

zwart = tekst

** = onverstaanbaar stukje

{blauw} = iets precies overlezen

(roord) = tijdsindicatie van opname

(groen) = beweging

Person	Text
Bo	Okay, so uhm in the first week we decided to take the topic of autistic children and we set up some objectives {reads out objectives}
Emilia	Yeah
Bo	And in the week after that we decided to focus on own of them, make it more easy for us and to get a clearer goal ..at the end of the project
Emilia	Hmm hmm, okay
Bo	So we decided to take the teamwork,
Sietske	Yeah
Emilia	Teamwork?
Bo	Yes, teamwork. and we wanted to create.. a sort of game-like or uhm.. uhmm.. Yeh, game is the good word i guess
Emilia	Yeah, okay
Bo	Uhm.. especially we want the, uhm.. to use the Nao, we think of Nao at this time. Also because it is available in our uhm.. uhmm..
Sietske	.. our faculty.
Bo	faculty etcetera.. And uhm some of our project members they have experiences with Nao, they learned some of programming a bit. Someone is also nu.. uhm now doing his, her end project with a Nao probably. So that's nice...if we can combine that.. ofjah have her skills.. uhmm and..
Emilia	..end uhm bachelor project?
Bo + Sietske	Yeah
Emilia	Who is this person? {hier vraagt ze naar wie en wat ze doet etc.. niet relevant voor dit onderzoek}
Bo	...She has some skills with Nao and the programming.. and she has a special thing with Raymond and now she knows something of the implementing things

Emilia	Okay.. I also have one Nao at the ID.. for another project..
Bo	Yeah
Emilia	.. So .. which we can share and you can .. but let see what..
Bo	Yes, we will first uhm.
Emilia	Raymond has enough Nao's I think
Sietske	haha
Bo	<p>so we have.. uhm state of art .. uhm.. I don't know if that it now .. first.. We want a literature study .. uhm ,.. and now we are looking for all topics, we are read some of your .. uhm.. research we read that already and set up that.. so we a good idea what is there and we want to expend this a little bit more and create our own game. And then something with teamwork, but especially what we need to do, we .. uhm today.. talk about this.. ..</p> <p>First we want to .. uhm... we said first simulate and then stimulate, so first together with the Nao doing the game and then maybe after it that the child could do it with another player.. that is the idea of it.. and then doing it with another player and that Nao will be there as support/</p> <p>This will be not in this 8 weeks possible, I think, to really implement and to research it with a real autistic child. So I think we have to take as end goal of this project, create this game and test it with students, also .. of .. that Nao can do the game.. that uhm...</p>
Emilia	(4.00 min) Okay.. this is uhmm possible.. Orr.. So you want to evoke some corporation
Bo	Yeah, something .. uhm with sorting we thought of.. a sort of first idea we had.. uhm with red blocks and blue blocks and you should give me al the reds of you and should give you al.. uhm the blue at my side. So at the end one has al the red blocks and the other all the blue blocks. So they have to corporate, like give me that block and uhmm.. That was our first idea and.. we do not know how far we can gan go with that..
Emilia	but you want Nao to grap the block? .. or to point?
Bo	Uhm.. I know what the .. what the possibilities are for that.
Emilia	Well.. you need a little bit of skills to let Nao really grap, maybe I have shownen you, he can playing dice and taking dice and throw it.. but you need.. uhm specially when you are not computer science, this could be a little bit...
Bo	So pointing is...
Emilia	Pointing is good enough, uhm also it .. teamwork with a child is good.. for now
Bo	Yes, yes
Emilia	Uhm.. I have one game, actually.. which I always want to turn into uhm to a game with a robot. Actually its a computergame, between 3 people.. and uhm

	(5.24) maybe I can show you something.. (Emilia moves to computer, take some time)
Bo	hmm hmm
Emilia	work is quite technical, you would see only formulas.. but this one.. it is more of a uhm.. human-computer interaction perspective.. uhm and it is there.. uhm i think.. another one (she looks for another document)
Emilia	So uhm.. we tested this like gaming with three people, three people were not random people but were people who.. work on the Mars 500 station, artificial Mars..
Sietske	Allright
Emilia	and I had a very excellent PHD student together with our user-system-interaction past master. They changed a game, an existing game which was played.. uhm .. which was developed at Harvar University. But we changed it to be a more symmertrical and with 3 players.
Sietske	hmm hmm (7.30)
Emilia	So uhm.. the game is a ..a.. there three players and the two of them get an innitial state.. an interaction place at them goals.. and they had to reach a goal. And to reach this goalstate they get some chips, each of them they get some chips. And the colour of the chips means, uhm.. if you get purple, you can get both.. but you go to the purple..
Sietske	purple block
Emilia	Yes.. So they never have enough for.. they have a uhm.. the wrong blocks. uhm the wrong ships
Sietske	yeah..
Emilia	they can check.. and by changing, they need to col.. uhm corporate.. but maybe with children, it is maybe a little bit complicated.. ... It is possible to use this game, Also we tested it with grown ups, and not everybody uhm.. not see an optimal solution
Sietske +Bo	Hahahaha
Emilia	Seems easy.. but the closer you get..
Sietske	Everybody has the same goal in this game?
Emilia	Yes. But the idea is that you playing it many times.. and if I help you know, maybe next turn around..
Sietske	Yeah, yesyes (9.00)

Emilia	But what I wondering .. if children will understand it at that level.. Because a child wants to win now.. Uhm maybe ..
Bo	Yeah, I think it is really hard. ... Uhm but it is a kind of game we can focus on.. With some ** and some goal..
Emilia	And this is a online game, but uhm.. registered.. you can download it to two robots or to two persons .. And the robot kan point what.. place..
Sietske	Then the questions is a bit, does that robot really have a function if you put it in like that.. it could also be a human.. does it add any value?
Emilia	uhm.. poeh.. not more then the children like the robots. But the added value, uhhh for especially the added value. Uhm maybe I can show you this own. (opens another research) It is one about colloboration, uhm.. So this was.. not .. no robot was used.. but we had made before this lighting blocks.. there was a type of.. they get a colours.. like a kind .. kind of abstract animal.. uhm the colour of the block would fade down ... uhm if it blue ..
Sietske	.. water animals.. and green you would have would.. or something...
Emilia	Uhm yes.. and uhm fiendship.. so according to the pyramid of needs.. uhm if you connect the blocks with some.. a blue .. to get some water This is also... One of the coloborate games , the other was with ** robots.
Sietske	What was the goal of this game?
Emilia	Uhm.. the goal of this game is to uhm.. it could be played by at least two children.. ** or robot .** not do ** And uhm the blocks are big enough so a child could not have more then 1 or 2 .. so you need to keep the system a life, you need to work together.. otherwise you can .. uhm yeah a few animals will die.
Sietske	yeah haha (12.30)
Emilia	Another cooperation game, it is the last that I show you.. so we can go to the.. uhm..
Sietske	And uhm.. children did well that game? they enjoyed it?
Emilia	They enjoyed it and they could ** eveything.. they the direction was clear to them. That the blocks ** and they considered it well ** (ze opent iets nieuws) Aah this one I want to see, but there was different kind of robots actually. They were not Nao robots, but were this robotcars.. And maybe this can be turned into another scenario to a nao robot.. So there was a tool, children we want to teach them to coloborate. And uhm like the robot will make a random movement, but both children will not do the same figure - but together, when they do it together then.. uhm the robot will start following. Otherwise if they do not make, uhm do one and the same thing.. the robots will do random things.

Bo	Yeah, yeah
Emilia	So of course this could be done with Nao and some question or some...
Bo	Do how the movement is like or..
Emilia	.. uhm yes .. (14.00) cause when we talk about coloborative task there should be some goal.. which has to be achievable.. and the children have to .. understand the value of coloborating
Bo	yeah, why they should.. uhm.. reach the goal
Sietske	So they need to be rewarded.. otherwise they would ... not reach the goal..
Emilia	uhm.. well the the ... reaching the goal is reward by itself but because they are children you have to be reward at the means.. just while playing the game , rewards to reach them.. Yeah it is indeed better to walk together... something like that..
Sietske	yeah, true. It is quit interresting for us I guess.
Emilia	Yeah, but I ..I, think maybe you can always borrow this... I can send you the links if you like.. for inspiration.. but you can create a new game of .. or search for an existing games.. in corporation.. (15.05)
Sietske	Because, uhm for this project, if we do not .. if we only going to making a game that need some technical implemetation, like those blocks that are lighting up or some stuff.. might it also be good enough?
Emilia	Yes, this could be good enough.. I also have somewhere these blocks, but they have some electronics which might be not working and then ... I did not have use them so long.. that you can borrow..
Sietske	Maybe we could make it..
Bo	Some of us, have some electronic courses, but not that advanced..
Emilia	And I .. uhm was just rewriting a paper about the checker game, it is not a cooperating game.. though .. Uhm.. they were some students doing this checkers game.. and de division part is solved the pointing part is solved is solved.. uhm.. but the user test is not so good.compare to.. the robot, the computer.. the robot did not have really social behaviors and I can imagine the autistic children like this very much.. uhm.. If it would maybe act social behavior.. then maybe The CALL for this exist, some mechanical enigneering students and a phd student.. we asked how this acting works.. (17.00) So the checker game.. , I was just sending somebody the link..., (zoekt link) Yes, this is the game.. Actually the people who made it was my PHD student which is just fininshed and he get cum laude..
Sietske	oh, woow

+Bo	
Emilia	(filmpje speelt af op de achtergrond) a very good one, and this is Wouter from Mechanical engineering, and he now become a PHD student by Rene van Molengraft..
Sietske	Oh okay..
Emilia	So, uhm.. this was the game.. this was the first test, and after that it became more physical.. (stopt filmpje) So the robot plays with a student and the robot was to smart..
Sietske + Bo	Hahaha
Emilia	Because it graded five steps ahead.. and that is why he could beat him.. So we made it.. uhm make it... dumber...
Sietske	Autistic children.. uhm it were autistic children?
Emilia	No, it were normal students.. Because working with autistic children is really difficult.. So when I work with them, I want everything, everything completely tested before do it with them..
Sletsek	Yeah.. of course
Emilia	So if you like, maybe we could get a pistol.. and I have some given the board and the pieces cutted.. here somewhere.. and eventually you can uhm... we are writing a paper now about it, that is why I know all the details.. **** But I do not know how to make this game colobarative.. because it is compatative.. game..
Sietske	Hmm yeah.. (19.00)
Bo	Maybe we can use it like a ... two against another one.. so the child has to work together with the robot.. and the robot can say.. we need to do this or that..
Emilia	So what is implemented here is a child with a robot, child compatative to a robot, and it is possible that the Nao robot play together with autistic child.. hmmm.. I do not know if .. how the game.. you should change the game.. But I do not know how you can do it technically.. how to..
Bo	Yeah.. it is something we.. uhm..
Sietske	I am not sure what we can add to it.. if we are going to use it..
Emilia	how to make it coorparative .. hmm, it is possible that uhm ... (20.05) Someone will play against the computer... a robot will help from time to time
Sietske	uhm yeah

Emilia	and also add some social content
Sietske	yeah how to add some social content
Bo	Do you have some tips... or something we can use?
Emilia	some tips, ja, if the child is making some wrong moves or something
Bo	Yeah.. yeah we have to think about it, what we exactly want to..
Sietske	Yeah.. what we want the robot to do
Emilia	And ofcourse you can think of something completely different
Bo	Yeah yeah yeah
Sietske	hahah
Emilia	I will send you this link so you can.
Sietske	Yeah we can discuss it with our group members, because there might come up quiet good ideas
Sietske	Yah would be nice if you can sent it to us, then conect you later if ...
Bo	If we know in which direction we want to go
Emilia	yah yah
Sietske	yeah
Emilia	okay
Sietske	umh... We had some other general questions for you (turns around her paper and looks at question), just a bit more about you, so that we can rely on it in the project, I don't know if that is good for you? If you want to answer them?
Bo	Things like uhh.. Yeah we already read some literature about it, but there are things like.. Why are robots better than human for autistic childern etc.
Emilia	Right.. They are not better than human, but uhm.. robots uhmmm are very simple.. And autistic people have uhm actually a lot of problems with processing a lot of information, like this small movements, facial expression, and eye movements and espacially as we see as a global thing.... They will see all details of all movements, consider this is completely knew information, this is overwhelming for them.Because that, they are often.. uhm.. yeah..We need to make their environment a bit simpler, so they have usually simple ordered environment
Bo	Yeah
Emilia	And if you want to teach the social skills, which are very complex for them..
Sietske	Yeah

Emilia	Just you can remove all the additional...
Bo	yeah yeah yeah
Emilia	uhmm.. skills and uhm...
Bo	yeah just start with the simple things and then step by step..
Emilia	Yeah
Bo	And are you already using robots in autistic therapy?
Sietske	Yeah like in real therapies or just for research?
Emilia	uhmm.. for now it is still uhmm.. research..
Sietske	Aah, so nowhere they are really using the robot
Emilia	They can use it for some small tasks, but mainly for tests, also many robots aren't so good for ummm. reliable. Also we are actually quiet advanced with that because I started work with the project I worked very early, so we made the first, uhm, project with a few children like 6 to 12 children
Bo	Yes
Emilia	uhmm with short periods, but after that they went to another clinic, where we said, lets make a project which will test it further, so they go to face two clinical trial, which means that for 6 months, uhm our experiments are going one and are almost finished.
Sietske	yeah
Emilia	we have a few more to go. uhmmm.. So the 50 children are tested for the 6 months... to see what is the effect of an robot.
Sietske	Yeah
Emilia	If the results will be possitive, than there is a face 3 clinical trial, which means that the they will test it with many children for a long time in many countries. And if this also works, than the robots can be approved for clinical practice
Bo	a yah
But no	but now, at least I know for myself, we are in the second face and what I know from robotcs conferences is that people are just trying out different thing
Bo	O jah
Sietske	uhuu
Emilia	And ofcourse if some school decides this is a good tool to work with... it will be used as an additional tool or an additional game or something..

Sietske	yeah.. because they are quiet special still and...
Emilia	jah and they try to get attention to the robot..
Sietske	jep
Emilia	because we had a presentation for children from ... school , uhm secondary school for autistic children, so they come and they look like (emilia imitates a child that is staring in the distance)
Bo	hahah oh haha
Sietske	haha
Emilia	And I also spoke to a mother of one of the childs.. and she said: (fluisterend) Yeah I broth my child to the therapy and there was a flikkering light, and my son was only staring at that flikkering light, It was very prikkeling for him
BO	O uhu
Emilia	And this is what the robot...
Sietske	yeah yeah
Bo	aah uhu
Emilia	And these children are often very talented
Sietske	yeah
Bo	yeah, they are really focussed on a specific thing or have an interest for something or specific things
Emilia	Yah and they.. they have lots of talents, but because of these social skills.. uhm they can hard practice them and they become unhappy and they yeah....
Sietske	Yeah..
Emilia	There can happen bad things in there..
Sietske	What kind of age do you consider most of the time?
Emilia	I usually work with children that are in between 4 to 12
Sietske	from 4 to 12..
Emilia	Because we make games and those are the most problem for kids, and if we have such a game, you can applicate them, so they are all grown ups.
Sietkse	Yeah because we have to think about that also. haha
Emilia	jep
Sietske	What age we could uuhh.. do it..

Bo	And is it uhm important to take therapists into consideration while doing the tests and uhmm that is really hard, it is only based on literature... and yeah we think we..
Emilia	I don't think we uhmm that we will reach a level that we can test it
Bo	jah, oh no no
Emilia	Just the game pretest it a little..
Bo	Yeah uhu
Sietskse	yeah indeed
Emilia	Jah jah
Bo	I think we get quiet a good view on
Sietske	jah
Sietske	There are no questions left so uhmm
Emilia	I speak also dutch if you will.. haha
Bo	jah haha
Sietske	haha
Bo	We thought about it to do it in dutch, but a for the research and the project we have to do it in English so we.. haha and for our practice it is also good to do it in English
Emilia	haha jah I see
Emilia	well okay, than if you sent me an e-mail than.. do you want to sent all the names than I can..? (discussing further about how to email.)
Emila	Well maybe you can think of a new game
Sietske	uhuu.... uhmm.. Well what is your background of all this?
Emila	Oeh, my background... yeah I did my PHD in computer science and AI.
Bo	yah
Emilia	And than I went to work in Japan, in a group intelligent robotics.
Sietske	yeah
Emiia	And than I decided robots are by far not intelligent enough.. haha
Bo and Sieske	hahah

Emilia	So I wanted to work with more background, so I started working at brain(...) institute. So we tried to make a brain inspired models for robots.
Sietske	hmm
Emilia	And then I ended here, Where we do completely the opposite, more the application of the robot and not really science about how the robot works and how you can translate this into AI. here we are more like how to uhhh. robot behavior and application can be.
Sietske en Bo	yeah
Emilia	So yeah, I know from everything a little bit, uhm which i consider is an advantage..
Bo	jah
Emilie	But know career will accept this, like nowww you are not really a neuroscientis and you are not..
Bo	haha ja we know that
Sietske	haha jah a P&T students
	More talks about P&T
Bo	alright
Sietske	yep
Bo	okay we will discuss things with our group and hope it will be alright
Emilia	uhu
Bo	ohja and uhm, for another appointment can we just come by and knock on the door or...
Emilia	uhmm
Bo	yeah just for small questions.. or otherwise we will sent you an e-mail
Emilia	yeah yeah yeah and you can come by.. uhm.. yeah when I am available. But a yeha you can come to meet again, maybe I can come one morning session
Sietske	oh jah
Bo	yeah or you come to the uhh.. or you ... we can look when last meeting is on thursday so we can come by afterwards.
Emilia	uhmm
Bo	jah it will be hard, Maybe I will just sent you an e-mail, then it is just clear when we will meet

Emilia	Uhm I have to go to a human robot interaction conference. raymond will go to the same conference, which means the week 10 after the carnival, I won't be here
	blablabla discussing about when to meet again
Bo	Do you have some examples, which direction we can go... with the project, but we think it will be something in the collaboration part
Emilia	If you want something else than collaboration, then I can sent you another example from other people.. haha
Bo	But do you think collaboration for us is a good..
Sietske	yeah.. Dorable thing
Emilia	uhh..
Bo	Or do you say.. facial expression with cards or something..
Sietske	Is way easier
Emilia	But then how..
Bo	yeah you just take a Nao and a child and you have some cards with facial expression on it or something... I think we had some literature about that..?
Sietske	Uhm I don't know
Bo	And then they ask.. a happy or a said face on the card.. and than the Nao shows it and asks, is it happy or is it sad
Emilia	uhm.. yeah... this could also be possible... they do teach childern with smilies..
Sietske	This also still is collaboration.. it is both because you have to work with the nao to find the right face... yeah maybe it is not collaboration only interraction
Emilia	Maybe the Nao can also tell some story which relates to the faces or someting.. as a extension.. to give is more context
Bo	Yeah because we already decided we wanted to do something with teamwork... But that if we cannot come up with a good game or something..
Emilia	a yah but you can create your own game.
Bo	Yeah we want it
Emilia	It is not nessecary to implement it, but you can have a good game, maybe some small things are implemented like.. the robot says something.. this could be.. for every game could be..
Bo	yeah
Sietske	Uhu

Emilia	It is the level of difficulty you have to end too... because.. every motor behavior.. like speech or movement, I think you will manage.. but if you have to use sensor information.. It could be difficult with your background
Bo	haha
Sietske	haha noo noo it is okay (we are all laughing because we already talked about our background)
Bo	Because the feedback that we got this morning was that they were fine with our project and that we had clear sections about what we wanted to do.. but they said, what at the end do you want to deliver.. when are you satisfied? uhm yeah... and we said yeah creating a game and than something of it is sort of the goal I think
Sietske	And maybe we can test is with normal humans and a bit with Noa if we can get it so far that some functions work.
Emilia	uhm yeah okay
Bo	...
Sietske	...
Bo	Alright, then I will just sent you an e-mail with our mails and you can sent us the links..
	end of recording
	after this we say goodbye and go.