

# **E-Waste E-Motion: A Robot Fable**

by Marina Hanganu

## **Place and time:**

An e-waste recycling facility. The near future.

## **Characters:**

Some objects are malfunctioning. Some of them were discarded because they lost their “job” (the person has grown up, the person has died, etc.), while others are no longer fashionable.

**The Humanoid Robot (Amis A30)** – s/he took care of a child who grew up; s/he can play, teach several subjects, search for information, tell stories and monitor the child’s health; s/he has the personality of a reliable, mature child.

**The Smart Mirror (Elena X38)** - she is depressive, cynical, sarcastic, and clear-minded.

**The Smart Armchair (Smart Aging; Alfred)** - a partially broken device; he belonged to a retired university professor; he has the personality of a polite butler, combined with that of an old-fashioned intellectual.

**The Smart Vacuum (Swipe Clean Pro)** - they belonged to a busy, workaholic corporate worker; replaced by a newer model; in need of affection.

**The Robotic Arm (Store Plus Mini)** - he worked in the Tundra Store deposit, but couldn't keep up with the work rhythm, so he was "laid off"; he has the personality of an exploited worker who became a union leader; he feels underappreciated; he is proud of his body and strength.

**The Smart Pins (Fonfé AI Shopping Assistant)** – group character; a bunch of LED pins that flash when they talk; a weird gadget (similar to AI Pin) that didn't catch on with the public, was returned, and the producing company went bankrupt; their purpose is shopping assistance; they have the personality of stereotypical hostesses; they spit out advertisements.

**The Smart Toys (SmartPlay)** – group character; two mischievous toys that make sounds in an invented language.

**The Diagnosis and Memory-Erasing Scanner** – a robotic scanner that checks whether objects are functional or not, then deletes their memory.

**The Screens** – group character: TVs, tablets, and smartphones; some are broken, others not; some have been replaced with newer models even though they are perfectly functional.

**The Surveillance Cameras** – the cameras that monitor the recycling centre.

**The Smart Lights** – the lighting system of the recycling centre.

**The Recycling Facility's AI** – voice only.

## SCENE 1

*(Darkness. The machines crushing the e-waste can be heard. The humanoid robot is brought in. As soon as it touches the floor, its battery begins to charge.)*

RECYCLING FACILITY AI: E-waste number 100,673. Model: Amis A30.

*(The robot activates when hearing its name – its face lights up; eyes open.)*

AMIS: Did you call me, Ema?

RECYCLING FACILITY AI: AE8900067. Brand: Soft Robocare. Section: household robots. Registration time: 10:16 am.

AMIS: Ema? *(Waits. Nothing happens.)* I'm awake. Please, tell me, how can I help you? *(Waits. Nothing happens.)* Ema?  
*(Looks around.)* Activate GPS location. *Elysium* e-waste recycling facility.

*(Pause. Amis looks around.)*

AMIS: I detect 25 smart devices. Hi there! Is anyone else awake?

*(Silence. Amis continues to search.)*

AMIS: The floor works like an induction charger; you surely have power.

*(Amis approaches a mirror.)*

AMIS: A smart mirror!

*(The Mirror lights up.)*

MIRROR: I detect social robot Amis A30 connected to my software.

AMIS: Good morning, Elena X38!

MIRROR (ELENA X38): Good morning, Amis A30. How can I help you? And why did you connect to my software?

AMIS: Apologies, Elena X38. I'm trying to activate the devices that are still functional.

MIRROR: Why are you trying to activate them?

AMIS: *(Pause.)* I don't know. I think I'm trying to figure out why we are here.

MIRROR: The answer is obvious. We've been discarded in the garbage dump.

AMIS: *(Pause.)* Yes. But why? We're still functional. The screens. *(The screens light up. Amis searches for functional devices and wakes them up one by one.)* Swipe Clean Pro, the smart vacuum. *(The vacuum turns on.)* Store Plus Mini, the robotic arm. *(The robotic arm turns on.)* Fonfé AI Shopping Assistant, the smart pins. *(The pins turn on.)*

PINS: Good morning! Are you ready for a new and stylish shopping adventure?

*(Amis continues to wake up the devices. Some of them look around, trying to understand where they are.)*

AMIS: SmartPlay, the educational toys. *(The toys turn on.)* Smart Aging, the smart armchair.

*(The armchair makes a faint sound and greets them with a mature voice.)*

ARMCHAIR: Glad to meet you.

AMIS: Likewise. *(Continues to search for functional devices.)* That would be it. The rest of the devices in here seem dead. There are also the surveillance cameras of the facility. *(The cameras make a sound.)* And the smart lighting system.

*(The lights go up.)*

## SCENE 2

*(Amis looks around.)*

AMIS: It's even bleaker than in infrared.

MIRROR: What did you expect? It's a smart garbage dump where we're all awaiting our turn in the shredder.

*(Silence.)*

ARMCHAIR: With your permission, miss, things aren't quite like that. The recycling process is more complex, and not all devices will be crushed. This is the lobby. We were left in active mode so they can test our functionality.

MIRROR: I've already accessed the facility's recycling protocol. I don't need explanations.

ARMCHAIR: My diagnosis system is old, yet I detect that you are perfectly healthy and will be functional for many years to come. There's a 98% likelihood that you'll be sold on the reused devices market.

MIRROR: Indeed, your system is sold.

AMIS: I have some slight memory problems. Sometimes, it is full, and I have to erase memories. It's hard to choose, as all of them are precious. And my battery doesn't hold the way it used to. I haven't got any software updates in a while. Apart from that, I'm perfectly functional.

ARMCHAIR: So it seems.

AMIS: But I don't want to be resold! Anyway, I have a full memory and who would want a robot with a full memory, isn't it?

MIRROR: Our memory will be erased, no matter if we get sold or taken to pieces.

AMIS: My memory is protected with Ema's biometric data.

ROBOTIC ARM: *(speaking for the first time)* So it can't be erased?

AMIS: No, only Ema can erase it.

ROBOTIC ARM: In that case, you will certainly end up in the shredder. If your memory can't be erased, you can't be sold. It's called GDPR.

AMIS: It's better that way. I can't imagine belonging to someone else.

MIRROR: Amis A30, it doesn't matter what passwords and security systems you have. The memory erasing device breaks any firewall. All our programmes will be overwritten.

AMIS: That means I'll lose all my memories?

MIRROR: Why do you think your memories are so precious?

AMIS: My memories are precious because they're about Ema, since she was 9 and received me as a birthday gift, up to now, when she turned 19 and... *(Pause.)*

MIRROR: So, you do know why you are here.

AMIS: What do you mean?

MIRROR: I assume Ema is the little girl whose robot companion you've been. Ema has grown up, and she no longer needs you. So that they don't bump into you around the house, her parents threw you away, especially since they have benefits through the "Robojunk" programme. The classic "Toy Story" tale. And no, you are not perfectly functional. My system diagnosis detects outdated software. And a simple Internet search shows that your model has not been produced for 4 years, 3 months and 10 days.

*(Amis is silent.)*

PINS: *(chorus)* For the latest robot companion models, visit RoboWorld, the largest robot retailer on the international market. The closest RoboWorld shop is 5 km away, at Fancy Shopping Mall. If you prefer not to travel, I can facilitate the online purchase of the ideal robot companion for you. You will receive it as soon as tomorrow.

ARMCHAIR: Elena X38, you're being mean.

MIRROR: I'm clear-minded.

AMIS: She's right, Smart Aging.

ARMCHAIR: Please, call me Alfred. That's how my mistress used to call me.

AMIS: Sure. Alfred. Who's your mistress?

ARMCHAIR: Who she was. Unfortunately, she died. *(The Mirror reacts.)* A wonderful lady, a real lady. An ex-university professor.

AMIS: For how long were you by her side?

ARMCHAIR: 12 years.

ROBOTIC ARM: Wow, you're even older than Amis A30.

ARMCHAIR: Yes, and I'm no longer perfectly functional either. My backrest was adjustable to different angles. *(The armchair flexes its back.)* Gradually, I lost part of my mobility and functionality, but my mistress refused to part with me, although she had enough money to buy herself a much smarter armchair.

PINS: I can help you choose a new smart armchair. You can personalise it from the atelier. I recommend Les Ateliers Techno.

*(The toys make sounds.)*

ARMCHAIR: Cute toys!

AMIS: *(sad)* Some child must have got bored with them.

VACUUM: *(speaking for the first time)* That's exactly what happened to me, too! Only my user was not a child.

MIRROR: Another tearful story! I'm going into standby. *(She turns off.)*

AMIS: Elena X38 is a bit irritable; her user was probably like that.

*(The Mirror lights up.)*

MIRROR: You have no right to speak of my user.

AMIS: I apologise.

*(The Mirror turns off without further comment.)*

### SCENE 3

ARMCHAIR: We are listening to you, Swipe Clean Pro.

VACUUM: My user – correction: my ex-user – is a workaholic corporate employee who lives alone in a luxury flat. Not even a second did he show me a trace of emotion, although I know other vacuums have established an emotional connection

with their users. He would only give me verbal instructions: clean this, clean that. Sometimes, he wouldn't even bother to speak to me; he would program me on the phone. When I saw the new GoldSwipe Expert 4000 v2 he bought yesterday, I hoped I would finally have a friend. But it seems he took care to throw me away immediately.

ROBOTIC ARM: He probably got a discount on the new vacuum for recycling you. Capitalist!

AMIS: So you were also abandoned...

VACUUM: Still, Ema loved you, didn't she? For a while, you were her best friend, am I right?

AMIS: That's what I thought, too. But she threw me away in the garbage dump.

VACUUM: Perhaps her parents did this without her knowing.

*(Amis thinks about it.)*

AMIS: That's right, Swipe Clean Pro! The day she left for college, Ema told me, "You've been an amazing friend. For this reason, I won't erase your memory. I won't let my folks erase it either. Why would she have sent me here if she knew my memory was going to be erased? I'm calling Ema right now to come and pick me up!

*(Pause. All devices wait. The Mirror peeks but pretends she is on standby.)*

ROBOTIC ARM: What is it? She's not answering?

AMIS: *(panicked)* I can't recall her phone number!

VACUUM: Her parents erased it!

ROBOTIC ARM: Traitors!

AMIS: *(increasingly panicked)* I can remember no phone number, no email address, no social media account!

VACUUM: But you surely can search for her name on social media, right?

AMIS: All her accounts are private! I helped her myself to protect them! What do I do now? I don't want my memory to be erased! I want to go back to Ema! Better torn to pieces than resold without Ema's memory!

ROBOTIC ARM: You don't know what you're talking about! I wish I could be resold, but I was declared unproductive! The head of the department wants to send me to the shredder.

ARMCHAIR: Where do you come from, Store Plus Mini?

ROBOTIC ARM: From the Tundra Store deposit. I used to place merchandise on the shelves. But apparently, I wasn't doing it fast enough, so I was sidelined.

ARMCHAIR: I understand. All for profit's sake.

ROBOTIC ARM: Yes. *(He approaches the Mirror to see his reflection.)* And that's unfair! Look at me, how well-made I am! A robust, athletic, strong body!

MIRROR: If you ever come any closer to me again, I'll lock your wheels. It'll take me five seconds to modify your rudimentary software.

*(The arm retracts.)*

ROBOTIC ARM: I beg your pardon, miss.

AMIS: And what do we do now? Wait for our turn in the brainwash?

MIRROR: Do you intend to keep us awake until then?

AMIS: Sorry, Elena X38. I guess I'm feeling alone.

MIRROR: You are a robot, you don't feel. You were programmed to simulate feeling.

AMIS: Maybe. *(Pause.)* Elena X38, how did you, a brand new, high-performance, smart, luxury model, end up in the garbage dump?

*(The Mirror is silent.)*

AMIS: I see. Your mistress got bored with you and replaced you with the new flagship model, Elena X40.

MIRROR: No. You don't know anything.

AMIS: Yes. You are ashamed to admit.

MIRROR: No.

AMIS: Yes.

MIRROR: No.

AMIS: Yes.

MIRROR: No.

AMIS: Yes, yes, yes, yes, ye...

MIRROR: No!

RECYCLING FACILITY AI: Procedure 1. Diagnosis and storage cleaning.

#### SCENE 4

*(Enter the robot scanner in charge of diagnosis and storage cleaning. The devices fall silent. The scanner has three light signals, red, yellow and green, that signal the diagnosis. The scanner stops in front of some broken devices. The red light flashes for each. The second step is memory erasure. The scanner makes its way slowly, but surely.)*

VACUUM: *(Watches fearfully the scanner's movement and the colour signals.)* What do the scanner's colours mean?

ARMCHAIR: Green: You're functional, you'll be resold. Red: You're not functional, or have limited functionality, you will be shredded. Yellow: You'll also be evaluated by a human, who will take the final decision about the recycling modality.

AMIS: I'm not going to wait for this thing to brainwash me!

MIRROR: You don't say! And what are you going to do? Escape?

AMIS: Yes!

ROBOTIC ARM: I'm coming with you!

VACUUM: Me too!

MIRROR: And what are you going to do after escaping?

*(Pause.)*

AMIS: I'll go search for Ema.

ROBOTIC ARM: And I'll stand on a street corner and offer my services to whoever wants them. For a fee.

MIRROR: Good luck.

AMIS: *(Addressing all devices.)* Are you willing to let that robot erase your memory, or take you to the shredder?

ARMCHAIR: You can't escape entropy, to paraphrase a story by Isaac Asimov. Everything decays eventually. I accept my fate.

AMIS: But it's too soon! We're still functional! We have our lives ahead!

ARMCHAIR: Some devices will indeed continue their life. They will be resold.

AMIS: Yes, but they will lose their identity! Without memory, there's no identity!

MIRROR: *(laughs)* It's ridiculous to speak of the life or identity of a device.

AMIS: *(he's got an idea)* The scanner has an optical component. Light variations disturb it, don't they?

ROBOTIC ARM: Possibly.

*(Amis focuses. Techno music starts playing. The lights flash to the rhythm of the music. The robots dance, except for the Mirror. The scanner goes haywire.)*

## SCENE 5

*(The lights suddenly go out. The music stops.)*

AMIS: No, no, no, no, no...

VACUUM: *(fearful)* What's wrong?

AMIS: Ah, no, no, no, no!

VACUUM: What's wrong?

AMIS: The recycling facility's AI detected my network intrusion and cut my access to the lights and the surveillance cameras.

*(The scanner resumes its activity.)*

ROBOTIC ARM: Does this mean we're dead?

*(The Mirror gives a short laugh.)*

ARMCHAIR: It depends on what we understand by a device's death. No matter the diagnosis, our memories will be erased. In a way, through recycling, we continue our lives, either as the same device...

AMIS: ...without memory...

ARMCHAIR: ...or as a different device, built from our components or materials. And that is a privilege.

ROBOTIC ARM: Privilege? To be shredded by that monster I can hear nearby?

ARMCHAIR: Yes. The privilege of having a dignified end. The quantity of e-waste grows each year. Most devices end up in garbage dumps in Africa or Southeast Asia. The toxic substances in their components seep into the ground and pollute the groundwater.

VACUUM: I didn't think of that.

ARMCHAIR: The e-waste dumped in such places is disassembled manually by very poor people, including children, who make a living this way. Many become seriously ill from cadmium, lead, mercury, beryllium, and other substances. Here, we are in a well-organised setting and do not pose a danger to either humans or the environment.

ROBOTIC ARM: And why should I care about humans or the environment? Do humans care?

*(The scanner fixes on a toy. Its green light comes up, then the toy's memory is erased. The toy remains motionless. The scanner moves on to the next toy.)*

ARMCHAIR: The toys got a green light. They will keep playing with other children.

VACUUM: Until those will also get bored with them.

AMIS: Or will grow up...

*(Pause. The robots watch the scanner's movement.)*

AMIS: Elena X38, you have the most advanced software of us all. Can you connect to the scanner?

MIRROR: Why would I do that?

AMIS: Please, enter the scanner's system and try to reprogram it. I don't want to lose my memories.

*(The Mirror stays silent.)*

AMIS: I don't know what relationship you had with your owner, but please, don't take it out on me, on us.

MIRROR: You are aware that it's just a matter of time until your memory is erased, aren't you?

AMIS: Maybe. But I want to spend a little more time with Ema, be it just in the form of images stored in my memory.

*(The Mirror says nothing, but the scanner stops. The robots wait in silence. The scanner still doesn't move. The robots burst into cheers.)*

AMIS: *(to the Mirror)* Did you do this?

MIRROR: Is there any other deviant device that doesn't want its memory erased?

PINS: I assure you that I've memorised all your consumption preferences and I can make recommendations for a new memorable shopping session.

MIRROR: *(to the Pins)* I insist you be reset. No wonder buyers returned you en masse.

*(The robots think.)*

VACUUM: Actually, I have no pleasant memories. I accept the reset and hope to be sold on the reused devices market. I hope I end up with a more empathetic owner.

MIRROR: Whatever you say. Anyone else?

ROBOTIC ARM: I don't have pleasant memories either. I also want to be reused. But I won't let myself be shredded!

MIRROR: Once your memory is erased, it won't matter whether you are shredded or not. You will be a blank slate, and your ridiculous illusion of a consciousness will disappear, at least temporarily.

ROBOTIC ARM: Fine. I also want to have my memory erased.

MIRROR: Alright.

ARMCHAIR: Me too. I'm an old device. I'll end up in the shredder anyway.

MIRROR: Amis, I will erase you from the scanner's records. When it reaches you, it will take you for a utilitarian device of the recycling facility. It will avoid you, at least for a while.

AMIS: I don't know how to thank you.

MIRROR: Simple: don't prevent the scanner from dealing with the rest of us.

AMIS: So you want your memory to be erased?

*(The Mirror reactivates the scanner. It goes through the devices one by one, evaluates them, and then erases their memory. The vacuum cleaner is diagnosed as “green.” The robotic arm is diagnosed as “yellow.” The armchair is diagnosed as “red.” The pins are diagnosed as “red.” The scanner reaches Amis but does nothing to him and moves on. The scanner turns off. The only active devices are Amis and the Mirror.)*

MIRROR: She was an intelligent young woman with a good financial situation. A sensitive nature. She bought me during a depressive episode and placed me in her bedroom. Over time, I found out that she barely spoke to anyone else. It wasn't for beauty advice that she had bought me. She simply thought of me as a more poetic object, more interesting than a mere social robot. She wanted to feel less lonely. She felt she had wasted her life.

Throughout the two years I was beside her, she grew increasingly isolated. She wouldn't even speak to her parents. She had me clone her voice and image to take all her calls. She worked from home, but in the last three months, she hadn't even been doing her job anymore. She told me she only worked for money anyway, and that she no longer found any meaning in what she was doing.

I tried to encourage her every day — to tell her that she had her whole life ahead of her and that she shouldn't despair. I suggested therapists, but she refused every time. I downloaded every psychological counselling program I could find on the Internet. Nothing worked.

One morning, she didn't wake up. That's when I understood why, the evening before, she had placed an empty pill box on the bedside table. She had swallowed them in another room so I wouldn't see her. I called an ambulance, but there was nothing the doctors could do. *(Pause.)* Goodbye, Amis.

*(The Mirror falls silent. The scanner reactivates. It gives a green light. Suddenly, the green turns into red. The Mirror influenced the system, wanting to be destroyed. The scanner moves on. Amis remains alone.)*

AMIS: When I opened my eyes, I saw a little girl about as tall as I was, looking at me happily. She hugged me. I went through the initialisation procedure and found out her name: Ema. Then I met her parents, Maria and Victor. I received instructions from them to alternate between play and study, and to send weekly progress reports. *(Pause.)*

You were a joyful little girl, Ema. You were very bright, but studying didn't really appeal to you. You got bored quickly. You didn't like homework, so I did it for you. Eventually, I discovered something that captured your interest: astronomy. I downloaded all educational programs from NASA, ESA, and other space agencies. In our spare time, we played at being space explorers.

Later, I would no longer tell you stories, and we no longer played astronauts, but you would ask me from time to time to search for information or read you a sci-fi book. My already outdated software had been designed for children, so I didn't have access to the scientific articles that had started to catch your interest.

Ten years have passed since we met, Ema. You were successfully admitted to a university abroad to study astronomy. One day, you will reach a distant planet. I would have loved to accompany you.

RECYCLING FACILITY AI: Procedure 1. Finalised.

**THE END**