? Because a piece in the dementia research is that when people lose their ability to drive it impairs their outdoor mobility and also their range of mobility is greatly reduced.

I8 - Yeah, definitely. Just for an example. I work with seniors that are independent-living and one of the reasons they don't drive anymore, I mean, partly it's to do with the fact that they are older and they feel less confident. But another piece is, these are seniors that moved into an

affordable housing condominium...One of the limitations is that there aren't as many parking spots because they wanted to save the space, they wanted the space to create more units, 'cause at the end of the day, it's affordable housing, for seniors. So a lot of seniors, when they moved in, had to give up their cars because of the lack of parking spaces available. So that actually encouraged them to walk more. But also the building is in a very centralized location, like in the city center. So if they wanted to go to the local senior center, it's down the street. Or if they wanted to go to the mall, it's across the street. There isn't really a need to have a car. But that's really dependent on where the home is located. If it's in a central location it actually doesn't really impact their ability to go out and do things. It's if it's in a remote area. I think that's where you see cases of seniors becoming socially isolated, when they no longer drive.

KS - It's contingent on the walkability of the neighborhood, I suppose?

I8 - Yeah, for sure. And not just the walkability, but also what community services and supports are around.

KS - Have you noticed your participants make conscious choices when they move to these affordable housing units because they are located in proximity to these service centers? Is that a decision they make consciously or is that something they discover along the way? I was wondering if they made the choice to move to these units because it was in a centralized location in the city.

I8 - Because the housing situation in Vancouver is very unique in a way that it's really becoming unaffordable for a lot of people. So it's not even a choice of where I want to live. It's basically what's available and what's affordable, so a lot of seniors that move into the specific area because it's two new high-rise buildings that were built. We had to fit a specific criteria, one

being low-income and second being a senior, and the third being ambulatory or independent living.

Of course, we do have a lot of seniors in the city who fit these criteria. A lot of seniors saw this as a great opportunity to move somewhere where it's quite centralized and there's a lot of amenities. But they didn't...this area is quite well known, so most people would know that it's quite centralized and currently there's about a 2-3 year waitlist to even get into the building.

KS - I'd like to talk a little bit more about landmarks in particular. Have you noticed participants that you work with describe certain landmarks that they are particularly drawn to that hold their interest when they walk outdoors, and if there's a distinction between landmarks that are familiar vs. landmarks that pique their curiosity, and are just interesting and unusual? Have you seen those kind of patterns emerge?

I8 - I would say it's linked to, again, with that familiarity. So, the landmarks that they usually talk about, are the key known places in the city which would be the shopping mall, the senior center, the city hall and the airport, 'cos it's really close to the airport and you could see the planes fly past. But for each of them there is a specific purpose or functionality. You go to the city hall to get access services. You go to the shopping mall to have lunch or to socialize. You go to the senior center to engage in senior's activities. The airport, it's travelling, but it's also watching the planes.

KS - What I'm hearing is that these landmarks help them engage meaningfully and retain autonomy in their personal lives. So they are all a part and parcel of their everyday routine?

I8 - Yes, for sure.

KS - Have you noticed people talking about public art, perhaps, or sculptures, when they walk outdoors?

I8 - Do you mean for direction purposes, when they are navigating?

KS - Right. When they go to these walking destinations or places of activities of daily living, do they use those kinds of cues in orienting and finding their way?

I8 - Yeah. You would use particular landmarks to situate yourself. For example knowing where you are, in relation to other places. Like, if you say, "Well, this restaurant is near the mall or next to the mall" then you would know. Or you would say, "the City Hall is further up, but across the street from the senior center." Or "The library is across the street from the senior center." So they use that as a bit of a location identifier almost, for example, traffic lights, they would say, "It's by the busy traffic lights." Or "it's by the future shop." Actually, the streets are quite well marked in Vancouver. So a lot of people just say street names, or they'll say, "On number 3 road."

KS - Signage also has a vital part to play in assisting people when they walk outdoors, in addition to landmarks I suppose?

I8 - Yes. Signage is hugely important. I think it could be a lot bigger. If you have vision problems it's a bit harder to see. The signage is quite good, but it could be a lot bigger.

KS - The height at which signage is placed would also be a consideration for older adults, I suppose?

I8 - Yeah. They're quite high up. I mean, for everyday type reasons, for driving it's easier to see when it's higher up. So, it's more catered to people on the road as opposed to people that are walking. But again if it made it bigger...one also interesting thing is the city that I'm describing

predominantly has a huge Chinese population. So a lot of signage is now in Chinese, for example, which is quite difficult for people that can't read Chinese. It would probably be good to have it in both as like standard, big English and big Chinese.

KS - Have you noticed that people use places that they pause along a walk as reference point in addition to destinations? Because I recall you spoke about places to sit and pause. Are those things that come up?

IS - Because there is a main traffic light that separates the building from the mall, so that's something that people would make note of. And also there's a patch of green space near the building that people often talk about. If they are going for walks they would make note of the green space. And that's where they would walk to.

KS - Now I would like to talk briefly about your survey responses. The first five pages of the pdf, sent to you in the email earlier today, contain the five photographs of landmarks that you found to be most noticeable in descending order of appeal, as per your ranking. How helpful would these landmarks be as wayfinding cues for persons living with mild to moderate dementia walking in the neighborhood? Are there any suggestions that you might have to improve their potential as wayfinding cues?

(Ark Lodge)

The first one that I picked was, of course, the local cinema. I think it's because, people always share experiences of film for example, as not only an activity but also a marker of historical events. This one in particular, you see that it maintains, almost an original look. It has that classic look to it, which I think for persons living with dementia, it's again about that sense of familiarity. For a person that's lived in this particular neighborhood for years, they would

know this particular marker point, “This is the local theater”, or “the local cinema.” or whatever it’s called, like the particular name of it. So, that’s like a key trigger reminder.

If it’s some landmark that’s been there for years...I often see for example, when I lived in the UK they would, instead of street signs, they would say, “It’s by the museum of this” or “It’s by the cinema”. So, the actual street sign wouldn’t be a name of the street, but it would be the name of that particular landmark. So when people are looking for things, they’ll look for that which is much bigger.

KS - So I’m guessing there are cultural differences in the way people make sense of the environment.

I8 - Yeah. Because if you think about it a lot of our street names are actually people’s names, like historic people that have contributed to this particular area, which I think can be quite confusing, whereas a big landmark, you would memorize and you would know that easily. It would just trigger...

KS - Is there something that you think can be enhanced in terms of design for this landmark for it to serve better as a wayfinding tool?

I8 - I think it’s great. I don’t know what the alley looks like in picture B, there’s a back alley. That could be improved or brightened up. I don’t think alleys necessarily have to be this dark, kind of scary place. You could turn it into a place where it feels more safe and friendly. In terms of the front, maybe a bit brighter. It kind of looks a bit institutional from the top with the windows. So yeah, anything that makes a building look less institutional.

KS - Have people explained why they are drawn to certain kinds of spaces within the community? It’s a theme in care facilities, hominess, warm, welcoming, home-like spaces.

I8 - Yeah, for sure. That's the point that I want to get at. A lot of seniors talked about any sort of places that triggers that memory of hospitals or reminds them of hospital settings, it's not a place that they'd particularly like or want to think about. For example, the mint-greenness alongside the white, it kind of has this hospital-type feel to it. It's just the color that hospitals seem to like to use, this green and white combination.

KS - And you think that might evoke that sense of institutional aesthetic?

I8 - Yeah. For example, if it was something brighter, even if it was orange, instead of that green, I think it would probably draw a lot more attention.

(Rainier Arts Center)

This building also has a historical-type look. I don't know if it's a particular style, like a Georgian style building, but it's something that has a sense of familiarity. Something that looks to the past a bit. But again, you can also see that it's turned into an Arts center. So that could mean something that's contemporary. So it's taking something old, but also using it for a purpose to show something that's contemporary.

In terms of the building, I don't think there's need for any big improvements. They've used quite bright colors for the signage which I think is great. In picture B, if you move outside of that, everything is dry...it just seems like now you're in a completely different place. So it's almost like the surrounding areas need to be kept friendly. It has to be like, as the person is travelling from one place to another, it's a nice walk, rather than "I need a car to drive to the place that's actually nice" but the journey to the place is actually quite rubbish.

KS - Is there something that could be done to remedy that in this case? Just maintaining the lawns, perhaps?

I8 - Yeah, maintaining the lawns. Probably a bit more plants, if there is some sort of city investment that could have some nice plants or some greenery that's more seasonal, that can withstand the winter. More trees. Maybe a few more benches. Not just benches but some tables that people can come and have lunch.

KS - Have they people that you work with report going outdoors to take lunch or for a picnic to the park nearby?

I8 - Yeah. People like doing that. If there's a place that's clean and nice where you can sit, you meet people and have a coffee. People will use it. Here, I see this one little bench and it's next to a garbage. On very dry grass. So, that's not really appealing even if there is that space. Often, older people like being around younger people. So there isn't much in that area for kids to play. So they could make this space a bit better, it doesn't have to be a park, but sometimes those little landmark features that kids can play on.

KS - It's part of observing social life around you?

I8 - Yeah.

(Seattle Public Library)

I think it's lovely. Again, it's kept its form. You can tell that this building was built, perhaps a years ago, but it's kept very nicely and it's the local library. A lot of seniors like going to the library because there's a lot of resources. If it's got a nice building and looks quite friendly, it's quite clean, it's somewhere seniors would like to go to as a destination.

KS - Do you think there could be any improvements made to this library in particular for it to serve better as a wayfinding tool?

I8 - I think the signage could be a bit bigger. You could see that it's just carved in. I know that it's that particular look. But they could have bigger, brighter signage.

KS - Was there a particular reason for ranking this lower than the previous two landmarks?

I8 - I think I would rank this equal to the previous one. I think also one thing to take particular note of, I'm just thinking of family members that have had walking ability issues. And that could definitely be persons living with dementia as well. If you have a lot of benches every, I don't know...even if it's every 50 meters, then people can take little breaks. If they're going out for walks and they just can't walk that far. If there's nowhere to just take a break, every time they go out it feels like this daunting task. 'Cause a lot of older people require air supplement, so they have their air tanks, which they have to push in a walker. So you need to have places where people can sit and take a break.

KS - So I guess little curbside areas for seating would make a difference?

I8 - Yeah, for sure, and even if it's like an interesting looking seat. So it could probably serve as a seat and a landmark.

(Columbia City Theater)

This looks like an area in the community where there's lots of little stores.

And this one particularly is the local theater. I know that a lot of older people enjoy going to the theater. They watch little plays. 'Cause when you think about it...a lot of older people didn't have the television, for example, when they were growing up. The local theater is like watching television, that kind of activity.

Again, not just as a landmark. It would be something that people know about, just because they enjoyed going to watch plays in the theater. One thing I would improve on this place is, it kind of blends in with the other shops in the area. That's quite interesting. Maybe not so much in picture C, but in other pictures there's a particular theme or look to that street which might make it just blend in and not as visible.

KS - But you do think that the identity to the place just by virtue of it housing plays and theater would trump the lack of distinctiveness of physical features?

I8 - Yes.

KS - Right. So I guess that also ties into that aspect of familiarity that you were talking about, something that harkens to the hobbies that they might have cultivated in the past?

I8 - Yeah. You could also see that it's next to a pub. I think a lot of older adults like sitting in a pub. It's a social...I'm talking about older adults from the UK, for example. I'm not sure. It really depends on the culture. In Canada, for example, you don't see a lot of older people sitting in a pub. But maybe you'd see them sitting in a coffee shop or a cafe instead.

KS - Do you think that there would be a difference in the way people take to this particular sidewalk which is lined with these shopfronts vs. some of the examples we saw earlier where you probably only see one or two distinct, discrete landmarks, that aren't necessarily busy or populated? I think, because you were talking about the chance people get to see social life around them as welcome. I'm wondering if you have an argument to support that, or against that, in this case.

I8 - I think the other two landmarks, they're definitely a place that you would travel to just for that particular purpose. There isn't much around it. This one is on a street. You would walk down the street and probably do various activities. So you perhaps might spend a day going from shop to shop, even after, you've seen a play. You might get lunch somewhere before. Or go to the pub after. Whereas for example those standalone landmarks, you'd go there just for that.

KS - Have you seen in your work with older adults, a willingness to break out of pre-planned routines and engage in spontaneous excursions in the neighborhood, for instance, in a setting like

this? Do you think they would be willing to try out a place that's different from their normal routine?

I8 - Yes, definitely. Even when I was doing some walking tours with seniors the plan was to stop off somewhere. They would say, "Oh, this is where I like to have lunch. Do you want to go there, stop for lunch?" If they have the energy for it, they definitely want to do things spontaneously.

(Columbia Funeral Home)

When you look at the first picture, there's a nice, outdoor green landscape. But again, it's a funeral home. I think seniors would see it. It's quite prominent. But it's not somewhere where...and it depends on different cultural groups. People don't like to be reminded of death and dying, that type of thing. It also looks like it's in the middle of a residential area. It's kind of just there. I don't know if there's anything that can improve it. To me it's just odd, that you have these houses and then you have just a big funeral home that looks like it's converted from what was once a house. As a landmark, you won't miss it.

KS - Do you think the negative association of a 'funeral home' would persist, or is there enough distinctiveness, like you were saying that it was so oddly situated there, that would somehow, maybe, compensate for it being a funeral home?

I8 - Well, that's the thing. I think people wouldn't like to visit it, but they'll know. It's so distinct that it'll definitely be used as some sort of navigation locator, just a landmark that you will remember and know.

KS - The last five pages of the pdf consist of the five landmarks that you didn't select as noticeable or appealing. My final question is the same as the previous one. Please explain why these landmarks would not be helpful as wayfinding cues for persons living with mild to

moderate dementia walking in the neighborhood? Are there any suggestions that you might have to improve their potential as wayfinding cues?

I8 - As I was looking through these, one thing that I was thinking about was, it kind of doesn't, almost doesn't stand out enough, in a way that it doesn't link to a particular purpose. So it's something that might look nice, but what would you describe it as? So, if people were to say, "It's near that thing that's really colorful on the side." People won't know what it is.

KS - So you don't have a name to associate with it?

I8 - Yeah. It's hard to name what it is, even if there is description, if it's meant to be artwork. I think it probably is some local art and you've seen it a lot. Perhaps it's purpose isn't to serve as a landmark. But it's just for expression. But if the municipality wants to use it as a landmark then they should have maybe a description, "this is by so-and-so" and it's meant to describe this, or "it links to this particular time point" or something. Then people would know, "Oh, there's this thing. It's nearby this thing." I think it's nice that you have that. I would encourage having that. But I don't know if it helps people living with dementia to serve as a landmark. I don't know how useful that would be.

(Pride)

KS -I also noticed that you spoke about the Chinese lions and how they might resonate for older adults who are in, say, Chinatown. Could you talk about that, that cultural undercurrents of landmarks might make them resonate for some people more than others?

I8 - Yeah, for sure. This particular lion is a very prominent statue in Chinese culture. If it was in Chinatown you wouldn't need to pin-point it because these would be everywhere. But because it's in, kind of like, just a street, where if you were Chinese, you would see, that's the only thing and that's the first thing you would see. So they wouldn't say, "Oh, this is on Martin Luther King

Jr. highway.” They would be like, “Oh it’s by that statue, you know the Chinese lion or the Chinese statue.” They would say, “Oh, yeah. I remember. I know where it is.”

KS - Do you think it doesn’t work if the older adult was not familiar with it, perhaps?

I8 - I don’t think that’s...I think it would resonate more with older Chinese adults. But this particular one, because it also looks like a type of animal, I think it might work as well, because it’s quite specific. It’s quite unique in it’s look and where it’s located.

KS - Is there a particular reason you considered in that it wouldn’t work as well in terms of noticeability or attractiveness, when you ranked it in the survey?

I8 - Yeah, I think it’s because it’s next to things that are quite similar in color. So it doesn’t stand out in that sense. It’s all cemented and then you have some trees. It’s kind of like an odd place. I don’t know if people would want to take a walk even, in this area. There isn’t much here. It’s not a place where you can go out and take a nice walk down the street. There’s not much around. But if you get lost, you’d say, “Oh, I remember. I drive past the street by that lion statue.

Some of these landmarks, again, it’s not meant to serve the function of it being a landmark, but it’s meant to just, as a form of expression, you have artworks that you put in places. It’s almost like a secret. If you discover it, “Oh, that’s interesting! Have you seen that piece?” So, if it was meant to serve as a landmark then you’d make it more prominent. You’d probably point people to it. Or there would be more on the local municipal website for tourism or whatever. You’d make it more of a distinct thing. But I don’t think it’s meant to serve that purpose.

The one main thing I would say is, it would be interesting to have different

things to serve different purposes. So, like a landmark could serve as a bench. It could also serve as somewhere where you could have kids play on, and also as a place to lock your bike. It would be really helpful to have landmarks that serve dual functions, or multiple functions.

N.9 Interview with I9

KS - What are some places that persons with mild to moderate dementia prefer to walk in when they go outdoors?

I9 - Easy walks, plenty of seating, destination points that are familiar and recognisable

KS - What are some enabling and disabling characteristics of the physical environment that influence their outdoor walking?

I9 - Changes in tone in paving which can appear as a change in level; not enough seating; no toilet to use en route; busy roads to cross;

KS - How important are landmarks to them when they go on walks outdoors?

I9 - Research has shown that people generally navigate by landmarks: “Older people with dementia tend to use landmarks and other visual clues rather than maps and written directions as wayfinding techniques” Mitchell et al. (2004)

KS - What are some landmarks that they are likely to notice during a walk outdoors?

I9 - Things that are familiar to them, that they understand and can remember from the past

KS - What are some ways in which they use or interact with landmarks during a walk outdoors?

I9 - I am not sure about this, but seeing a familiar landmark gives one reassurance that one is on the right route from A to B – there may be more research on this noted in Mitchell et al (2004)

KS - Now I would like you to reflect on your survey responses. Please refer to the attached pdf file that contains all ten landmarks that you saw in the survey.

Please respond to the following question with regard to the five landmarks that you found to be most noticeable and ranked as appealing. How helpful would these landmarks be as wayfinding cues for persons living with mild to moderate dementia walking in the neighborhood? Are there any design strategies that you would suggest to augment their potential as wayfinding cues?

I9 - Clear to see, i.e. good contrast between the landmark and its background; not having to look upwards as many older people find this difficult; familiarity; interest, not confusing (as is the several walls with vertical native American patterns on them (of course these would be more helpful perhaps for people who are native American...))

KS - Please respond to the following question with regard to the last five pages of the pdf, which consist of the five landmarks that you did not select as noticeable or appealing. How and why do these landmarks fail to serve as wayfinding cues for persons living with mild to moderate dementia walking in the neighborhood? Are there any design strategies that would enable them to serve as wayfinding cues?

I9 - Little of obvious visual interest that actually stands out. Colours / tones are all much the same. I did think that the wall with paintings might be a good landmark – but this depends on how temporary it might be. Cars are not a landmark – to a person with dementia they probably look all the same...and are not as they would remember anyway. The funeral home – reminds one of one's mortality? The bicycle – needs to be more robust and a good contrasting colour, also more like a real bike too.

Seeing the small theatre with the tree in its street context, it might not be enough of a contrast, although its small scale and the tree and seat are all helpful