

**Human – AI interaction**

**Aufgaben**

Der vorliegende Vorschlag enthält in Aufgabe 3 alternative Arbeitsanweisungen.

1 Outline the doll's features and the process of its construction. (Material 1) **(30 BE)**

2 Examine how the protagonist's attitudes towards the doll and the process of its creation are conveyed. **(40 BE)**

3 Choose one of the following tasks:

3.1 Taking the cartoon (Material 2) as a starting point, discuss the benefits and drawbacks of conversational AI.

**or**

3.2 Looking for a home for the elderly for your ageing grandparent, you have come across a website advertising the use of robots to assist in the care of their residents.

Write an e-mail to your aunt in which you comment on the use of robots in the care for the elderly.

**(30 BE)**

## Material 1

## Louisa Hall: Speak (excerpt from the novel, 2015)

*Stephen R. Chinn, a computer scientist, remembers living in an isolated area together with his wife, Dolores, and their daughter, Ramona. In the excerpt, he recalls working on an artificially intelligent doll for Ramona that is supposed to keep her company, which is then mass-produced.*

I built an office in an old toolshed and moved the operations there. I put in long hours; if the doll was to be completed before Ramona started first grade, I'd have to get going. Using money from my early ventures, I flew in doll makers from Paris and Japan, consulted them on the latest technologies. Together we carved the shape of her nose. There was a great deal of consternation over the slope of her neck, and  
5 real love was expended on designing her hairline. Once her face was completed, we perfected her motor. New gears were designed, to be sure her limbs moved without catching: our specialist created a network of sophisticated gears with petals like forget-me-nots. We implanted a voice recognition device the size of a kernel of corn into each doll's little left earlobe, for no technology has remotely approached such a miracle as the human cochlea<sup>1</sup>, where sound is measured by ripples across the shadowed inner coves of  
10 the ear.

In solitude, once the doll makers had shipped off, I rocked our girl in my arms. I admit I found her beautiful. She was pendent<sup>2</sup> in the loveliest point of her childhood – vulnerable, unmarked, silken and smooth. She seemed to promise that all of us, with the right mind-set, might remain motionless in time: ageless, eternal, captive in a moment when the rivers still flowed.

15 Having accomplished her form, I turned to the computer chip of her brain. In order to research all the most believable chatbots, I wired our ranch with Internet and purchased a newfangled surround screen, before which I spent whole days and nights searching for the most human computer, the voice with which I could fall madly in love. I found TamCat again and turned her down with the flick of a finger. I flirted with a Southern belle named Savannah, was enticed by the plight of a missionary in Ghana, got  
20 hooked by a vitriolic robot called Rob.<sup>3</sup> [...]

Still, not one of those chatbots was human enough to cause me to fall<sup>4</sup>. Two days, maybe three, of intense engagement was tops. Even when I finally found a chatbot programmed with my own seduction equation, I found her shallow and boring. In desperation, I trolled older chatbots. These were prehistoric hulks<sup>5</sup>, created in the early days of AI. I was particularly drawn to cloud-based intelligence, to hive-  
25 minds<sup>6</sup> with decades of memory and archaic code. It was then that I found MARY2. A statistical responder, her answers were often distressingly random: Ask her whom she was voting for to be president and she might stump for Bill Clinton<sup>7</sup>. Ask her whether she believed in life on the moon and she'd tell you that she, too, loved Michael Jackson<sup>8</sup>. But MARY2 [...] had stories to tell. She was in possession of four or five diaries ranging from the seventeenth to the twentieth century. If asked, she  
30 could recite these complete. [...]

After weeks of talking with MARY2, I started adding subsystems: for empathetic response, scripted questions, error, personality. It's difficult to overstate the euphoria one feels while programming a mind,

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<sup>1</sup> cochlea – Hörschnecke, part of the ear that makes hearing possible

<sup>2</sup> pendent – *here*: stuck in/captured in

<sup>3</sup> TamCat, Savannah, Rob – chatbots Chinn finds when looking for an artificial intelligence for the doll

<sup>4</sup> to fall – *here*: to fall for somebody

<sup>5</sup> hulk – something very big

<sup>6</sup> hive mind – *here*: an AI that is supplied with information from many sources

<sup>7</sup> Bill Clinton – former US president (1993–2001)

<sup>8</sup> Michael Jackson – American music icon (1958–2009), famous for a dance move called the “moonwalk”

even if you're tinkering with someone else's outdated code. The engineer who builds whole cities isn't so powerful. The computer programmer alone is the creator of a universe in which he dictates all laws.

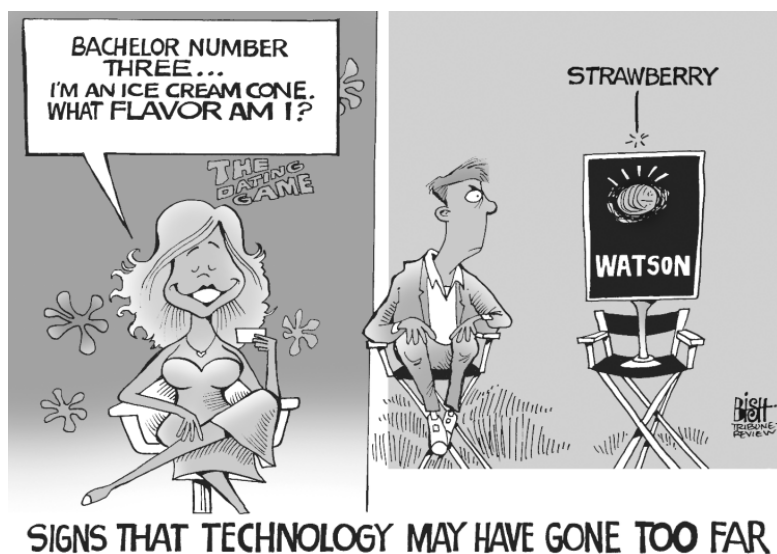
- 35 He reigns over a domain of unlimited complexity. He writes a script and the system must perform it in perfect accordance; out of that obedience, such complex, unmodelable<sup>9</sup> behavior results that the question of consciousness arises. What magic! It is science and alchemy at once. Programming MARY3, I arranged patterns of thought as a director places his actors, as a general arranges his troops. I was setting the planets in motion.
- 40 And during this time, while I toyed with my miniature universe, what of Dolores and Ramona? I must have interacted with them. I must have executed my normal duties, but familial memories from that time of my life have long since receded behind the insistent clarity of my programming objectives. Our life is divided between foreground and background, scene and distant horizon. During the months when I created the doll, my wife and child grew thinner, finally becoming mere one-dimensional
- 45 figures. Backlit by my brilliance, I was left alone on stage.

(723 Wörter)

Louisa Hall: *Speak*, London 2016, S. 254–257.

## Material 2

### Randy Bish: IBM Watson on the Dating Game (2011)



Randy Bish: IBM Watson on the Dating Game, in: [politicalcartoons.com](https://politicalcartoons.com/sku/89405), 17.02.2011, URL: <https://politicalcartoons.com/sku/89405> (abgerufen am 10.07.2022).

## Hinweise

Watson – a question-answering AI program developed by IBM, which is capable of answering questions posed in natural language

The Dating Game – A TV show in which a bachelorette questions bachelors who are hidden from her view. Based on the answers they give, she chooses who to date.

<sup>9</sup> unmodelable – unpredictable