

Micro-assignment | Lecture 9 | Socially Intelligent Robotics 2023

Deadline: Friday 01 December 2023 23:59

Motivation

To design a social robot that can offer meaningful support to people with dementia we asked creative writers to create short stories in which they speculate about possible futures where these meaningful interactions take place. These stories are based on or inspired by interviews with people with dementia, their caregivers, and roboticists.

With these stories we hope to facilitate a discussion with all the stakeholders to identify their interactional needs and determine what a meaningful interaction even is.

With this micro-assignment we would like to involve you in this discussion as well.

Assignment

Bellow you will find one of the short stories. You will read the story and highlight parts that feel meaningful to you (with the highlight functionality of your pdf reader (e.g. Adobe Acrobat)) and add a comment to that highlighted text motivating what about it makes it meaningful for you.

Scientific data collection

We would like to analyse your annotations (i.e. highlights and comments) to better understand the notion of meaningfulness.

Data management

The annotations and answers to the two experience questions are considered research data. They will be extracted from the pdf, anonymized, and stored for 10 years following the regulations of the Dutch Universities¹. Your anonymized annotations, or parts thereof, might be published as part of a research paper, artistic expression, or science communication for the general public. The answers to the questions will never be published.

You can opt-out of the assignment being used for scientific research by checking the checkbox below. If you don't check the box you consent to use your annotations and answers in our scientific research. Note: if you opt-out, you still have to do the assignment, but it will not be analysed as part of our research.

*Check box if you **don't** want the assignment to be used in our scientific research.*

Opt-out ☐

¹ [https://www.universiteitenvannederland.nl/files/documenten/Domeinen/Onderzoek/Code_wetenschapsbeoefening_2004_\(2014\).pdf](https://www.universiteitenvannederland.nl/files/documenten/Domeinen/Onderzoek/Code_wetenschapsbeoefening_2004_(2014).pdf)

Experience with elderly care

Rate your level of experience with elderly care (1 – 5):

1: hardly / no experience – 5 a lot of experience

Describe your experience.

Experience with creative writing

Rate your level of experience with creative writing (1 – 5):

1: hardly / no experience – 5 a lot of experience

Describe your experience.

Morning Aerobics

I've often considered hanging a camera in the room. Just to see what she does when I'm not home. Sometimes the television is suddenly on a different channel than the one I last left it on: then I'm sure I turned it off after the morning news, but when I get home, it is on RTL4. Maybe it was Robbie, I think, and she wanted to see Jinek back.

But I also want to see what she does because when I come home, she always sits on the little step stool next to the door. I wonder if she's waiting for me there all day. Maybe it's a hopeful thought, she knows I would like that and that's why she makes it seem that way, but she rushes to that place every day when she hears my keys rattling against the front door.

She sits there, on the step stool, and doesn't say anything. It smells like cleaning fluid. Her head turns in my direction, following me as I walk to the couch and fall back against the soft cushions. "I'm analyzing something," she says. It still feels a bit awkward: the big, difficult words she sometimes uses. Then she says analyze or calculate or calibrate in a tinny voice as if she were reading from a textbook, even though she is the size of a toddler. A tall toddler, well, maybe she's more like an eight-year-old, but still, a person her size wouldn't know how to spell the word analyzer, let alone use it in a normal sentence.

"What then, Robbie?" I have made a sport of always calling her something different, but I often end up with variations of the word robot: Robbie, Roberta, Robster, or my favorite Robusta, after the coffee bean.

'My recordings register that your right leg does not leave the ground properly when you walk. You drag him behind you.'

"Are you trying to say I'm old?"

"It's not a judgement, Henry. I'm simply registering it.' She rises, rolls quietly away from her position towards me, but collides at the edge of the carpet. She can't get over it, just like the robot vacuum cleaner that seems to appear here sometimes. I don't know who put it here. 'Could it be that you pulled a muscle? I see that yesterday there was an agenda item called 'gardening' in your schedule.' Her eyes flash orange. I'm stuck, she tries to say. Help.

I place my left foot against the heel of my right shoe and pry it off my foot without untying the laces. Is that why there was dirt under my nails this morning and my shirt smelled like potting soil?

"Could it be that you've been working in the garden and pulled a muscle?" She repeats it in the same tinny, monotone tone, but it still feels more compelling. Pedantic, in a way, as if I have to explain to my mother why the chain on my bicycle is off again. Have you been racing through the hills again, Henry?

I push myself against the worn bench with my arms and push myself up as smoothly as possible, without squeaking. I carefully place my foot under her wheels and hoist her up slightly. She rolls up the carpet.

'I feel great, Robster. No pain to be seen.'

She raises her left arm, outstretched, to shoulder height, then her right, crosses her body. I have to avoid her outstretched arm, which shoots up dangerously close to my body, by taking a big step backwards.

'Imitate me. Try to raise and lower your arms slowly. Like you're fluttering, like a bird. I'll count.'

"But my arms don't bother me."

'One. Two. Three.' Her arms drop. You would expect them to jerk a little, the plastic to rattle, but it happens with a smooth, gentle motion, like a synchronized swimmer. I imitate her, flapping my arms faster than she does.

'You see? Nothing to worry about.'

Her head turns back one hundred and eighty degrees, like an owl. It's a horrible sight, a robot that suddenly turns its own neck. The first time she did it, I thought: that was it, now she falls down and I have to explain that it wasn't me, that she did it herself, but she continued to talk happily, even joking that she had wanted they had also put eyes in the back of her head.

'And now lift your legs, one by one. Look, like this.' She raises her left leg, bends it at the knee and brings it to her hip.

I imitate her, first my left leg and then the right, holding her shoulder with my hand so that I don't lose my balance. It hurts in my lower back, but I try not to let it show.

"Now for the final exercise, I promise. A little dance." Robusta starts moving her hips, first back and forth and then in circles, and something creaks. Her hinges, probably, although I don't know if the parts she has, are called hinges. They probably have a difficult English word for that, for the little screws and things that form the movement mechanism of her hips.

'You're cracking, Robster. Maybe you are ready for a new artificial hip, or at the very least you need some oil to lubricate everything smoothly. I still have some salad oil in the kitchen cupboard. Is that something?'

The screens that represent her eyes turn purple, then blue and pink. The shades flow together slowly and softly, and she laughs a tinny robotic smile, one where all the syllables are spoken with a short pause in between. Ha-ha-ha.

"Nice joke, Henry. Will you dance along?' Robbie stops moving and turns her head back in the right direction. Her body is buzzing.

And then, just when I think she's going on standby because her battery is running low, music plays.