

9 questions for you before the test

First of all, when you are doing your work in the smile lab, with altering(adaptive) narratives, what kind of input do you use?

Idea is that we that, the viZarTs project, we have the smile lab, supporting the vizarts project, which stands for Visualization and adaptive real time Storytelling. So first i should explain a little what adaptive real time storytelling is.

You know interactive storytelling, that's where you have choses, so you go back and forth or left and right and you kind of do things and so on but its for example navigation, and so on, or choose to go for the dragon or save the princess - that is traditional interactive, where as adaptive real time storytelling is more where the story is adapting to your behaviour for example, how you have reacted to encounters with other characters, did you react hostile? or friendly or something like that? It is all the things that the user might not consciously choose, but unconsciously or implicit choose something. It can be something like meeting people, how you greet them, but it could also be how you are sitting in the chair while you are playing, or how you can see with the pupil dilation, and how big they are and so on , that could affect the way that we tell the story, or it could be in this case that, a scenario, this guy is coming to talk about later today, about, he has written all these things about continuation desire, which is my definition of engagement. And that it because i think any interactive experience, or any experience at all actually is about, how much do i actually want to continue this experience? And that is why my question always is, from a scale from 0 to 10, where 10 is the most engaging experience you have ever had where you wanted to continue the most, and then you can put yourself in a 0 to 10, and then you can ask why or why not. This guy who is called dines ray selvik? he made a final thesis last summer where he, and this is an example of how we can use it. He took a webcam, tracked your face, compared that with deep learning, with two million faces, so he could track with an accuracy of around 95% which emotion the people playing the game had based on that webcam. And he correlated that with an investigation in the desire to continue over time, so in that way he has a system that with above 90 % accuracy can tell you if you are engaged or not while playing, just by looking just by looking at your face with a webcam. So, then take that and combine that with an interactive storyworld, and then you are going to see if people are engaged or not, and that means that you can orchestrate events, if it is boring for a while, then you know, you have a face of a boring person, i would say that this is mainly applicable for two persons playing, because if its only one person, you could sit with a stone face, and still be super engaged. Anyway that way you have an interface or input for this, so that is one way of doing it. So when you asked the question about how we do these adaptive things it could be anything from this to sound or whatever.

In your opinion, do you think immersion is broken, to an extend, through explicit interaction?

Yeah, like do you want to go left or right? with a big sign? - yes i definitely think that the immersion is broken, but i have to say i don't think engagement is broken, or the desire to continue, because immersion is one concept, and the desire to continue can kind of affect your immersion, because the more engaged you are, the more you are prone to be

immersed. But also the immersion can fuel the desire to continue, because the more immersed you are, the more you want to continue. So in this case i would say that you get out of the immersion when you have to make a conscious choice and with that said you can still be very engaged even if you have to choose, and that is why i chose to evaluate experiences based on the desire to continue and not immersion, or presence, or flow or the other things.

Some have said that some of Banderstachs success is due to the fact that the viewers feel in control of the choices - do you think that implicit interactions such a facial expression would hinder that aspect?

Definitely, because in Bandersnatch you know, i have this model of how you can be engaged or how you can have the desire to continue, and one of them is exploration, or experimentation, and with Bandersnatch, you can actually explore different outcomes you can experiment with the whole thing, so people will have this thing, what if? what if i did that or what if i made that choice? But if it is just tracking your face, then you don't know when you are making choices.

Do you think people exhibit facial expressions to an extent that they can be accurately measured?

I told you before that this thing that we did with denes(name)? is having so and so much accuracy but you look up a video called immersion (can throw a link here to it) there is a video of people just playing, and you should see their faces, some a really like *excited face* and some are really like *stonefaces*, and are super engaged, so i don't think that face tracking is the only way of measuring engagement or reactions, of course you can get scared or something or move, maybe it is more the posture or other things that you can use, but i think in some cases you can use face tracking and emotion tracking for controlling things and so on.

In your research with adaptive storytelling, have you managed to identify a target audience?

yeah, i am sorry to say but i think the target audience would be anyone, because it can be used for any medium, and if you need to make it real time adaptive and so on, in the morning we saw a talk (name Niks Stre Tøge, not sure if spelled correctly) who talked about some commercial companies in the states that make a little doll, a fluffy doll, i think it is called the IT monster, and you can control it with leap motion, with your hands, and have a real time character doing like that *hand motions*, so this way it could be for kids doing this, and you can make like a story, and if he behaves in a certain way, then there is a story told with this IT monster if you could imagine that, and on the other hand elderly people could still sit at elderly homes and talk with - you know there is a research saying that elderly people actually can get easier back *inaudible* when they have something from their childhood, a use or something concrete from their town, so if you imagine an interactive system that could kind of talk back to them, or they could talk to them saying "take me back to my home street" or something, so that could also be a target group. And then as they watch maybe if they get a little bit dizzy then maybe there is a high music from one of the parties they were at or whatever, Elvis played at that time or something, so they can wake up again, then that could

also be a target group. So i would say for a lot of media and a lot of purposes even for learning like falling asleep, "okay now you have to learn some other words in english" or something - so anyone. I just want to mentioned, you could imagine that when you don't have any interface, and you just have the camera tracking you, then even people who don't know how to use a computer could still have an interesting experience with the adaptive, because you don't have to make conscious choices , so it is just your body feedback or something exactly like your emotions or something

Last question before the test - Do you think that this technology - or technologies like it will change the way we watch tv and movies on the mainstream services?

I think it will not change it, i think it will open up for new possibilities, just as we saw with Bandersnatch. I think people still when they tired and get home from work will just want to fall down on the sofa and watch linear storytelling and have the usual Hollywood model telling you, and having a climax, and we want to see the hero winning and so on so that market will never die because people will always do that.

However, i think because as more and more people play computer games, we will see another breed of experiences which is not interactive storytelling go left or right or choose the man or the woman or whatever but more - kind of in a dialog with the user in a way. My dream is to have a open storyworld - just like you have on your screen there, and i can roam wherever i want, but there will always be some events orchestrated somewhere in front of me and popping up - that group *pointing group next to us* is actually working with that so, have either just a linear track that you can not get out of, and then you will see events popping up in front of you as you go to that *inaudible* that's a static version, but a dynamic version would pop up the events in front of you not matter where you go, but it will pop up in a moment where you need some dramatic input to be engaged and curious to continue. In that way you could make a whole open world and go wherever you wanted *inaudible* procedurally generated in front of you, and you will always be engaged because around the next corner there will be something, and you don't know what it is, so your curiosity will drive you to that, and that, this is something i would like to work with next semester and start slowly *inaudible* these technologies will now have a lot of knowledge of producing content but know, and you know about machine learning and all these kinds of things and emotional tracking, so we can, now we have a time where we can combine these things, and then make new, i would call it a new breed of experiences. I don't know how successful it will be, or what exactly the target group, but you could imagine teaching scenario with Columbus, that you could either be the native or Columbus on the ship, and then you land on shore, and then there are some interaction because you can not understand what they say and so on, but with adaptive storytelling, that experience would always be exciting and make you curious to continue.

TESTING HAPPENS

So the question is basically just, in your opinion, is changing the weather suitable for a proof of concept for changing narratives?

I must say that im impressed of your work, which semester are you on? (3) its really well done, and it is exactly what i have been looking for with this adaptive real time storytelling, because it is a very very simple way to control it, and i like it a lot, and i enjoy watching the

visual, so there's this sensory engagement as i call it where you continue to watch because it is beautiful or nice or interesting to watch, and then i still want to explore it, and experiment with it, smiling and not smiling, if you read my first paper about continuation desire, which is called a player engagement process, all these things, i think a lot of them is actually here. At start i didn't know, i was thinking okay that is a bit bleak and so on but it looks super nice, and i didnt know what to do, and i actually forgot that it could track my face, and then you said something to me, then i really liked it, i liked to come from the darkness to the brightness, i loved these chipping of the birds, it is really like a spring day and so on, you could even put in some black birds, they are usually the sign of spring. But as a proof of concept, definitely yes, that is really, super nice.