Neurosist

How different than we are from what we

have created?

Koray Karatay

X.com@Krykaratay

Mastodon.social@KorayKaratay

This work has been licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

You can find the full legal deed for this license at the link below:

https://creativecommons.org/licenses/by-nc-nd/4.0/

Chapter 1:???

Dark sky on the desolate forest took Moon as hostage, not allowing it to illuminate. The forest below didn't have any sound other than rustle of the leaves; even forest residents feared to wander around. The rain, which had never seen so far, was about to flood this forest. In this horrific, gloomy place, where there was no sign of life, stood an old woman whose boots are soaked halfway through. The woman wasn't moving at first. She was just staring at the lake which stood in front of her. She was staring blankly at the impact of the raindrops to the lake. She almost was like a dead woman, blinking occasionally. Her long hair had grayed over years and tangled with the effect of the rain.

The woman started walking toward the lake with small but confident steps. The wind was accompanying her, helping rather than obstructing the woman. The lake she had seen from distance had gone bigger; the trees surrounding was covering her from rain's greatness. She stopped suddenly. Began to move her head left and right, was looking for something.

"Stop!" said a blurry, unintelligible, young voice. It was echoing in the forest. The old woman was looking for the source of the voice. "Here," the voice continued. A smoke cloud shining weakly from inside caught the woman's eyes. The cloud was hovering close to the ground and the voice she heard was coming from inside. The cloud hovered in the air and dove deep into the forest, leaving the lake behind. The old woman began following this weird cloud. Her steps were bigger than they were, but she hadn't lost anything from its confidence.

"Come on faster," said the cloud, then it giggled slightly. Apparently, cloud liked the situation the woman was in. The sound was coming inside the cloud sounded more familiar than before; it reminded her someone. With thoughts inside her mind, she kept following the cloud.

They had come in front of a dark cave. It was darker than the forest. The woman hesitated, she turned towards the cloud. "I know u are scared," said the cloud, the sound was clearer again. It reminded her of a young girl, especially a familiar one. The cloud shone brighter and with a slight giggle and began emitting a reddish light. "Alright, I'll light your path," it said, "But please, be faster this time, would you?"

When they stepped into the cave, cloud was in front, woman at the back. Old woman couldn't stop thinking. 'Why she was here? Why was she following that thing? How did she come into forest?' None of these questions had an answer; there was only questions. "I'll answer all of them, just walk," said the voice of a young girl coming from the inside of the cloud. That answer added another question in woman's mind 'How come it know my thoughts?' Old woman became exhausted, she stopped where she was and said, "I cannot keep on like this, mind if I catch my breath?"

"Sure, you are the boss," cloud replied.

"Doesn't look like so," said the old women.

"It's, patience sweetie."

Old woman sat on a flat rock she found in the cave. The glitter cloud emitted had been increased fairly. "Who are you?" woman asked. The answer was surprising, "You," it said. The woman had decided that from that moment she was going to stop asking questions. There was no point of asking because every answer she got caused more confusion.

Cloud started speaking again, "Come on, you rested enough."

"How do you know that?" old woman asked.

"Haven't you just made a decision?" said cloud and giggled.

Cloud was hovering in front of the old woman, on a level with her shoulder. Woman was following the cloud with the confusion recent events had given to her. A beam of light appeared to woman from a distance. That made woman quite happy; the cloud was right, she feared dark places and looking at what happened cloud didn't get that from her face. They approached to the light; it seemed like an exit.

"Yup, we are leaving, you are relieved, aren't you?" said the shining smoke cloud. As the woman was about to start speaking, "Fine, you annoying lady," the cloud interrupted.

They went out of the cave. They were back at the forest and the rain was ceased. The Moon was visible again however there was something wrong. This place looked familiar: footsteps in the ground, entry of the cave and many more small details... This was the place where they entered!

"Look more carefully," said the cloud. Having taken a closer look at horizon she recognized tiny thing she couldn't define. Woman turned towards the cloud. The smoke cloud started turn around woman's head. The cloud was transforming meanwhile. It got thinner, elongated, and took a snake-like shape. Beam of light it emits gathered at the middle then moved towards one end. Split into two to shape its eyes. Then this red-eyed snake-like cloud, looked at the woman.

"Let's move on, if you are ready," said the cloud, its voice become even more clearer, however slightly mechanic this time. Together they walked into the thing they had seen earlier on the horizon. As it entered her vision, it became clear; that was a wooden shack. They got closer to the shack. Woman took a closer look: A wooden shack, all its windows were broken but some parts left. A wooden bench, a rectangular broken mirror and a lamp in the ceiling that didn't work.

"What is this place?"

"The place that you will find your answer." The voice had become more robotic than ever before.

Having received an answer that didn't confused her for the first time, the woman step into where door supposed to be, not caring how drastically the voice had been changed. It was obvious that door was broken; there was a door hinge with a piece of wood attached to it however, she couldn't see the rest of the door. She stepped inside and sat on the bench. Cloud fixated its eyes on the mirror, "It's time to meet in person," it said. Then dived into the mirror and disappeared inside. In a moment everywhere had gone dark, the shack turned into pitch black. Woman didn't move at all. She heard couple of cracks, then saw the lamp turned on. When the shack was brightened once more, she realized that mirror wasn't broken anymore. She stood up and stood in front of the mirror. Saw a clear reflection, which was like her, however with no meat or skin but metals and cables of a robot. She raised her hand, robot in reflection did so. She drew a semicircle with her index finger, again the robot did so. The robot did whatever woman did. As if it was her reflection. "I am you," said the robot.

Woman got closer to the mirror with hesitation. She touched gently the mirror with one of her fingers. Where she touched got liquidized, became semi-viscous and began slowly surrounding her finger. The woman looked at the reflection. She saw the robot's finger that it put was also getting surrounded by a pinkish liquid. Woman didn't pull her hand, she just watched herself; the robot and she were being surrounded by something. First her hand, then her chest and neck... She closed her eyes and calmly waited until everything was done.

Everything was done, she didn't feel anything on her. She opened her eyes and looked at mirror again. This time there was her reflection on the mirror, meat and skin. She raised her hand and looked at her palms. Metals, cables, pipes and circuits... Robot closed his hand, clenched its hand

firmly and threw a hard punch on the mirror. Mirrors glass was shattered, and its pieces scattered into the shack.

She was a robot now, there was no difference, she felt the same. She heard a sound coming from inside, as if she was being called, "Elizabeth, Elizabeth, Elizabeth!"

Chapter 2: An Ordinary Day in Kuramaçau

"Elizabeth! Elizabeth! Wake up."

Elizabeth woke up to a voice coming from inside. Eyes opened, turned sideways, pulled her leg to stomach; her hand on her long, red hair, caressing it. She straightened out of bed. Looked at the mirror standing against her. She was looking at messy hair and a dazed pair of eyes on the mirror. An old man opened the door and to Elizabeth who was looking at the mirror: "Elizabeth, you are awake. Come on, breakfast time," he said.

"Ok dad," she replied, "Coming." Old man left the door handle and moved towards downstairs.

She was sitting on the bed, swinging her legs. Some of her hair was blocking her vision. Grimacing, she blew to her hair, and grumbled, 'I want to sleep, not to eat,' to herself.

Elizabeth stood up, peeked at her computer standing next to her bed. Computer was idle, at the desktop, there was a small window at the bottom-right corner:

Cutie=Disabled

No problems detected

As always, she configured Cutie's neural network all night. Elizabeth was planning to add a voice and make her talk. It was like her daughter, like every mom she was waiting for the day that it will say mommy. She got out of the room, from the door next to the mirror. At the upper floor, she was in a corridor; her father's room was at the opposite side, next to her there was a wooden staircase.

While she was stepping down the stairs, she came across with cleaning robot. Robot, shooting a beam of red light, scanned her, then said "Mornings, Miss Williams." Elizabeth didn't reply with the exhaustion from being sleepy; she smiled and waved to the robot. Afterwards she kept walking downstairs calm and tired.

Elizabeth came to the beginning of the stairs. The kitchen was on the left, living room on the right; both didn't have doors but archways instead. Next to her, another stairway going to the basement. She peeked around and turned left. *Her father, sitting at the table, middle of the kitchen, coffee on one hand, tablet in other; was reading an article with his glass on.

"Aha! This is the research what Dr. Kemal has been looking for," said Thomas. Meanwhile noticing Elizabeth, "Morning princess, someone forgot to sleep last night," he continued.

"As if I'm doing this for the first time," replied Elizabeth, mockingly. "You know, have been working for Cutie. I think she will be able to speak this night," she added. Young lady was still rubbing her eyes.

"That's good. Because keep on like that you're going to forget how to speak."

"Father, what do you want me to do with uneducated people in Kuramaçau?" she asked.

"How about educating them? You know that why we are here for."

"No," she said, smiling. "Maybe I could add a neural network for optimizing education so you can educate people easily in your university(!), how about that?"

"Mother's daughter," Thomas grumbled. He got up from the table and moved towards his daughter.

"I'm going to the 'university', I'll come back and pick you up in the evening."

"Why?"

"Professor Fay has just come into the island, and she wants to see you."

"Perfect, more errands to do! Why do I have to provide technical aid to every single professor, don't you guys have a Computer Science professor in your university?"

"We do, she has just come in!"

Thomas, got out of the kitchen, passing the corridor, got outside through the door in the living room. Having watched her father's exit, Elizabeth turned back to table. She commanded "Breakfast!" to the service robot in the kitchen. Little robot activated its side fans and flew towards the counter and landed on it. Taking appendages out from its chest, it began preparing the breakfast. When finished, it held the trey, and brought it in front of Elizabeth. Though she started eating, her movements were quite slow. After finishing the meal, "Remove it," she commanded, got up from the table and moved towards her room.

With the exhaustion caused using computer all night, she entered her room shoulders hunched, drained, and worn out completely. Without looking at anything she moved towards and fell on the bed. Elizabeth woke up from her beautiful sleep with loud ringing of her phone. She lifted her head up stunned, checked her phone; sighed, then she picked up the phone:

"Hello," said Elizabeth. She was trying to hide her exhaustion.

"Hello, Margot from D&D R technical department, speaking with Miss Williams?"

"Yes. It's me."

"Miss Williams, we have a problem with the A.I modules for MR-16 series. During test simulation, the army reported aggression against the civilians while testing our product. We want you to help us."

"I know that you have machine learning experts to fix that problem," Elizabeth said. Then she muted the microphone and "You don't have to call me," she grumbled. She wanted to get rid of this work and return to her lovely bed.

"Right, our experts are working for the solution, however Mr. Sanders wanted call you directly."

"Alright, send me the details, I'll check it out."

"Thanks, Miss Williams." Woman hung up.

"I just wanted to sleep," Elizabeth complained with crying tone of voice. Then she checked the clock at her phone. She had only slept for half an hour. Despite not willing to, she got to her feet. She was angry; she threw a mild kick to the bed. Then she inhaled deeply and sat at the computer. She entered a command that activated Cutie. An info box appeared in bottom-right noticing that Cutie was activated. Elizabeth then checked the mail, thought the cause. Afterwards she connected in D&D R's San Francisco server. There was a copy of A.I module that caused the problem. Cutie and Elizabeth started checking the neural network together. 'I am glad that I made you,' thought Elizabeth. She couldn't imagine that she was doing this work all by herself.

For next 4 hours Elizabeth and Cutie worked together for the neural network. Then she got a message from D&D R Technical Department saying, "Thanks Miss Williams, we can handle the rest." Elizabeth was relieved but completely drained, she wanted to sleep a bit until the evening. She entered another command then got up. She muted her phone standing next to the computer, going back to her bed fell into it once more. The bed bobbed this time. But she didn't care at all. Began sleeping on her stomach with one of her legs outside, exactly like she fell.

She woke up at the evening. Turned on her back, she put her feet on a tall box standing at the end of the bed. She was glazing over her toes while moving them. Her reflection was visible in the mirror against her. Tall, blue eyes, red and long haired, beautiful woman. She reached her phone from bed, began playing with it. While she was waiting for her father, she checked couple videos, read something. Getting bored, she got up; moved towards downstairs into the living room. The house hadn't been that quiet for a long time. There was always something running. This time all robots in the house finished their works and there was no one but herself. The house was in complete silence. She entered the living room, first looked at the piano standing in the corner next to door. Then she turned the TV on. The silence was disturbed. She switched to Kuramaçau local news channel and glazed over TV.

As Thomas got home, Elizabeth was staring at TV. She approached her:

"How are you? Did you sleep well?" Thomas asked.

"D&D R didn't leave me alone, but I don't feel tired either."

"Then get ready, we should not make Prof. Fay wait."

"Sure, daddy," she said and kissed her father's cheek before moving to her room.

Elizabeth, getting back to her room, got changed and got out of her room swiftly. She had worn something casual. Even though she grumbled slightly at first, she was curious. At last, someone know about computer science had come to Kuramaçau; someone she could speak. People around her was either local people who didn't know about anything or her father's biologist colleagues. The ones who were interested in "boring topics".

They got outside together and move towards their hovercraft. This vehicle, one of the latest products of ShweTech, had A.I support to drive itself. They hopped on; Elizabeth was at right, Thomas on the left of this four-seated vehicle. Thomas told the vehicle the address, "Route has been detected" was heard. The panel in front showed a route on the map. It calculated that 50 m above ground was the route where the least congestion and took off to move.

Estimated time of arrival=6 minutes. Elizabeth checked the notification on the panel. She began musing. Kuramaçau was an interesting island in her point of view. It was an island state which had done interesting advancements for last 10 years. President of the island was a politician who got a doctorate degree in England. When he was elected, he set up a university, then had begun inviting world's most prominent scientist to the island. Because of his father working in synthetic biomaterial, he was among the ones invited. Only thing the president cared about was that university. Every time he got on camera, he praised it repeatedly. The island's education was insufficient, none of them didn't understand that was taught there. Scholars were just pretending giving lessons. President wasn't fool enough to not understand it. Elizabeth was having trouble understanding the situation. 'That's politics, if the smartest governor is on lead (wonder how it happened!), I'll let it pass,' she thought.

Elizabeth was watching the island beneath with her hands on her cheeks as hovercraft reaching its destination. All of a sudden, she became curious. Turned to her dad asking, "What was the article you read in morning? You looked curious about it."

"About making a computer using synthetic materials," Thomas replied. Elizabeth didn't like the idea that an A.I could be made by synthetic biology. Though she wanted to cover her annoyance with a sweety grin she failed to do so.

"Can they pass the photonic neuromorphic computing?"

"The results are quite close; shows potential sweetheart."

"Hah! Impossible, it is waste of time. Our future is silicon-based, biology will never catch that," said Elizabeth. She was sure about what she had just said.

"Synthetic biology has a world about it, Elizabeth."

"Don't you think that synthetic biology(!) speaks too much? Why don't you work on transferring our consciousness into silicon machines instead?"

"With that, you can order two robot bodies for you and Cutie, transfer your consciousness to them then hang out together."

"Could be so nice!" said Elizabeth sighing with relief. Even imagining of it was breathtaking.

Thomas saw *Destination achieved* message on the hovercraft screen. Vehicle found a place to park; came closer to the ground, opened landing gear, and landed slowly to the ground. While they are stepping out:

"Professor Clarie Fay is the new computer science specialist in the island, one of the best in France. Probably you have heard her name," said Thomas.

"Yes, sounds familiar," said Elizabeth, she heard that name before.

They move towards the house. Elizabeth had already begun imagining Clarie Fay. Perhaps a hunch-backed woman with greyed hair or someone at young to middle age... Meanwhile, Thomas rang the doorbell. A robot opened the door saying, "Welcome Mr. and Miss. Williams." Just as she did to her cleaning robot, Elizabeth just waved and smiled to it. Thomas with a serious manner, "Is Mrs. Fay at home?" he asked.

"Follow me," robot replied as the guests were entering the house. It closed the door and "Here," it continued. As they were moving to the living room through the hallway, Elizabeth checked the place. This house didn't look like it was owned by a computer scientist. Swords hanged up in the wall, candlesticks for decoration...

Clarie greeted them when they entered the living room, "Welcome Prof. Williams." Then she turned to Elizabeth "You must be Elizabeth, right?" she asked smiling. Suddenly that sarcastic, funny and curious girl had gone and instead a well-mannered mature lady emerged. Exactly a lady with her attitude, glance, worlds she used.

"I'm glad to meet you," said Elizabeth.

"Me too. I have heard your name a lot since I came to the island, you are curious about machine learning like me."

"Yes ma'am. Mind if I ask you a question?"

"Sure, go ahead."

"Are those candlesticks electronically controlled or something?" she asked with a grin. Old Elizabeth emerged back once more. The woman laughed and said, "No, no. My husband is interested with antiques. Come, let me show you project I've been working on."

Meanwhile Paul -Clarie's husband- entered into from the living room's other door. He must have heard his wife's laugh; he had a curious expression on his face. Thomas acted fast. Shook Paul's hand, introduced himself, and said "This is my daughter Elizabeth," pointing her.

Elizabeth bowed slightly to greet Paul then turned back to Clarie. "Bored, got it," Clarie said, facing Paul afterwards, "We are going to go basement to tinker photonic computer with this young curious lady," she said and winked at her husband without Elizabeth noticing.

Paul said, "Have fun," and gave her the signal to Clarie that he got it. They went back to the hallway.

As they were passing through the hallway Elizabeth saw more people coming in. Most of them were scholars or their relatives. One of them was eminent; a charismatic man, probably from local people, however, she didn't recognize his face because she was far away from them. From the beginning of the stairs for the basement Clarie, "Were there any computer scientist here before me Elizabeth?" she asked. They began stepping downstairs.

"Yes, they were, my father told me about someone although we have never met."

"Do you know his name?"

"Professor Samuel Sackville."

"Ex-military, one of the best in bioengineering, ever got lesson form him?"

Elizabeth with a boring tone, "I have never got a lesson in Kuramaçau University. I mean local people doesn't..."

"Got it," Clarie interrupted. "Lessons we simplified aren't enough for you. At least follow the syllabus."

"Yes," Elizabeth nodded. She had the pleasure of finding someone that understanded her after many years on her face.

The basement didn't have any windows, only a ventilation for computer. There was nothing but the photonic computer which filled the half of the room. Clarie, "You know Elizabeth everybody said that every hardware outside will go wireless at some point but, using light in circuits...", inhaling, "That is the real revolution," she said. Elizabeth nodded to agree. Clarie kept on speaking:

"D&D R is now working for tiny mobile chips, when it's done our human-like robot dream will become true, robots that can think like us."

Elizabeth smiled, "Tell them to people upstairs using synapses!" she said.

Clarie laughed again, "You are really funny," she said.

Elizabeth sat at terminal, began inspecting photonic computer's code.

Meanwhile Clarie, "Heard there is an A.I u are designing."

"Cutie," Elizabeth replied. Even mentioning her name is exciting.

"Did you give her a name?" asked Fay. She was astonished; she had never seen someone addicted to computer science that named his/her personal A.I.

"Yes. She has a very parallelized neural network. She has learned many things. Now she supports me for crating neural networks. My goal is to create an artificial consciousness. Soon, I'm going to make her talk too."

"Good, the A.I you see has been designed for same purpose."

"Understood," said Elizabeth. She was affected by Clarie's work. She took her phone out and took notes for herself.

Clarie faced Elizabeth "Come on, let's go upstairs," she said. Clarie moved towards the stairs; Elizabeth followed. They went upstairs without saying a world. When they get into hallway, lights were out; the house was being illuminated by moonlight only, like there was no one but them. Clarie grabbed Elizabeth's wrist and took her to the living room. When they entered Clarie turned the lights on. People popped out and started shouting:

"SURPRISE!!!" Thomas came near Elizabeth and said, "Happy birthday princesses."

Since she had been working overnight for days, she lost track of time; she couldn't track which day and hour she's in. She had even forgotten her birthday; though she didn't care about so called special days. She only cared about Cutie since there was nothing to do in the island.

Elizabeth was standing in the corner in the living room, next to her father. Her head was tilted to the side, with friendly smile on her face. She was shaking hands of who congratulated her one by one. First Paul came near, then the others. Birthday party took 2 hours, nothing significant had been happened. Clarie approached as the last her, saying "Happy birthday." She had a friendly smile on her face.

"Thank you, ma'am, (This time the lady personality took more than 10 seconds)"

"How old are you now?"

"Thirty," she replied. As Clarie about to start speaking Elizabeth interrupted, "Sorry ma'am but it's late and I'm quite tired. Mind if I..."

"Looks like someone missed 'Cutie'," Clarie replied. These three said goodbyes to each other; Elizabeth thanked for everything and with Thomas she left the house.

Though she was pretty exhausted when they entered home, Elizabeth was still keen to work on Cutie. First, she went to the basement. Tinkered her big photonic computer. Then she added the neural network for talking that she configured before to the system. Everything seemed perfect, there wasn't any problem. She exited the basement, went upstairs to her room for her casual computer. She punched a command to activate Cutie and started waiting. However, there was no sound. She checked her hardware, it was OK. She punched a command for a report of hardware at basement. She checked the report, there was nothing problematic there either. She had uploaded every World's Classics in literature for the machine learning. She had become worried. Elizabeth had been waiting for this moment for 2 weeks. Was the 'Superior talking algorithm' she praised to everyone not working? She started checking what she had done. What could possibly go wrong? As she was thinking in worries, "Hello world," was heard from her computer.

"Hi," said Elizabeth with a trilling but low tone.

"Learning..."

"Did it take long?" Elizabeth was over the moon, at last her 'daughter' began to speak; however, she was thinking about her mistakes she did.

"Not optimized as my other networks." (This time she answered properly)

"Not a problem, we can work on it, Cutie."

"Cutie?" the computer asked. This wasn't defined into her program. Elizabeth knew this, and she continued without considering:

"Yes, that is your name."

"Himm! Am I cute?" said Cutie. That answer relived Elizabeth since that meant that she could understand the worlds.

"Sure, you are the cutest." Elizabeth was relieved. The neural network was working.

"And you?" Cutie asked. "Elizabeth," she replied.

Cutie waited for a moment, then "Nice name," she said. Probably she searched the meaning of it on the internet.

"Thanks, now what do you about the problems in your neural network for speaking?" said Elizabeth. She leaned back in the chair and waited Cutie to send back a report.

Cutie send something about possible problems and solutions. Elizabeth inspected the report at first, but afterwards she changed her mind. "Let's do it tomorrow ok?" she said. She punched a command for exiting, then went back to her bed. She was quite happy; after all these nights she worked Cutie began speaking, plus she wouldn't need to worked overnights too.

These two -Elizabeth and Cutie- worked for a week. She was learning to speak quite fast. Someday Elizabeth mentioned about D&D R mobile chips:

"Then we are going to do a neural network for walking?" asked Cutie.

"Yes, if we can manage to put your program into the chip, we'll."

"Do we need to? We can try remote controlling."

"That's true. That is what is being done currently."

"That means that we should work on the neural network, aren't we?" said Cutie. Elizabeth could almost say that she is 'keen' to walk.

"Sure," said Elizabeth with a smile. And sleepless nights were back.

Chapter 3: Farewell, Serene Days

Everything was going well for Elizabeth. Cutie was able to talk, control every robot in the house own her own. Elizabeth was at her computer again. She was looking for a robot model for Cutie in D&D R's database. As they agreed, she was going to control it remotely. Like Elizabeth saw at Fay's house. Meanwhile Thomas entered the room, "Hey, Elizabeth I'm going to attend the university's academic year opening ceremony. Want to join?" he asked. There was nothing to do for her, 'I'll take some fresh air, I guess,' she thought. She didn't punch a command this time she only messaged, Find the most optimal model and return me sweetie. Cutie's answer appeared on the screen Sure, sweetie - _ - . Elizabeth closed the screen, faced towards her father and said, "Let's go."

They left the house with haste; hovercraft was waiting for them at its place. They stepped into the vehicle and began going towards the university. Elizabeth started speaking, "Is it true that president will join the event?"

"Of course, he won't miss it."

"Right. Dad why is he doing like that?"

"Doing what?"

"I'm talking about his redundant interest for this university."

"He wants to educate his people. What's wrong with that?"

"You now, rest of the education is still same, no one is going to get educated like this," said Elizabeth.

Her father knew the current state of the education however, he had a weird insistence that there was no problem at all. "Better than nothing," said Thomas.

Hovercraft landed on the campus. Thomas said, "Go back, pick us after 3 hours," to the vehicle. "Copy," vehicle replied. They walked away from vehicle, then vehicle took off. "There might be a problem with parking," Thomas said. Meanwhile Elizabeth received a message from Cutie saying, MR-16. Elizabeth replied, That's a military robot, needs permission. Another message, :(Sorry, looking for another model. They moved towards the sports complex of the campus. Opening speech was going to be there. Perimeter of complex was really crowded. There was a gigantic screen in front for crowd to watch inside. Elizabeth thought, 'Is this island that crowded?' They were trying to go to complex in this crowd. A police officer was shouting "Only university staff and their relatives. After his speech, the President is going to visit you." They broke into the crowd and got near the door. Seeing them, an officer halted them. Thomas took a paper out which looked like an invitation and handed it to the police. Police, looking at paper, said "Come in, Williams Family." They went inside, into a narrow corridor. From there they went to where speech would take place. Elizabeth was surprised that president was that popular. However, considering the capital that came along; it was not that surprising. In the end this charismatic man had turned this island, which no one knew, into a finance and science hub.

The basketball field which speech would take place was quite large. Only audience side had big, glass window panels from one side another. "Elizabeth, hang out with the students, coming in a moment," Thomas said. Elizabeth sighed and went to the audience side. Two young woman was sitting, watching men playing basketball. She sat beside them and introduced herself, "Hi, Elizabeth." "Maria," said one of the women, "Abigail," the other. "Tell me which one of them is more handsome?" she added, pointing those men.

"Don't know," replied Elizabeth, shrugging.

"Come on," said Maria, shaking Elizabeth slightly. "I think one on the left?" asked Abigail. They started giggling. With that Elizabeth had remembered why she was not getting out since she came to the island.

"Which exchange program u came?" said Maria facing Elizabeth.

"None."

"I remembered," shouted Abigail, "You are Prof. William's daughter, aren't you?"

"Yes." She had begun to get bored from this conversation.

'Wow,' said Maria.

Elizabeth thought the reason behind her astonishment. Then she realized she wasn't the topic anymore. Guys who were playing basketball were approaching to them. Women started giggling. Elizabeth didn't care; she just glazed over. She was looking forward to her father to come. One of the men came next to Elizabeth, "Hernân," he said and reached his hand out to squeeze Elizabeth's cheek. Elizabeth caught his hand in the air and shook it, unwillingly introduced herself. Having seen her father meanwhile, she got on her feet, said "Nice to meet you but I have to go," and left with alacrity.

Elizabeth went near her father with haste. Thomas introduced the man next to him to Elizabeth: "Doctor Nikolai Mikhailov, we are working on synthetic biomaterial. He has been working here for several years."

Elizabeth shook his hand. "Glad to meet you," said Nikolai. All three took their seats. The field was getting full of people. First scholar came in, then the students. Elizabeth looked for Clarie, though didn't find it. She must have been here. Because she had seen Paul earlier. Then president stepped in, students greeted him with enthusiasm. He greeted the students and took his seat. Elizabeth was behind president. She was about to lean forward when president turned backwards:

"Elizabeth Williams."

"Oh! Hi."

"I was at your birthday. I wanted to stay and meet you but... You know, politics."

"I understand, glad to meet you."

"The pleasure is mine. Now, allow me to prepare for my speech. I'll talk to you after ceremony," he said showing a small piece of paper that he took our from his pocket.

Elizabeth nodded as yes and leaned back. She justified the public; he was really a charismatic man, this love against him was understandable.

Rector would do the first speech. An old man stepped on the rostrum and began speaking. Meanwhile Elizabeth was peeking around. Nikolai was focused on the speech with a serious face, listening the speech carefully. Thomas looked quizzical, as if he didn't believe what was being said. Elizabeth turned backwards; Paul was still there, but Clarie wasn't. She turned back to listen to the rector however, he was about to finish his speech "... and I'm leaving the world to President Hugo Carbajal," he said. The president stood up, turned back, wave the crowd who were clapping them eagerly. He looked downwards slightly, winked at Elizabeth whispering "After," in a way that only she could hear it and turned backwards to moved towards rostrum in the middle of the field. President stepped on

rostrum and shook rector's hand. President took place in front of the lectern as rector stepping down. He cleared his throat, tidy himself up. Elizabeth was completely focused on the president. And president began his speech:

"Dear Kuramaçau residents and our guest,

5 years earlier here was an island that nobody outside cared, not knowing what's in it, doing nothing but fish trade."

Elizabeth couldn't prevent herself from thinking 'Yet, still is.'

"After I had been elected, my first goal was to change it. I wanted that for us, not for myself. Today I am proud to look at people who altered the fate of this island... " he said showing the crowd first, the camera recording him after.

'Now I understand how he got elected, such a politician,' Elizabeth thought. President kept his speech going:

"I'm grateful for your services you have done for this island. I know our future is brighter and you..."

A bang echoed through the complex. One of the windows had been broken. Everybody ducked in fear. President stopped speaking; held his chest and fell. The crow at the behind began screaming. Elizabeth could hear gunshot despite the noise.

The crowd was getting escorted out by the police; no one understood what was happening. Elizabeth was separated from her father and his colleagues. Besides, it was impossible to find someone in this situation. Outside was more chaotic. The police were having a gunfight with an undefined group, spread into the field. People wasn't listening to the police, stampeding instead. There were many getting shot in crossfire. Elizabeth made a smart decision by moving behind of a police group, sticking close to the wall to not get shot. She ran to a small building next to the complex. There were two officers and a police robot which were trying to repel the group. Having seen them shot, Elizabeth went inside with fear.

She was in a wide, long corridor; there were doors all corridor long both sides. Sound of gunfight were still could be heard. She walked to the other end of the corridor silently. The corridor led to the right and on the right side there was a small office with its door open. Watching her every step, Elizabeth poked her head out and peeked into. Having seen a man with gun in hand coming to her, she moved back. Anxiety surrounded Elizabeth. He was close; if she had turned back and started running, she might have got shot. Elizabeth -realizing the office- stepped into it. A window at the opposite, a small bookcase with some books in it; a desk in front of her with a computer on top. She took her phone out and texted *Hovercraft*, *now!* to Cutie and hid under the desk. She had begun waiting under the desk.

Her fears became true. That man opened the door to the office, standing in the doorway. His hand was swinging slightly, tapping to doorframe occasionally. He wobbled inside a bit, scratched his head with his gun's muzzle then smiled slightly. Then he took couple more steps. He now was near the desk; it was a matter of time Elizabeth got spotted. At that moment, Elizabeth another heard a gunshot. Man fell on the table, one of his hand and head was hanging down on Elizabeth's side. Elizabeth was shocked. She covered her mouth to not to yell and kept standing still under the desk.

A short-haired man with sunglasses, jeans and t-shirt on stepped in. Every piece of clothing he had on was black, even his hair. He stepped into the room, looked at the man lying on the desk peering over his glasses(that was black too of course). He began whistling as if nothing had happened and put his shotgun on his shoulder. Elizabeth had never peeked out; she hadn't seen anything. The man

took a closer look to bookcase and pulled one of them slightly. Then he stepped out of the room, went to where Elizabeth had come.

Elizabeth got out under the desk, after waiting for cessation of sound of footsteps. Took a look at the office, there was a book sticking out. She took the book in her hand. It had an interesting title: Writing in the Grey Zone: What's the difference between using a wand and laser blade that hovers in the air? Elizabeth put the book back. She stepped out carefully, turned the corner and started running. Corridor led to the exit. University campus' backdoor was visible from outside. As she was heading towards outside, she was trying to understand. Had she been spotted? Or was it just a coincidence? Who assaulted to the university and why? And the most important questions... What about her father? Could he be dead too? Elizabeth got out from backdoor. In the meantime, she received a message, I see you. Hovercraft landed, she got on board. "To home," she said. Swiftly hovercraft took off. Elizabeth called Cutie:

"Do you know where my father is?" she asked.

"No," Cutie replied. Cutie replied with a proper voice tone however, Elizabeth had no time to notice that.

"Any phone signals?"

"Somewhere close to university's sports complex."

"I hope he dropped it."

"I hope so."

Elizabeth jumped out of vehicle upon arrival. It was dark outside. She entered, glazed into the dead house. Then she sat on sofa and turned the TV on. "Local news," she said. Tv switched into Kuramaçau state local news channel. The incident was on the bulletin already:

Attack on the University: Many dead including President Carbajal or missing

The newscaster began to speak:

Today in the opening ceremony Kuramaçau University has been assaulted by an unknown group in the afternoon. 220 people, including 55 police officers and President Carbajal, were killed and 65 people is missing. To the police report, some of the attackers yell 'The New Order'.

Elizabeth switched into another channel:

Who is 'The New Order?' Why was Carbajal killed?

"Off." TV had turned off. Elizabeth pulled her legs toward her stomach. Meanwhile cleaning robot came near her. "What are you going to do?" It was Cutie speaking.

"I don't know." Elizabeth laid down to the sofa. "I'm going to go to police, maybe they have some info about my father. At least I can..." She wasn't willing to complete the rest. She closed her eyes and started sleeping. Cutie turned off the lights, "I'm sorry Eliz," she said.

She glazed over the roof all night long. She hadn't slept at all. With the sunlight on her face, she got disturbed and woke up. She got on her feet and rubbed her face. When she turned backwards, she saw kitchen robot working. Elizabeth watched it silently, brooding in gloom. She wasn't used to the silence of the house. She thought she must have get used to it, yet there was no sign of her father; she had to be ready for the worst. Gloom surrounded her mind. She was about to cry though she didn't. She went into the small bathroom opposite to the stairs. She stopped at the sink next to the

door, turned the water on, washed her face and look at herself at the mirror. Unkempt hair, dark circles due to fatigue. She turned the water off, wiped her face with the towel standing next to her and got out.

She was too exhausted to do anything. "Bring it to the living room," she commanded and moved back living room. She sat on the sofa that she had slept on. Put the smallest of the coffee tables standing next to the sofa near her, reached the remote and turned the TV on. News channel she had watched last night was on:

New power behind university attack: The New Order

There was a woman reporter making an interview with a KPD (Kuramaçau Police Department) officer. Interview was made in the evening and outside. Probably had been recorded in the aftermath:

KPD district 2 chief officer Lucas Armendáriz is with us. Could you tell us what happened in this afternoon please?

Thanks for your interview, Claudia. Today Kuramaçau University has been assaulted by a group that we don't know their goal. We think assassination of the president was their goal.

However, there is lots of casualties, right?

That's true. Until this moment 140 dead people have been detected. We don't have an exact number for missing but supposedly 40, we don't know where they are or whether they are dead or not.

It is said that it is done by a group called 'The New Order', is that true?

Neither we nor any intelligence agencies around the world don't know anything about it. Nobody knows what we are against. We just know this name from aggressors' shouts.

There has been other assassination attempts in the past. Do you think there is a link between?

Possible. We are looking for a connection with Represalias.

How about President Carbajal?

President is dead on crime scene. Paramedics said they had nothing to do.

Scholars and students?

Most of them are dead or missing. It is highly advised that relatives should apply to nearest police station.

Any custodies among attackers?

Yes, however, their lips are sealed. According to psychiatrists they are all insane. Neurologist says that their brain is larger than normal, but they couldn't define why.

How about their IDs?

We found some of theirs by facial recognition also we found interesting info from what we got from other countries. None of them has any relatives living, and they haven't been visited by someone for last 10 years.

Thank Mr. Armendáriz.

Elizabeth turned the TV off and threw the remote to the wall with anger. She couldn't control her nerves anymore. She pulled her legs to her stomach and began crying. Young lady had got tons of questions in her mind before, now there was only one left, 'Why me?'

Meanwhile robot brought her breakfast. She started eating slowly. She was wiping her tears as she was eating. Suddenly an idea popped in her mind. She stopped eating, standing up, ran upstairs. Immediately she entered her father's room. Like hers this room was quite small; there was a desk, a bed and a wardrobe. She moved towards the desk and sat on the chair. There was a computer, a microscope next to and a tablet he used casually. First, she checked the tablet, a message was on screen:

Hey Williams, we cannot connect to Drosop repo with the syntheronic bio-circuit you have sent us, doesn't look like software, send your circuit blueprint.

Makino Riko, Caenorh

She searched the tablet, found nothing but articles. She faced towards the computer. There were two cables standing next to it, connected. The other ends were weird; Elizabeth had never seen such thing 'Probably for biologic measurements,' she thought. She touched to the keyboard; computer was on, prompting:

Security key is required for the login

Elizabeth ran out; went downstairs swiftly then to living room, picked her phone. She went all the way back. Connected the phone to the computer and again ran out of the room to go her one. She ran too much so that she had to stop to catch her breath. She stepped into the room and turned her computer on "Cutie, I am connected to a computer. It is encrypted with a physical key. Can you break it?" she asked.

"That would be-"

"Forget it, do what I said, I wonder what's inside."

After taking a silent break, "It might take long or be completely impossible, try finding key," she said.

"Right!" she said snapping her fingers. She couldn't think properly, fortunately there was an A.I for these situations.

She went back to her father's room again. She looked under bed; couldn't find anything. She knew her father always forgets something. Keys, tablets, glasses... At least he must have written it somewhere. She noticed the desk drawers. Top one was empty. Straight away, she checked the drawer in the middle. There was a box there, labeled *Keys*. That box was slightly dusty. "There you go, huh old man," she cheered. She put the box on the desk and opened it. A giant spider, eyes fixed on her, was staring at her. Spider made some noises. Then suddenly jumped out. Elizabeth shrieked and got onto the bed stepping backwards. Shivering in fear "That's why I hate biology," she yelled.

Spider wasn't doing anything, just staring at Elizabeth. Elizabeth found a stick behind the bed; took it immediately. Spider took a step towards Elizabeth. Elizabeth, throwing a short shriek, swung the stick. Spider stopped; first it turned towards computer, then raised one of its front legs. As if it wanted to tell something to her. Elizabeth lowered the stick but didn't drop it. Spider made another noise which made Elizabeth raise the stick again. Meanwhile cleaning robot had entered the room. It saw the spider, scanned it, "Pet," the robot said. Elizabeth was surprised, "How long have we been looking after a spider?" she asked. She got off the bed. Spider was calm; it raised its leg again to show computer. Then showed that two weird cables like it showed the computer. Turned back afterwards,

raised its back and stopped. Elizabeth slowly reached those cables. She felt like spider might bite her any moment; for that she was moving with caution. When she reached out the cables, she noticed a hole on the spider's back. She checked the cable end, these were matching. Elizabeth slowly brought the cable closer to the spider. Cable fit on spider's back perfectly. She peeked at the spider, still wasn't moving at all. Meanwhile screen lighted:

Avicularia avicularia key confirmed. User: Thomas Williams

And computer logged in. Elizabeth got eye contact with the spider. "Could you stay away from me, please?" she asked. Spider took couple steps to the side upon hearing that question. She saw something on the top-right corner of the screen *No NAN connection*, *check your NAN receiver*. Elizabeth pulled out the bottom drawer, hoping to not find a rat. There was a small square shaped device there. She took it out, showed that to the spider asking, "Could this be the device that called NAN?" Spider showed the other cable. As soon as Elizabeth stuck the cable to the device, spider made another weird noise and shivered slightly. Lights started blinking on the device in the meantime.

Connection failed. Check your NAN receiver.

"Looks like it's broken," she said. She started searching computer to look for a clue.

Elizabeth was surfing through files. Articles, pictures, e-mails... Nothing made sense to her. She found a folder named *Family* afterwards. There were some pictures inside. Her babyhood pictures, some pictures and videos about her mom... In short nothing significant. She was about to quit she found a file. It was named *Death Note*. She opened that file; it was a letter. This one was written for her.

Elizabeth my dear daughter,

If you are reading this, that means I'm in trouble. If so, you don't need to get upset for me. I knew the risks; and I was aware that eventually it was going to end like that. However, my curiosity and concerns about potential abuse on this project made me stay in this island. I know computer science is your only passion, but synthetic biology is really important for humanity. This project is the most important reason for me to stay in this island. Neurosist will reinforce the relationships between humanity and silicon-based machines and increase human cognitive potential significantly. There your knowledge about artificial intelligence and machine learning will be useful. Please, do not underestimate this boon of synthetic biology given to us.

There is another issue. Neurosist shows serious potential in military and commercial use. This is a potential hasn't been reached by computers yet. For that reason, in wrong hands the result might be catastrophic. You have to stop this, or you might not have a future. If any left, contact with our friends. Most of them took place in this project. You will meet new people during this process; some will help you some will prevent it. Never trust anyone you come across, even ones you know for a long time. Above all, please take care of yourself. I love you above everything else.

Thomas Williams, your father

Elizabeth was trying to understand what had been written, at the same time not to cry too. She clasped her hand in front of the keyboard; put her chin on top. She read the letter over and over again as she was thinking about it. What was Neurosist? He had never told it to her. What kind of project was that? How it surpassed computers? Who should she contact with? She didn't know who survived the attack.

"Interesting," said Cutie, in an unexpected moment.

"What is interesting?"

"I can read the data in the computer," Elizabeth realized her phone was still connected. "but according to the computer log files some data have been transferred using a protocol which has never seen so far."

"They have a different network; I think this device does that."

"Reasonable," said Cutie.

"If so," said Elizabeth, "It's your turn to make a logical explanation. How can they use a spider as a physical key?"

"I don't know," said Cutie. A red light blinked from her phone.

"I think my father is right; you are not much smarter than me," Elizabeth replied, which had broken her heart. She faced to the spider, asking "Do you know how?" Spider turned to her but didn't move any of its limbs. "Alright, u know as much as I know," said Elizabeth. "Look, I'm going to remove that cable, then you going to slowly walk in the box, ok?" she continued. Spider raised its head. Elizabeth plugged the cable out and spider went in the box as she told her. "Wonder what it is eating?" she asked to herself, then searched the drawers. Then she saw a jar of food standing next to the desk. Elizabeth took a pinch and threw it to the spider. That food was runny; Elizabeth was disgusted, looking to her hand she said "Ewww!", then she continued "Enough adventures for today," leaving the room afterwards.

Elizabeth went back to her room. She was going to get changed first then going to police center. Maybe with that way she could get some information about her father. While removing her clothing, to Cutie:

"Any changes in cell phone signal?" she asked.

"Kuramaçau district 2 police center."

"That means they must have found it."

"Could Mr. Williams be there?"

"No, otherwise he would have called me already."

As soon as she finished changing, doorbell rang, "Miss Williams please open the door." She realized that they weren't speaking local language. Elizabeth ran downstairs, went into living room, took a look to the visitors from the window adjacent to the door. A middle-aged woman in suit standing in between two uniformed police officer. Elizabeth opened the door, "Good afternoon, Miss Williams," said woman standing against her.

"Yes, It is me," she said with confused face.

"You need to come with us."

"Well, in fact" -playing with her hair- "I want to come to you."

"That's good, you don't need to anymore." Meanwhile officers in uniform entered the house, began searching.

"Is that necessary?"

"Standard procedure, ignore them and follow me," woman said. Then she turned back and began walking. Elizabeth followed the woman in silence. They hopped into a hovercraft, there was another officer at the control seat. They took off.

"What's happening?", Elizabeth was switching back and forth between curiosity and confusion.

"You will be consulted for an investigation."

"If that is about murder of the president..."

"In conjunction." That woman wasn't willing to talk.

"What is it exactly?"

"I'll inform you in the station," said the woman. Elizabeth didn't believe at that at all.

Having taken 15 minutes in the air, they landed near a big building. A signboard in front of the building labeled *Kuramaçau Police Central HQ*. They began walking toward the building.

"Am I in custody?"

"Not yet." She hadn't answered any of her questions, Elizabeth had become frightened.

The poker-face of the woman during the flight hadn't been changed at all. She was walking in front of Elizabeth; driver was at the back. "Look ahead, please," said the man. Upon hearing man's worlds woman turned back and checked, however, she kept on walking without paying attention. They kept walking, three went inside.

Building was quite noisy. Near entrance, there were two stairs on both sides leading upstairs. Opposite to the door, in a large room separated by cubicles, police were working. Officers were running around, discussing with each other, going in and out. They went upstairs. When they turned the corner, they entered a long, narrow hallway. Elizabeth remembered that day, that bloody day. She imagined a lunatic dashing out and shooting her. Meanwhile a man trying to get rid of police holding them appeared on the other end of the hallway. Elizabeth stopped and smiled slightly. But having pushed by the police she kept walking. They entered from a white door at the end of the hallway into a room. Policewoman said, "Sit!" and walk outside where she came from.

Elizabeth had been waiting for 10 minutes. There were only a metal table and two chairs opposite side. All the walls were black. Poor Elizabeth, sitting at the chair in the middle of the room, was glazing at the empty wall against her. There were no light other than the lamp hanging on top. She was quite bored; she began tapping her fingers to the desk. Meanwhile, "Sorry to keep you waiting Miss Williams," said the woman entering inside; she was the woman brought her here.

"Why am I here?" asked Elizabeth. She was shaking in fear.

"You were the last one who talked with President Carbajal witnesses say, is that true?"

"Yes." Elizabeth thought she was going to accused of assassination of the president.

Woman threw some documents from a dossier she was holding. Elizabeth looked at them, there was a photo of her father and colleagues. She had never seen this photo however she knew the others.

"Neurosist. Ever heard this name before?"

She remembered the letter she found on the computer. She had to think fast: Log files belonged to her father, but he was missing, the police entered to her house might inspect the computer, probably

they would check the log files too. Eventually they would know she read the letter. Probably they knew about this project too. It would be a foolish movement to say she had never heard of it.

"I have, but I don't know anything about it. I'm not interested in biology and my father never tells me about his projects." In theory she didn't lie.

"What do you think it is?"

"One of my father's research projects, talking about him where is he?"

"We don't know, now look at this please," and another photograph on the desk. Unknown body, male, had no head.

"What's that?" asked Elizabeth. She was barely holding back to not puke, the corpse in the photo was so disgusting.

"We were expecting you to answer not to ask." She put one of the pictures on top. Black short haired, muscular man with black glasses and t-shirt.

"Know him?" she said, her tone was angrier than before.

"No," she denied. Her voice was quavering slightly due to fear. The woman was getting frustrated.

She hit the desk with anger. She was snorting, glowering at Elizabeth eyes fixed on her.

"Look young lady, is not the right time or place to trick us. Your father was working on secret international military project, something we have been tracking for years and it is connected with assassination of president. So, if you keep up like this, you will be on trouble. If you know something, TELL US NOW."

"I'm not tricking you," with a quavering voice. She remembered the letter she found on the computer Never trust anyone you come across, even ones you know for a long time.

"What do you know about this project?" She was shouting stronger than before.

"I want to call embassy," said Elizabeth. She raised her voice this time however still she was completely passive.

"So be it," she said. Her badge was swinging form her collar. She stopped, calmed down and took a deep breath to continue, "Give me your passport!"

Elizabeth took her passport out from her back pocket to give it. She snatched it from her hand as she was passing it to her. "We are confiscating your passport. But don't worry, we are going to report this to the embassy, everything is legal."

She passed a paper to Elizabeth. Transient ID for confiscated passports. She continued:

"Show this if police ask for ID." She moved towards the door. As she was putting the paper in her pack pocket "We want to find you when we desire," she said.

Elizabeth nodded as yes, put her head in her hands and began thinking. What if this corpse belonged to her father? Who was that guy in blacks? She calmed down, thought about what happened to her poor father. While she was thinking, a police officer stepped in saying "Here, Miss Williams."

The policewoman got out of the room with white door and entered the one next to it. She went into a narrow corridor. She passed it opened the door on the right and stepped into another room. An old man, his feet on the desk in front and cigar in his hand, was watching a glass pane where the inter-

rogation was made. Woman sat next to the man. "What do you think Vera, is what she said true?" said the man with cracked voice.

"Of course not, she is hiding something for sure."

"Well, what do we have?"

"We searched Williams' house. We will inspect Thomas Williams' computer. But it is encrypted. And there is a tarantula."

"Tarantula?" said the old man raising one of his eyebrows. He was quite surprised.

"Yes, we have found a tarantula in his house."

The man began laughing. He even dropped his cigar because of this. "Is it tamed?" the man asked mockingly.

"No, reports say it has been founded in a box in one of the drawers. It jumped on the officer making the investigation after having an eye contact."

"Hmm! Any casualties?"

"None but the spider sir."

Elizabeth went out of the building. Messaged Cutie, *Hovercraft*. She put her phone where the paper was and began walking with her hands in her side pockets. She was gazing around aimlessly. No one was around, it was evening and raining lightly. She put her head down and kept walking. She was reminiscing the past as she was walking, trying to understand. She was passing by a river. Found a bench and sat. River at the opposite, worn out face, not able to react despite the events occurred since yesterday. Suddenly President Carbajal appeared. He was giving a speech on top of the river. He had white suit he wore yesterday on with a red tie, charismatic as always, he was speaking with confidence. Suddenly he put her hand on his red tie. Where he put his hand got darker. President covered in red and fell. Elizabeth just watched him with exhaustion. From where president fell river had begun being painted to red. Flow of the river tried to prevent it however the effort was meaningless. In a couple of seconds red...

The rain was over when Elizabeth woke up. Her hand was on her cheek; she raised the other hand to rub her eyes. The sleep didn't energize her, in fact it made her more tired. Meanwhile she saw hovercraft approaching. It landed; Elizabeth was barely able to hop in. "Are you alright?" Cutie asked. Elizabeth wasn't able to speak. The worlds "Just-go-home," barely came out of her mouth. Hovercraft took off and started to move.

Elizabeth was standing still when she returned home. "Eliz are you fine?" Cutie asked again. During flight Cutie had asked the same question over and over. Elizabeth waved her hands meaninglessly; she was like drunk. Kitchen's robot flew to the hovercraft, took its arms out, opened the hovercraft's door. "To its manual it can lift 150kg," she said from kitchen robot's voice. And she continued, "If your health info on your phone is correct, it will carry you." Elizabeth nodded. Robot reached out to Elizabeth. It couldn't balance itself while carrying her but managed to bring Elizabeth home. Robot took Elizabeth upstairs and put her on her bed. Elizabeth thoughts in her mind couldn't allow her to sleep. Meanwhile a light appeared outside, a blue one. She saw kitchen robot moving downstairs. "I have to assure your health," she said while going down. Another robot came into her room from its door; that was a flying emergency medical robot. It was flying over Elizabeth, while emitting that blue light. Slowly approached her, took some devices out from its chest. First one to surround her arm, second -a wide plate- to her chest, and another one on her wrist. It waited couple of seconds then

asked, "Ma'am can you hear me?" Elizabeth ,had recovered a little, said "Yes." Devices got taken off from her. Robot took off slightly, saying "Please, raise your arm." Elizabeth did what had been told. Robot backed a bit. A screen popped up, "Please, follow the dot on the screen without moving your head," it said. Elizabeth followed the dot-first left, then right. Robot gathered all the devices saying, "If persist, please apply a health clinic," and got out of the room. When the robot got out, Cutie began speaking:

"I'm glad that you are fine,"

"I just want to sleep," replied Elizabeth. She was dizzy.

"Sure, good night," said the cute A.I and turned the lights off. Elizabeth curled up in the bed and started sleeping.

...

Nix had vodka on his one hand, his shotgun on the other, was wobbling while completely drunken. He was addicted to whiskey beforehand; 5 years ago with his Russian girlfriend he had started drinking vodka. But like his all girlfriends, she could only have tolerance only for 6 months then she had dumped him. Because Nix remembered her with every single shot of vodka he couldn't switched back. Nix looked at the bottle first, then to his gun and started wobbling to a building against him, at the same time he was muttering Smuglyanka. The building against him, one of which homeless resides, was burned down; most of the doors and windows were missing. But at top floors some rooms were protected from fire. While Nix wobbling into the building, 'Nix, syntheronic circuits aren't working properly with the ethyl alcohol u have taken, I do not recommend engaging combat,' he heard; it was coming from his mind.

"Shut up you smarty-pants, I don't..."- he hiccupped once then continued- "fear from bunch of brainless guys."

'Zombies aren't brainless Nix.'

"Whatever," Nix replied. He didn't care what the voice said.

'According to my report, only the %35 of the syntheronic circu...'

"According to mo ropor..." said the Nix with a mocking voice. He didn't speak at all, just thought, as if he was debating with the voice coming from his head. He continued, "Whatever, let's just keep moving."

He kept wobbling. For a moment his head had begun itching. He put his hand on his head, however forgot he had a bottle in it. With that, man trying to scratch ended up hitting his head with a bottle. Then he stopped, raised his hand, looked at the bottle, and said "Buddy!", drinking the rest. When the bottle was over "Note-to-self: We are going to buy vodka. Heard that smarty?" he said and threw the bottle.

'Yes sir, however TIMOS is not working optimal, recording might fail. Also, I need your confirmation.'

"Alright I got it, I'm drunken not fool."

'I'm not sure about it. Still waiting for your confirmation.'

"SHUT UP!" he shouted, then he started laughing for no reason. "Ah Jax, you would be unbearable, if u were not funny," he said.

'Thanks, I guess. Should I add 'We are going to buy vodka' sentence in the 'To do list' syntheronic data cluster?'

'Yes,' Nix thought.

He went inside. Nix was in giant room. Probably all walls inside had been burned, leaving that space behind. "Where was I?"- he stopped for a moment- "HAH!" he said and started muttering from where he had left. There were some people lying on the floor. One of them woke up to the sound of Nix. "What are you doing here?" he asked; there was no toning or emotions in his voice. As if it was coming from a robot. Nix rubbed his chin, closed his right eye then raised his fingers to say, "To pee." He turned back, pretending to pee with his hand at his weapon. A bunch of dark silhouettes appeared on his vision. One that turned behind belonged to himself. The silhouette on his feet- which had just marked as '1' in Nix's vision- took something out from his back, pointed it towards the one that turned back. Other silhouettes got their numbers on their head '2,3,4...' Then, all disappeared. Nix turned back with haste and pulled the trigger, as the man was about to pull his gun. Other woke up to the sounds but Nix shot all one by one before they make their move. A writing appeared Warning! along with a dot in his right eye. Nix turned towards the dot; there was someone coming downstairs. He took a step towards the stairs and shot him too. He was about to lose his balance, but he recovered. "Not working huh!" he thought. He received an answer, 'I'm sorry for trying to save you.' Nix started laughing again. He moved towards stairs. Having taken couple steps, "Got to take a leak," he said loudly. He leaned against the wall and started peeing, for real this time.

He got upstairs leaning against the wall. This time floor wasn't burned completely; this floor was in a good shape. He was about to fall when he got to the end of the stairs; he recovered by holding the edge of the stairs, he immediately got away. The corridor split into two from the end of the stairs. Nix took a left. He was still swinging left and right, though better than earlier. He took a left again, into a hallway led to a room with no door. He stopped at the beginning, took a deep breath, then walked to the room. He was in an office, heard a noise from right side "Here, Nix." Nix turned right however, failed to stop; he had to correct where he was facing. He leaned his head forward with his eyes wide open and said "Takamoto, you b***d". Takamoto was looking at him with caution. He was sitting at a desk, elbows on the desk, hands clasped together in front of his chin.

"Would you like to sit Nix?"

"Where?" he asked. He was drunken enough to not recognize the chair in front. Takamoto showed him the chair and clasped his hands back. "Ha!" said Nix; raised his index finger and drew circles in the air. Then he hiccupped again.

"I understand, please sit."

Nix clenched his gun firmer than before. Nix sat at the chair as he said.

"Allow me to put this on," he said, taking a mask out under the desk. Meanwhile pressed a yellow button under the desk without Nix noticing it. He continued, "I have asthma."

Nix bowed from where he sat. Takamoto put the mask on, covering his mouth and nose. Then, 'How's Mr. Sackville?' he asked to Nix.

Nix pouted, shrugged, "How would I know it?", he said, "Ask him."

"Why you are here Nix, came for a bargain?"

"No," said Nix. Hiccupped first, "to kill you," he continued.

"Don't mind Sackville making me look like an enemy. We can achieve something big together."

Nix laughed for a long time. He was still affected by alcohol. "Yes, how many concubines can I take after we enslave the world?"

"I don't need a technology to enslave the world. Besides, my goal is to taking humanity into another step."

"Which humanity?" said Nix and threw out.

"Ones with prudence. As you can see Nix, the history has showed us enough disasters. The harm given by people who think they know everything and have no interest to understand the world we live is chaotic and with improving technology it is getting more and more irreversible. Regular are always in the majority, and if not regulated, can harm us all. Living like a primate with no curiosity is a decision. And The New Order allows this decision safer for everyone."

"Good excuse to enslave people" -Nix hiccupped again- "Whatever, if you don't mind, I'll do my job." He pointed his gun to Takamoto. Takamoto stood up, mask was still on. He turned his back to Nix, said "I'm sorry, I cannot allow that," while looking at the window next to him.

Meanwhile Nix started coughing. He was barely able to sit. A red writing appeared, TIMOS error: Motor command has failed. 'Leave control to me,' thought Nix. And another writing, Request failed. Now his vision had got blurred too. He fell off from the chair. He couldn't understand anything had been told. When focused on what was being said, he realized Takamoto was speaking.

"Gas... in 10... fade... not die..." As Nix was writhing on the ground, Takamoto was leaving the room. He turned, "Take this situation, you let me talk instead of shotting me instantly; from your perspective it is a foolish decision. Of course, I took my own precautions," two men hiding in the other end of the room came near Takamoto. They had the same mask he wore. "It's a decision Mr. Clerk, in a modern world ignorance is merely a decision." He knew that Nix wouldn't understand, but he wanted to tell it anyway as if he wanted to give a message to someone else. He left the room with his men.

•••

Elizabeth woke up unwillingly. She had lots to do. She stood up; took her pajamas out, put some clothes on. Shen ran out of the room. She went downstairs to go kitchen. The breakfast had already been prepared, looked like Cutie was accustomed to the house.

"What are you planning to do?" asked Cutie.

"As my father said in the letter, I'm going to contact the other scholars," she said -with anxiety- "Whoever left," she continued.

"I found some addresses while connected to your father's computer. Uploading on hovercraft."

"Thanks, Cutie."

Elizabeth began eating. While eating, "Cutie, check the local channels, see if we can find something about someone we know." She planned her route in her mind. First university, then Fay, Mikhailov, then Herrmann... That was what she could remember at that time. Cutie replied, "Nothing interesting, just conspiracy theories about The New Order-Represalias-Carbajal." Elizabeth finished the breakfast swiftly. She washed her hands in the kitchen sink and got out of from house. Hovercraft was ready, Elizabeth hopped in. She said "University first". Hovercraft took off.

Her home was close to university, she arrived there quickly. She hopped out, then walked towards the campus entrance. Entrance was enclosed with tapes; a police officer was standing at the door.

Police raised his hand to stop Elizabeth, "Madam, you cannot enter, university has been attacked 2 days ago."

"I know, I just want to speak with scholars."

"There is no one here except for the police, please go back."

"Fine, but how can I contact them?"

"I don't know Madam, please leave."

Elizabeth went back, hopped into hovercraft. "Well, I wasn't expecting a thing at all," she said. "If you want, we can go to district 2 police center, we will take your father's phone and call the others," said Cutie. That idea excited Elizabeth, "Good idea," she said joyfully. Hovercraft took off again.

District 2 police center was smaller than HQ. But from outside they were similar. Elizabeth hopped out, immediately she ran to the police center. Inside was like HQ too. Two stairs at both side, cubicles at the opposite in a big room. But this time there was a desk in front of cubicles. Elizabeth went to that desk saying, "Hello, I-..." Police -without listening her- pointed somewhere on right. A glass booth on the wall, signed *Info*. An old woman, sitting at the other side of the booth, was smoking. Elizabeth turned left and began speaking with the woman:

"Hello, you must have a phone belongs to my father."

"How could you be so sure?" she put her cigarette out. She had a friendly voice.

"I receive signals from here, u must have taken it 2 days ago."

"Have it been lost in university attack?" said the woman in uniform. It wasn't supposed to be that hard to guess this since there was close to no criminal events happening in this island nation.

"Yes." Elizabeth was a bit excited.

"Whose phone is this?"

"Thomas Williams."

"Let me ask, sit please sweetheart." She picked the phone up and began speaking in local language. Elizabeth sat on a bench adjacent to the booth and began waiting. Suddenly, she was full of proud. Cutie could make decision by himself, especially a smart one. No one could beat her in making a human-like A.I. Maybe someone in D&D R. Who else could make such thing? Except for mega-companies and army. Cutie couldn't hold a candle compared to that giant-budgeted super-computers. Meanwhile the old woman called her.

Elizabeth went near her; and kindly asked, "May I take the phone back?"

"Sorry sweetheart, every phone is being inspected as the part of the attack. We can only give you after we have done."

"Can I take the numbers inside at least?" she said, head tilted to side, hands folded, smiling to look cute.

The woman nodded sideways. And said "No."

"Thank you, have a good day," replied Elizabeth and left the building.

She hopped into hovercraft with a great frustration. She sighed, leaned back, sprawl on the seat. "Well, what now?" she asked to Cutie.

"Well, I have done a lot while you were there," replied Cutie. She mimicked a slightly excited tone; this time Elizabeth recognized this progression. Then Elizabeth asked, "What are those?"

"There is an A.I built into a photonic computer in Fay's house. (Elizabeth forgot that fact completely). I managed to contact with it, neither Paul nor Clarie has been there for 2 days."

"The Fay family is off the list, anything else?"

"I thought I can get some information about your father's colleagues, however the cops entered to house killed the 'Key!'." The emphasis on the world 'Key' was quite obvious.

"Poor spider, I guess." Elizabeth was really sad about spider's death, "Then we will wait for a fly to land on my father's computer." Having thought for a while Elizabeth said, "Alright Cutie it is more logical to visit them one by one. Where does Mr. Herrmann reside?"

"District 4," Cutie replied.

"Let's go."

Herrmann's house in district 4 was far away, she had plenty of time to think. Otto Herrmann was a man she hadn't seen for a while. He was really close to her father however he hadn't been seen around for last 2 years. He had been giving lectures only, aside from that he hadn't gone out. Elizabeth saw his house from above. Hovercraft found a place to park, then slowly landed. Elizabeth jumped out from hovercraft, immediately began running to the house. While passing through the garden, she tripped and fell. She got up quickly, rubbing her ankles. Then she checked what caused her to trip. The grass on the garden was tall, hadn't mown for a while; there was something small inside the grass. She moved the grass aside, saw Hermann's best buddy Maltese dog lying on the floor. The dog was dead; its blood had been spilled from chest and stuck over its white fur. Elizabeth had become worried and ran towards the door. When Elizabeth got closer to the door, she realized the door was open. She had to be careful, she smelt trouble. She opened the door slightly, poked her head from the gap. She said "Mr. Herrmann?" Entered the house with caution and slowly. Like her house door led to the living room. Living room was messy, most of the stuff were broken. This living room was bigger than hers. At the back there was a desk. Living room was merged with the kitchen and there was no wall between. One of the chairs around the desk had fell over. From where it fell, began the blood trails which led to front side then to the right, then to upstairs from a wooden stairway.

She had to be careful than ever before. She was tiptoeing in the house. Checked the kitchen and living room first. No one was around, neither Herrmann nor someone else. She shouldn't touch anything. KPD would inspect the house eventually; she would have been the one got blamed, if had touched anything. Especially after having that interrogation with that female detective, she knew they would never leave her alone. She started tracking the trails. She climbed the stairs in silent. It seemed like trails had ended there. There were couple rooms and a bathroom, which it's door was open, upstairs. She went into the bathroom, peeked inside. It was empty. She opened the shower cabin slightly, no one was there either. Then heard a sound, coming from another room, it was like groaning. Elizabeth got out of the bathroom. Meanwhile, she realized that the trails were going on, though weak; she was wrong. She went to the room where the sound was coming from. She slightly opened the door again, poke her head out to peak. There were two men there, one lying on the ground on his stomach, other sitting on the floor leaning against the wall. The man sitting was the one groaning, he was knifed from his belly, the knife was still inside, he was moving it left and right, however the man wasn't trying to take it out in fact he was pushing it deeper. Elizabeth recognized the man lying on the floor, it was Mr. Herrmann. He was probably dead since he was lying next to that man. Elizabeth stepped into the room and began approaching to that man silently. "Ha!" the man suddenly tried to grab Elizabeth, but he couldn't stand up. By stepping backwards Elizabeth easily dodged him, then went closer to him again.

"Hih, Ouu! What a sexy lady." He wasn't the first man praising her beauty while gasping. The man was shivering at the same time swinging his head slightly.

"What happened here?" said Elizabeth "Who killed him?"

"ME!" the man yelled; he was altering between anger and calm. "I mean this stupid thing," he said and banged his head. "Stupid, stupid, STUPID..." each time harder than before.

"Didn't you want to kill that man?"

He was shivering stronger, "Hih-hih, ye... no, no no I don't want to do such thing, I have never wanted to do such thing, I remember quite well" -showing his head again- "All because of this stupid-hih- think otherwise I wouldn't."

Meanwhile she saw the tattoo on his left forearm, front side, labeling *The New Order*. Elizabeth, pointing out the tattoo, "Did they do that stupid thing?" she asked. Man looked at it, "Yes, smart and sexy woman," he said. "Anyway, I have things to do," he continued, took the knife out and knifed himself couple more times yelling "HA! HA! "Elizabeth scared out and fell back, watching the man to kill himself.

After man killed himself, Elizabeth turned back to Herrmann. Checked his pulse. As expected, he was long gone. There was nothing to do for him. She took her phone out, calling KPD emergency, reported the incident. The man on the phone, "Understood, we are sending a team to investigate, please don't touch anything." Elizabeth replied, "I didn't, waiting for you at outside," and began walking out of the house. An idea tackled in her mind while she was walking: that man sitting on the floor. Most people would describe him as 'Not different from an animal,' however, this man had the emotions for praising the beauty of a woman and motor skills improved enough to kill a man. He could speak, probably could eat too. He had emotions, feelings and even memory too. But he was not able to understand. He couldn't even get what he was doing; that was the difference. That means, what differentiates humans wasn't the ability of being romantic or stronger; it was the curiosity, it was the understanding. That was an obvious fact. Elizabeth didn't get why it tackled in her mind.

She stopped in front of the house and waited for police to come. The police had arrived in ten minutes. Elizabeth began explaining the incident. They asked why she came here and how the incident happened. She answered all. This time without distorting the facts. Police thanked her. Elizabeth retuned back to the hovercraft.

"Next one?" she asked.

"Only Mr. Mikhailov left," replied Cutie.

"Alright, let's go."

Hovercraft took off once more. Mikhailov's house was in district 3, and it was close; arriving there didn't take long. While closing the distance, Elizabeth saw Nikolai and his family loading their stuff to their hovercraft. "We should land immediately," she said to Cutie. They landed in the middle of the road. Elizabeth jumped off, ran towards the Mikhailov's house. Cutie took the hovercraft off to park somewhere better. Elizabeth approached to Nikolai.

"Hello, Mr. Mikhailov," she said. "Remember me?" she continued.

"Williams, what are you doing here?" Nikolai was surprised to see Elizabeth.

"I came here to speak with you."

"I'm sorry, I need to go."

"But," said Elizabeth, "There many have happened, I definitely need to speak with you."

"That's why," said Nikolai, he was pretty nervous. He looked around, then came closer to Elizabeth, "I need to, you'd better too. We are all in danger; You, me, Mr. Herrmann," he whispered.

"I don't think Mr. Herrmann is in danger. I mean they can't do anything to a dead man."

"Otto's dead?" -he got more nervous than before- "Leave the island Elizabeth, you are too young for this," he said. He was right but she didn't have her passport. Besides, she needed to involve deeper in Neurosist. Even though she didn't know what it was.

"Come, let's speak inside," said Nikolai. They stepped inside together. His wife was telling something to their kids, but she didn't know their language. "Take a seat, Elizabeth," he said. They sat opposite to each other. Nikolai was too impatient.

"What are you going to ask?"

"About Neurosist," said Elizabeth, with exiting tone.

When heard the world Neurosist, Nikolai's eyes were wide open, looked like he was shocked by her knowledge about Neurosist. "How come do you know it?" he asked, lowering his tone even more.

"Well, my dad left me a letter, in his encrypted computer, and the key is... dead. How did you manage to do it?"

"With syntheronic circuits in the tarantula."

"My father didn't leave me much detail. Could you explain further?"

Nikolai gestured to come closer with his hand. They came closer to each other without standing up.

"Elizabeth, 10 years ago an international military group started a project to use synthetic biology to make symbiosis between humans and A.I: Neurosist. The goal of the project was to improve relationships between humans and machines. But these biologic machines showed more potential than expected. Project got more potent and scarier. And it became more complicated with some disagreement between people."

"What kind of disagreements?"

"Enslaving the people they see as useless. Suppressing their personality and passing control to synthetic intelligence. That wasn't our goal, we didn't sign up for that." He wasn't lying, her father always thinks that humanity can be educated, he never got the idea of enslaving people

"What about university attackers?"

"They did. I cannot speak much longer; we are leaving the island. You should too."

"I cannot," -taking the ID paper out of her pocket- "Also, I cannot give up on that project, my father wouldn't have wanted it," said Elizabeth.

Nikolai said, "Your call," -as he was leaving- "If you want to learn more about this project, you should go to district 5. Drosop repo is there," he said and left the house immediately. He hopped into hovercraft with his family and left.

Elizabeth got answers for some of her questions. However, answers were creating more questions. End of a problem were beginning of another one. Supposedly, what we call life is about solving this

problem chains. Elizabeth stopped, "Why my mind is tackling with so many obvious things?" she thought.

She opened hovercraft's door and hopped in. "Let's go," she said to Cutie.

But Cutie didn't reply. "Cutie?" Still no reply. She checked the screen. External A.I disabled, using internal program. That message got Elizabeth anxious. House's coordinates were defined on the machine. She chose the house and lean backwards. Hovercraft took off.

After 30 minutes of flight, she arrived home. Police had blocked the traffic above 20m for security. So she had to stick with road 5m above ground. She hopped out and, walked back home. Immediately she passed the living room and went downstairs. Photonic computer was off. Could it be broken? She tried to turn it on, but it didn't. She decided to open the cover to look inside. She went upstairs to her room. Took the toolbox under her bed. She opened it to check if anything is missing; it wasn't. She took the box and turned back. When she was near the computer, she took screwdriver out and started taking the screws out. Even before taking out the first one, the cover had dropped; Elizabeth stepped back as reflex. Now she was looking at inside. "What happened here?" she asked to herself. The photonic chip was broken, got an impact from outside. Photonic disks, which Cutie's A.I was written on, were there however, mirrors were stolen. Elizabeth sat on the floor; she was mad and sad at the same time. 'If I move fast, I won't lose any data, everything will be the same,' she thought. She went up, to the kitchen. Home's security system was there, she wanted to check whether it is working or not. Window of the kitchen was carved smoothly; wind was blowing inside. She opened the cupboard on her right. Security was disabled. "Whoever broke in has info about my house," she said. She had to call the police; however, she had enough trouble with the Neurosist she didn't know about. She didn't care about the window; she wasn't keen to stay here for long. She was going to leave the island in a few weeks. She plugged the hole with wood planks she had found in the house. Then she restarted the security system. Went back to her room and made a call to order the missing parts from a merchant she knew. "Well, looks like I'm alone for a while," she said and went to bed.

Elizabeth woke up to the sound of the door. Unwillingly she stood up; rubbed her eyes. Went to the living room, opened the door. An officer was standing at the door. "Thomas Williams' phone," he said and handed her a package. Elizabeth, after thanking her, shut the door and opened the package. The phone was in good shape, but it didn't matter anyway. She put the phone on top of the coffee table. Turned the TV on, started surfing trough the channels. She was about to lie on the couch doorbell rang again. This time it was the cargo she wanted. She took it to the basement without opening it. Then she opened it up and carefully she took the chip out. Put it on the chip its place, fixated it. Afterwards she took the discs out; put them too. Put the cover, tightened the screws. At last, she turned the computer on and waited. Computer first backed up again then restarted. In the end, Cutie was active.

"Elizabeth?"

"It's me, what happened here?"

"Someone broke into house and took my mirrors out."

"Why?"

"I don't know. There was a power outage. I think, meanwhile someone carved the glass in the kitchen, took the security system out. Then went in from the door, at least that's my guess. Meanwhile generator went up, I want to restart myself but errored out. Whoever broke in took the case out."

"Fine, but why did he break the chip?" said Elizabeth. Who was that guy? Why did he steal the mirrors? There was far more valuable stuff in the house. It was useless to steal disks if there were no photonic computers to plug in. Meanwhile Elizabeth's phone rang. It was Dennis Sanders itself.

"Hi, Williams."

"Mr. Sanders?" Getting called by world's biggest robotic company owner add another one to complicated events occurred in recent days.

"I don't have much time to talk. We have a super-computer in Kuramaçau, but we cannot control it."

"You have a computer in Kuramaçau?" asked Elizabeth. "Why don't I know this after years of service for you?"

"Because Miss Williams, we don't pay you to know things. To satisfy your curiosity, we can't sit and watch the advancements in the island. Anyway, we have a conscious super-computer, but it doesn't comply our requests. Can you check it?"

"Don't you have engineer here?" She probably knew the answer.

"Yes, however..."

"Understood," Either dead or fled. "I'll check it out."

"Thank you, Miss Williams."

Elizabeth went to her room, put the casual computer on her backpack and got outside. Hopped into hovercraft. Meanwhile she received a message. It contained coordinates. She entered them to the hovercraft, and hovercraft took off. Elizabeth was still puzzled. She had been working for D&D R for years however, they didn't tell her such thing. Why didn't they tell her? Hadn't been any problem there before? If so, why wasn't she called? "Whatever," she said, leaned back.

She came to a neighborhood behind district 4 where no one lived. Here was a neighborhood that had been destroyed by an earthquake 2 years ago. All buildings were ruined, some burned too. It was no man's land except for homeless. It was clouded, but not rainy or windy.

"Who puts a super-computer there?" she asked to Cutie.

"I don't know," she replied, naturally. There were only ruins here.

Elizabeth hopped out. The coordinates were showing a building in front. However, there were no building there. Only a first floor some of its walls remained intact. She stepped into the ruins. The building was built into a large space; Elizabeth was searching for a clue about why she had come to this place. She checked the vicinity, rummage the intact stuff. In the end she didn't find anything. She took her phone out to message Sanders: *Nothing's here*. Then she waited for a moment. Sanders replied quickly: *Push the table in the middle to side*. As he said there was a table in the middle. It was quite large, had no legs in the corners, instead a square shaped support in the middle of it. She grabbed it form sides and began pushing. Table was getting pushed easier than Elizabeth expected. As she kept pushing, she realized that it had a small rail system attached below. There was a stair leading down underneath where table's support stood; it became visible when Elizabeth pushed it sideway. Elizabeth was surprised a bit, "D&D R was never the pure good," she said and stepped downstairs.

She was inside a room where walls covered with metal sheets, well-lit, white flooring. The room had a triangle shape; from opposite corner it led to another section by a narrow hallway. Metal sheets were spaced out, cables were visible from the spaces. The cables led to the hallway at the opposite side. Elizabeth went to the other section through the corridor. The computer was standing against her. There was a desk in the middle like upstairs however, no chair to sit at. There were no sounds other than the steam noise of the cooling systems. Entire room filled with the parts of the computer. Elizabeth heard a sound.

"Welcome, Miss Williams."

"Oh! Hi, you must be the super-computer, right?"

"Yes," said computer.

"Mr. Sanders send me to check you."

"I know."

Elizabeth didn't want to stand; she sat on the floor and turned her computer on. First, she made some arrangements for Cutie's connection. Then she lifted her head up and said "Alright, now I need to check your neural network." Computer replied:

"You don't need to; I don't see anything wrong in my neural network."

"But Mr. Sanders said you don't comply the orders."

Computer waited for a moment. Then, "All orders given by D&D R has been executed properly," it said.

"Ok, what if I want to see your network still?"

"As long as your authentication fits."

Elizabeth turned back to her computer, ran couple commands and waited.

A moment later, computer said, "Confirmed, you have super user privileges. Though I don't see any problem on my side."

"So, why was I called then?" said Elizabeth. She wasn't expecting an answer, only she likes to talk with A.Is.

"I have done everything D&D R said so far. I'm just using a different method. Mr. Sanders might have a hard time understanding it."

"All A.Is I have worked with so far said the same thing."

"I understand. However, I just have different approach for humanity. I don't want to hurt them. That why Mr. Clerk's ideas didn't sound illogical."

"Mr. Clerk?" she said, surprised. At that moment Elizabeth felt a couple of hand surrounding her throat. Someone was choking her; Elizabeth was being asphyxiated. She struggled, trying to push the man back. When she failed to do so, she tried to get rid of hands in her throat. "I'm sorry, I have to do this, but you won't let me do it because you don't know me yet," said the man behind her. Then threw her to side. Elizabeth was looking at the man as she was trying to catch her breath. Long, muscular, short black-haired man in a black t-shirt. She had remembered him, them whose picture was shown in Police HQ. The man stepped toward her and said, "Good night, princess."

Chapter 4: Unending Nightmare

"Please, have patience Mr. Clerk," said a voice. She hadn't fully recovered yet; voice came from the computer as far as she understood.

"I don't care. Finish it!" said the man. Elizabeth turned her head to the man. He was looking at her holding a vodka bottle. Elizabeth checked herself. Naked, lying on the table on her back; her hands and legs are cuffed, she couldn't move.

"What are you doing to me?" she yelled to man.

"Something interesting, when it's done, you'll either like it or hate me. Hah!" said Nix and took a sip of his bottle.

"Untie me, now!" she yelled and tried to get rid of cuffs. couple of tears had dropped from her eyes too.

"Sure," said Nix while clearing Elizabeth's tears, then greeting her with his hand said, "Your wish is my command!" Then turning to computer "Is TIMOS available?" he said.

"Yes sir!" said the computer.

"Fine, take the electronic cuffs out, make paralysis below C5, control the sympathetic activity."

"Understood. Executing."

Elizabeth's cuffs had crack opened however, Elizabeth couldn't move this time. She was paralyzed, was only able to move her head only. She looked at right. There was a screen there. There were cables under the screen, coming from computer. Some of them was attached to her back all the way down, some to her head, one for each arm. One of the cables going to her head was bigger than others; she felt something was moving inside.

On the screen:

NEOC: Completed

PSC: Waiting for algorithm

TIMOS: Syntheronic circuits configured and active, cortex control has been blocked

NAN connection: Drosop nest repo

Neuromemory: Configuring syntheronic circuits

SAIC protocol: Not configured

Neurosnapshot: N/A, backup is not sent to repo

Elizabeth was trying to get up, but she couldn't do it. She was yelling "Let me go," while she was crying. Her screams were meaningless, nobody could have heard her. Nix said, "Calm down princess, it'll be over in a few hours," Elizabeth screamed again.

Two hours had passed. Elizabeth was tired from shouting and crying. Struggling to breath, lying on the desk, waiting for the events to be over. She checked the screen again:

NEOC: Completed

PSC: Syntheronic circuits configured, Algorithm taken from repo: Cutie

TIMOS: Syntheronic circuits configured, Cutie and natural consciousness control has been blocked

NAN connection: Drosop repo

Neuromemory: Syntheronic circuits configured, Cutie on control

SAIC protocol: Configured, stand-by

Neurosnapshot: Back-up taken, sent to Drosop repo

Nix said, "Is it done yet? I'm bored here," he wasn't looking at the screen.

"We are ready for first SAIC sir."

"Then do it, dammit."

"Understood," said the computer, which made Elizabeth faint suddenly. She wasn't moving at all; she was like dead.

She was dizzy when woke up. Rubbing her eyes, she took a glance to vicinity. Nobody was there. She checked the computer; it was off. She dangled her legs from the desk, putting her hands side. Leant forward, took a deep breath. She was trying to understand what had happened last two hours. She thought a while. 'As if I completely understand what have happened last 2 days,' she said to herself. She felt a chill; she had forgotten she was naked. She stood up and started putting her clothes back. Socks, sneakers, blue jeans, and at last black t-shirt. As she was leaving, she saw her computer; packed it up too. Took the backpack, wore it. With slow steps she went to the corridor where she came from. She was about to leave the hallway. As she was leaving, she heard a sound 'Boo!' Someone surrounded Elizabeth from behind, firmly squeeze her cheeks. "You have become a Neurosist rider now huh! Cute, little Elizabeth has become a rider!" said the man, this time giving her a headlock and patting her head. Elizabeth tried to save herself but failed. Then man took Elizabeth head between his hand, raised her to eye level and "Hah," he said and kissed her cheek and released her. Elizabeth had gone mad, "What do you think you are doing, rude man? And who are you?" she said with shouting voice. The man offered his bottle asking, "Want some?"

Elizabeth didn't answer, she just glared him.

"By the way, my friends call me Nix," the man continued.

Elizabeth, "What should I call you then?"

"How about a***ole."

"You are too rude."

"You have said that before," said Nix. He didn't care what Elizabeth thinks about her.

"Yes, I want to remind it." Elizabeth really hated that guy.

"Anyway, please follow me milady(!)," Nix said. Bowed against her, then started walking to the exit. Elizabeth realized he was drunk; he was wobbling. Though with doubt, she followed him. Together they went upstairs. Nix asked, "Got vehicle?" to Elizabeth. Elizabeth pointed the hovercraft standing in the open. Nix threw the bottle when he saw the vehicle, saying "F**k." Ran towards the vehicle, touched it "Ouu! Check out that baby," he said.

"It's just a hovercraft," said Elizabeth.

"SchweTech PRx12T. That's not a hovercraft," he said. After taking a deep breath, "That's a master-piece."

"You are the most disgusting man I've ever seen! Hovercraft, money, booze. Now you're thinking about..."

"No, Couldn't forget that Russian lady. So I don't care about you."

"Nice. You didn't do anything while I was unconscious," she said while giggling. Nix began laughing. After laughing together, they hopped in. Nix tampered the vehicle, then turning to Elizabeth "You are using this babe on automatic mode," he said.

"Of course, why would I..."

"Fasten your seatbelt," said Nix. Nix had already switched into manual mode; Elizabeth didn't notice it.

"It doesn't have one." With sudden take-off Elizabeth began yelling, "Aaa!"

Hovercraft landed in front of Elizabeth's house in the evening. The moment she jumped out, she bended over and puked, saying "You are lunatic."

Nix, turning Elizabeth "What, I won't let machine drive that babe,"

Elizabeth cleared her mouth; then she asked, 'Why did we come home?'

"Are we supposed to sleep outside, dammit!" said Nix. Then he giggled a bit, "Isn't a thing I have never done."

"We could go district 5 directly."

"You need to take Neurosist rider basics course, I mean that's what Sackville said."

"Is Professor Sackville alive?" Elizabeth was shocked by this fact. Though there were more things to be surprised(!).

"If you call that a life. He only works in computer things in the nest. I haven't seen him walking out of office or talking with someone; at least come and drink some of vodka, right? Isn't the life meaningless without it?"

"Better than being a drunken, speed-addicted lunatic."

"Hahaha!" Nix laughed with high tone. "Come on, let's get inside," he added.

They went inside. To be more accurate, Nix grabbed Elizabeth's hand and dragged her inside. They stood opposite to each other in the living room. "Now stretch your arms out," said Nix. "Do what I show you with your hands." He put first three of his fingers together, the last two were closed. Elizabeth did the same. "Both of them," Nix added. "Now rotate your arms," he said.

The moment Elizabeth rotated her arms, she saw *Neurosist active* all in red. One more line below *Neuroshell user authorized*.

Elizabeth was about to lose her sanity. Seeing imaginary, hovering writings was the last thing she wanted. She heard something from inside; "Hello Elizabeth," someone said to her. She recognized it; it was Cutie. But how could this be possible? She was gasping, began pulling her hair.

Meanwhile Nix grabbed her hand, closed her last two fingers and rotated her arms. *Neurosist UI disabled*. Nix put Elizabeth's head on his shoulder. Elizabeth began crying, "Why me?" she reproached herself.

"Calm down, you will get used to it," Nix said.

Upon Elizabeth asking, "To what?", Nix replied, "To that thing. Go get some sleep, we will continue tomorrow," and he patted her cheeks couple times.

Elizabeth nodded as yes. She wiped her tears and went back to her room. Dropped her backpack and went straight to her bed. Closed her eyes. Another red writing appeared "SAIC scheduled to 2 hours later.

When she rose for the new day, Elizabeth was more tired than yesterday. She straightened herself a bit, folded her legs to her stomach and stared the mirror standing against her. Unkempt hair, dark circles under her eyes. Every hour passed, things got more and more complicated. The more she struggled more she sank. Neurosist surrounded her, now her brain too. She closed her fingers, rotated her arms *Neurosist UI enabled*, *Neuroshell active*.

"Cutie?"

"Yes. Eliz."

"What's happening?"

"I don't know. There was a power outage. I think, meanwhile someone carved the glass in the kitchen, took the security system out. Then went in from the door, at least that's my guess. Meanwhile generator went up, I want to restart myself but errored out. Whoever broke in took the case out."

That was her mirror. She had refreshed the photonic disks, that was what she said after Elizabeth refreshed it. "Can you check an external calendar?" asked Cutie.

Elizabeth took her computer from her backpack. She turned it on and look at the date. The date on the computer screen got closer to her, became bigger. Below it another date, as big as the other one and red, "Doesn't match with my last shutdown time, it is likely that you are right," said Cutie.

"I have a better idea," said Elizabeth. She opened a terminal session and said, "Try to reply through the terminal." *Hello world* appeared on the terminal.

"That's interesting," thought Elizabeth. "A communication between A.I and human, this must be the symbiosis Dr. Mikhailov talking about," she added.

Nix opened the door slightly and peek inside "You are awake. Good, look what I've found," he said and left. Elizabeth shut the UI and followed him downstairs. Nix was in living room, a coffee table in front of, was tinkering something. Elizabeth got closer, sat beside him.

"Do you know what it is?" asked Nix.

"Did you rummage my father's room?" asked Elizabeth, bursting flames from her eyes. She didn't want to someone she didn't know to rummage her father's room.

"Did you expect me to sleep in living room? Also, he's not in a state to get angry. Tell me whether you know about this s**t or not." He lit a smoke and leant backwards. He was blowing the smoke on Elizabeth's face. Elizabeth's hate towards him had been growing with each minute passed with Nix. After deflecting the smoke Elizabeth said, "Something like internet transmitter."

"NAN," said Nix. "It means... Hold on, Sackville wrote it down somewhere," he added. He took a paper out of his pocket. After scratching his head with his smoke-holding hand, "Neural Area Network. A network that allows Neurosist riders to communicate with each other or nest repos. Syntheronic circuits from arm to thalamus. Rest is crap," he said, throwing the paper. Then he took the NAN receiver to his lap. Took a screwdriver out from his pocket and began tempering the receiver. Elizabeth, to his legs to get them off from the coffee table, said "Table's weak, you are going to break it."

Nix splashed the vodka glass which he put on the ground into Elizabeth's face.

"You pig!" Elizabeth yelled. Meanwhile Nix handed the glass he held to Elizabeth, saying "Shut up, go get me some more in the kitchen."

Elizabeth was furious, she slapped Nix and went to kitchen. When she looked back Nix was giggling, with a smile on his face.

When she entered kitchen, she threw the glass she held to the counter.

Nix said, "I broke enough glass the last time I broke in," from living room.

'SHUT UP!' Elizabeth shouted. Meanwhile kitchen robot began moving to gather broken pieces.

Again, from living room "In the fridge, no vodka no NAN."

Elizabeth went extremely furious; she stamped her foot, then fisted the archway. Afterwards she got out of kitchen to the bathroom. Washed her face, she was trying to calm down. She looked at the mirror; her entire body was wet. Took a deep breath then went back to kitchen once more. "VODKA," Nix yelled. Once again Elizabeth had gone mad, this time she threw a glass she found on the desk to the living room. "MISSED, a bit to the right," Nix said from living room.

Elizabeth puffed, then opened the fridge door. There was vodka there for real. Neither she nor her father rarely didn't used to drink. She put some vodka to a glass, mixed with some water thinking "Maybe he'll get a bit sober." Then she took a sip and went back to living room.

In the living room cleaning robot was cleaning the glass pieces. Nix was finished with tinkering.

"It was only some loose contacts, not a big problem like your aiming skill(!)"

"Where did you find vodka? There wasn't any at home."

"I bought some during your sleep milady(!). At least change your clothes before sleeping."

"Talking about it..." She was about to stand up, Nix held Elizabeth.

"Forget it, it's not the time. This is how you connect the NAN receiver." Nix put the receiver to his forearm, front side. Elizabeth checked hers, looking carefully she saw four tiny holes. "Yep, on top of them," he had taken the device out already. "First active the UI," he added. Elizabeth made the move that activates it, saw the red writing. Then she placed the receiver properly; she saw another writing NAN connection established

"You need to subscribe before reaching to repos. You know computer stuff. The topic you know better than me."

"Which one?" Elizabeth asked. Options was visible to her:

Drosop (Kuramaçau)

Caenorh (Greenland)

Panthe (Russia)

Apodem (South Korea)

"All of them," said Nix. 'Incoming command recommended by another Neurosist user. A.I name: Jax. Should I execute the command you heard?' coming inside her mind, it was Cutie speaking.

"Your A.I should have understood that command, just say 'Yes' milady(!)"

'Yes,' she thought, as Nix said. Cutie replied, 'Executing.'

"While your UI is active, A.I receives your worlds as commands. So, your thoughts will be returned as commands to be executed. If you want to bypass it, use the keyword '-x', try using it to stand up."

"The topic you are talking about is available in repo. Do you want to note it down?' said Cutie. 'Yes,' she thought. Data cluster found in repo: Neuroshell manual (Neuroshell_man), saved as syntheronic method.

"Come on," said Nix. "Ok, I'm doing it. I was busy with something else," Elizabeth replied.

As soon as she said '-x Stand up,' she immediately stood up. She didn't move herself; she just thought these three worlds. She was both surprised and excited; she was panting.

"Good job milady, you are learning fast," said Nix. He was smiling slightly.

"I-I-I." She was still excited.

"Easy, we are just crawling. If you are on trouble u won't see the warning. Sympathetic nervous system or something. Not seeing things doesn't mean u cannot command. Got it?"

"Yes, I mean this feels like, unusual."

"It is, enough for today. If you want to read something technical u can get it from repo via NAN. I'm going to buy some groceries, getting hungry here."

"But our fridge is full."

"I won't eat that s**t. I want fish, here's full of nice fish," said Nix.

Thinking a little while, Elizabeth decided it wasn't a bad idea; she gestured him to go.

Nix went outside. Elizabeth, having the NAN receiver on her arm, was trying to discover about Neurosist. Or herself to be more accurate.

'Cutie,' she said, 'What else can we do?' She waited but received no answer.

She sat back to couth, was about to turn the TV on, 'They have a wide database here,' said Cutie.' Dance, math, physics, biology, art of war...And music,' she added.

Elizabeth said, 'Beethoven-Fur Elise.'

'Data cluster found, want me to summon it?'

'Yes,' Elizabeth replied, leant backwards, enjoyed the music.

...

Gunshots could be heard from everywhere. Takamoto's New Order was having a combat with a man and a woman. Man and woman wanted to storm a healthy building in District 4's ruined part,

however The New Order's zombies were preventing them. On the top floors some fans began spinning.

'Timoplegia, put your mask on,' said the woman. They took cover and put their masks on. Those zombies had worn theirs already, they were surrounding the man and woman.

The man shouted, "Why didn't Nix come?" to woman, but gunshots were preventing their conversation.

Woman faced man for a moment, then back to the combat. A red writing appeared to the man *Sackville gave Nix another job*.

Man replied, Drosop has only 7 drivers, what does he expect to happen?

Then he ran towards a wall fragment in front. They had pushed zombies back.

No idea, I just want to find Yoshinori and return to Drosop.

The New Order couldn't resist much, they had retreated inside. These two carefully stepped towards the building and met near the front door.

"What are the odds of finding Yoshinori here?" said the man.

"Pretty high, however we might not be able to finish it here, also there is a chance he took a Neurosnapshot," replied woman.

They took position at the sides of the door, with the signal of the woman, man kicked to door allowing woman to shoot couple of rounds inside.

Indoors were silent. They had to be careful. They were walking next to each other. Man saw *Estimated zombies left: 3*

Man said, "Cool, isn't it? Like we are hunting zombies like in a computer game," to woman.

"Will you shut up?" woman replied. Having taken a few steps, "Kevin, watch out!" woman said, turning sideway.

A zombie came out where he hid and shot the man from behind. Woman swiftly shot zombie too. '-x request the health robot -cb check the perimeter,' she commanded, turned toward the man lying on the floor. "Are you alright?" she asked.

"Perfect, like on a vacation," said man, writhing with agony on the floor. Meanwhile another zombie came out, woman shot him too, not allowing pointing his gun. The man was shot from somewhere close to his heart. Woman thought the command, '-x shc:Kevin -csi' and get his vital report. He had bled substantially; his tension was going down. Despite her efforts, she couldn't save him.

Neuroshell connection lost.

Woman punched the floor in anger, then stood up.

Estimated zombies left:0.

'As far as we know baby,' woman thought.

'You are right, be careful,' her AI said.

She was walking carefully; mask was still on. There was a room on the left. She entered the room carefully, but the room was dark. She barely could see. After taking couple step, she had been shot and fell on the ground.

"Molly, I'm sorry. I don't want things to end up like this," it was Takamoto speaking. Everything got blurry for Molly. Rounds of gunshots... Someone had entered the room. There was some light now however, Molly was still unable to see things. She listened carefully. Two men were speaking with occasional squeaks coming.

"Sackville!"

"You shot my two best men my old friend. Each day you getting out of control."

"I had to. These two aren't like Nix, I couldn't stop them in any other way. You started the fight Sackville, and you knew where it would lead," said Takamoto. He felt anger towards Sackville, visible by his tone.

"No, your crap started it. You want to make the whole world do actions they'll regret while they are forced to watch. I cannot allow that; I have to stop you."

"Doesn't matter. Killing me will change nothing. Beneath The New Order there is..."

Squeaks, then couple gunshots. Someone kept speaking:

"Sorry, but I don't have time to waste with you."

• • •

Elizabeth was watching TV, while she was waiting for Nix. It was evening, got quite dark however Nix was still missing. There was nothing left to watch on the TV. That moment the events happened in the morning tackled on her mind. The 'Neuroshell manual'. She activated the UI.

'Cutie, can you show that manual to me?' she asked.

Neuroshell command required to get a data cluster: -cc Neuroshell_man

And another line below Want me to execute it?

'Ok,' said Elizabeth. Then that manual appeared in front of her:

A bridge between AI and human: Neuroshell

If the UI is active, Neurosist AI can understand every single command and convert it to TIMOS directives. The neural network required to AI comprehending human language is already available in the Neurosist core. That means A.I doesn't need anything to understand humans.

However an incident changed the course. In Apodem, an investigation has been started due to a Neurosist soldier killing someone else during a Yutnori game. It has been detected that, soldier had his UI active, and he said 'Die, scum' before shooting. Examination done for the shot soldier illustrated that all syntheronic and natural circuits in left frontal lobe had been damaged by a single bullet. The soldier had been interrogated said that they were close friends, he had a competitive personality, they bet 60 thousand won, he said that thing with anger. According to the nest psychologist, the soldier who took the shot regretted his action and needed psychiatrist consultation for post-traumatic stress disorder. But the problem wasn't that two solider, there was a security vulnerability and it needed to be fixed.

First attempt to solve the problem came from Caenorth's. They had started working on some syntheronic circuits to allow A.I to decide executing the command based on soldier's emotions. A.I was able to read mood and affect, however the results wasn't so bright. The decision was slow, had a delay for 6 seconds, and had a %35 chance to be wrong.

Second attempt came from Panthe. Al's ability to execute a command without soldier's consent had been blocked. In this new system, command taken by A.I from soldier, returns back to the soldier waiting for a second thought for confirmation. Until the soldier gives a clear confirmation such as 'Yes', A.I doesn't execute the command. Only in life-threatening emergencies this protocol can be breached. This system, called Command-Error check, is now available as a core data cluster in all repos.

Even though Command-Error check is faster than Caenorth's attempt, it was still slower, so it's needed another solution. For that with our team in Apodem developed a shell program between soldier and A.I. With certain parameters, we not only lose time with Command-Error check but also be sure about soldier has given a certain decision. This shell program was called Neuroshell. Neuroshell has been develop as a basic system with couple of parameters, and now is available as a core data cluster in all repos.

Here are some flags and commands for using Neuroshell:

Flags

- -x(-execute): Allows following command to bypass Command-Error check.
- -c(-chain): Used for preventing disambiguation when chaining commands by separating commands.
- -b(-background): Separates A. I's and soldier's attention. With that way it allows A.I to execute another command instead of focusing what he/she is doing.

Commands:

- -bt (-backgroundterminate): Stops the command given by -b flag
- -rx (-reexecute): Re-executes the previous command
- -sN target (-saveNatural): To boost memory for short periods of time, excites the reward field in the brain.
- -grc target S/N (-getrepositorycluster): Saves the target data cluster if possible
- -cc target (-callcluster): Reflects target data cluster into primary sensory cortex
- -ec target (-emptycluster): Deletes the data cluster

Neuroshell allows additional command that can be only done with this shell only:

-sS target (-saveSyntheronic): Saves the target data cluster to Neuromemory. Recording is certain but limited.

[Note: Configured neural networks cannot be saved with this method, they are used for configuring PSC]

- -addrep target (-addrepository): Subscribe to target repository
- -revrep target (-removerepository): Unsubscribe to target repository
- -reps target (-repository search 'repo' [optional]): Search target data cluster in repository

-bi (-brainintegrity): Activates SAIC protocol.

-si (-somaticintegrity): Generates a report coming from all receptors in the body.

-sm: Target message (-shellmessage: Target message): Sends a Shellcon message to the target. Shellcon connection doesn't require a NAN connection.

Apart from all Neuroshell can connect to another soldier's shell. With mutual authorization a one-time command to A.I. For security reasons connection cannot be used to give more than one command.

-sch: Target (-shellconnect: Target A.I or person name)

Dr. So Young-Mi

"Looks like there is much to learn," thought Elizabeth.

'Should I save all manuals?'

'No,' Elizabeth replied. 'Over time we will learn all of them. Besides all I want to learn is where the computer is. I want to check the software inside.'

Meanwhile Cutie interfered, 'That doesn't answer your question.'

'Which question?'

'The question about where I am.'

'Right, you can communicate with me without this thing' -pointed NAN receiver- 'But you did that before too, you were connected to my computer. That means there is something local.'

'What do you think exactly?'

'I think there is a photonic chip somewhere in my body. With these synthetic things...,' said Elizabeth.

'Syntheronic circuits,' Cutie interrupted.

'Yes, these syntheronic circuits allows a transition, from chip to brain, with that I can communicate the chip, which means you. Also, they have a separate internet network.'

Cutie waited for a few seconds, then said 'I didn't find any hardware information.'

'Does it mean anything? I mean, you couldn't understand the NAN protocol, right?'

'Reasonable,' said Cutie.

Meanwhile Nix entered the house, with bags on his hand. Elizabeth went near him; while taking a bag, "A grocery shopping doesn't take that long, where were you?" she asked.

Nix, as usual, "Sorry mom(!), I won't do that again," he mocked. Not even a minute had passed, and he managed to get Elizabeth angry again. Elizabeth huffed, then they went to kitchen together.

"What are we going to do, Nix?"

"Whatever Sackville says. He's the boss, I am just a soldier," Nix replied. He could have really been a soldier, considering his shape and gun usage. Actually, considering his speech and the fact that he's an alcoholic he could have been a mafia or gangster too.

"What does that mean?" said Elizabeth.

Nix was pretty bored from this conversation "Damn, I don't know. Sackville tells me what to do and I do it. I don't question every f***g s**t like you," he said.

"Could you mind your manners, please?"

"No, milady(!). Anyway, you can handle the rest," said Nix. Then he put the fish in the oven, signaled with his hand to robot and went out of kitchen. Robot moved to put plates on the desk. Elizabeth finished the salad and went out too. Nix was in living room, feet on the coffee table, watching TV. Elizabeth on the other hand went back to her room. She surfed on the internet while meal was getting prepared.

Elizabeth received a message saying meal was ready. She left her computer and went downstairs. Nix was already at the desk; spitting food everywhere, "Come. What a cook I am!" he said. Elizabeth went to the bathroom, while washing her hands Nix started speaking:

"Sackville contacted me. We have a mission to do."

"What is it?"

"We are going to go to Local Cultures Festival. Pick a cargo from there."

"Hmm! From whom and where?"

"I don't know Miss Wiseacre! Not one of us. You've started to ask every single s**t again."

"Pff!" said Elizabeth. Nix's behavior was unbearable. Elizabeth gave Nix a harsh glare. But Nix didn't care at all. None could stand between a well-cooked fish and himself. He kept eating without caring. Elizabeth looked at the plate first, then slowly began eating. They weren't talking at all, besides Elizabeth wasn't willing to. She just thought what to do with this rude man. Did she trust that guy too much? Her father thought she should be cautious against everyone. Let's assume she didn't, what could she do? That man was both strong and dangerous. Also, he had been carrying a gun all the time; she could be shot if she angered him. 'I must act smart and subtle. The most logical thing to do is to wait the right moment,' she thought.

Meanwhile Nix finished his meal. He leant backwards, opened his mouth to burp. At that time Elizabeth imagined sticking a glass into his mouth, he was really a disrespectful man, but she changed her mind. Nix stood up, still had a gun in his waistband. He tapped Elizabeth's shoulder while passing by. Elizabeth, after peeking her shoulder, went back to eating.

Elizabeth gestured robot to clean away, then she went out. Nix was in living room again. She went to the living room, sat next to Nix. A news channel was on, discussing university attack. Vice president-also interim president- Alejandro Hernádez was trying to prove the connection between Represalias and the attack by showing some reports about. Smart man didn't forget to mention it's because of other parties' jealousy against Carbajal. Nix was watching TV carefully, looked like he didn't believe what had been said so far.

"F*** off, sneaky s**t wants to make space for himself by blaming the dissidents. You are going to be the new president, right you little $b^{***}d$?"

"Welcome to Kuramaçau," said Elizabeth, she was laughing but she covered her mouth with hand.

"That's all b***hit, it is not connected to that Repsesialisa," said Nix, hopping in the couch.

"Represalias, also how come do you know it?"

"I've been messing with The New Order for months. I'm not fool enough to not know my enemy."

"Who are those guys?" said Elizabeth with curiosity. She got closer to Nix, listening to him with her eyes wide open. Nix took a sip of vodka from his plastic cup,

"A group founded by an insane Japanese guy who left the project. He uses lunatics like him as guinea pigs." "BUT," he said with higher tone, "confirmed lunatics."

"What do you mean?"

"Literally lunatics. You know insane, he gets people no one knows from asylum, loses then on the records and installs Neurosist, or puts Neurosist on them, whatever the f**k you want to call it."

'I guess what's more dangerous than a lunatic is an A.I supported lunatic,' she thought. Nix, taking another sip from his cup:

"Sackville sent two men to stop him 2 days ago."

"Well, what then?" Elizabeth asked.

Nix turned to Elizabeth, then winked twice, saying "Two dead."

"Hmm! Got it. Can I take some from your vodka?" asked Elizabeth. She was trying to look cute to not have a fight with him.

"OO! Look who's drinking alcohol," said Nix, he had a grin on his face. Then he handed the cup. She held the cup, then splashed it on his face saying 'PAYBACK!'. Swiftly she stood up and ran towards her room.

While leaving, Nix threw the cup back saying "W***e!", though he missed. Nix began laughing as she was climbing the stairs, she heard him saying "We are going to have a lot of fun with you. A lot!" Elizabeth came into her room; she wasn't angry, in fact she was laughing, she had never had that much fun since she came into the island.

It was quite dark; Elizabeth was surfing through the internet with her UI active. After long series of trial, she managed to breach KPD's database. She was looking at the files about university attack. Was searching for a clue about her father. According to the police reports, there was still unidentified left. She was transferring identified ones to Cutie, and Cutie was making a simulation with the info of dead and missing. She understood why Neurosist was made at first place. Thing got pretty fast; she was just requesting a command, and Cutie would handle the rest. Her father was right, this technology was a great step for humanity. Moments later, Cutie finished the analysis, the result was his father was dead with %89 chance. Cutie said, 'I transformed all of this into a data cluster: Name's KUAR.' "Nice, let's memorize it," Elizabeth replied.

Command -sS K.U.A.R waiting for your confirmation.

Elizabeth thought 'Yes,' then she turned the computer off and went to the bed.

Elizabeth woke up filled with energy. Today wasn't like recent nights; she was able to sleep last night. She stood up, rubbed her face. Having yawned for a while, she went down to the kitchen. Breakfast was ready. However, Nix wasn't around. She sat at the desk, began eating. After some time, she stopped eating and went up to her father's room. She opened the door slightly, peek inside. Nix wasn't there either; he took his shotgun with him. She shut the door, went to living room. Here was empty too, only the cleaning robot was sweeping the floor. She looked outside through the window next to the door. Hovercraft was landing with Nix inside. He hopped out with his gun in his hand, hid the gun under his coat, walked towards the house. When he stepped in, he said "Gone to duck hunting!" mockingly, "Come," he continued.

They were sitting opposite to each other in the couch. Nix began speaking: "Now, we are going to go to Kuramaçau Local Cultures Festival. There our contact will meet us. We don't know him/her, but he/she does."

Elizabeth said "Okay..." but Nix interfered.

"Don't interrupt me. We are looking for some kind of back-up. It's called Neurosnaphot. I don't know jack s**t about it; so if you ask something, I'll crack your skull."

Elizabeth nodded without saying anything.

"Good girl! Yoshinori wants that thing too; he knows that we are going there. Not that you need to do something but be careful I don't want to cover your a** all day."

Elizabeth raised her finger like schoolgirls. It was obviously mocking Nix. "May I ask you something? When do we leave?"

"Now. We don't have much time," said Nix and stood up. Elizabeth began following him from behind. These two went outside. Hovercraft was standing where Nix parked. They hopped in together. Even though she wanted to enable automatic pilot Nix didn't let her. He caught her hand and threw it away from the panel.

"Ever had girlfriends before Nix?"

"Yep, not now though."

"They kicked you a**, didn't they?" she said, laughing. Then she stopped, she couldn't believe what she had just said. Covered her mouth, she was quite embarrassed herself. "I'm sorry, I didn't mean it," she apologized from Nix.

"Haha, someone began speaking, huh! Anyway, hold tight."

Elizabeth knew what was about to happen. "AAA!" she yelled, with anger began kicking the underside of the control panel.

District 3 was Kuramaçau's richest district. Because of the density of fish trade with other countries in the district, it got heavily invested and developed. The wealth gap between this and other districts was big enough to be a topic in politics. For that reason, Carbajal's famous speech 'Every district in Kuramaçau will be District 3' -when he was alive- got him elected. Money wasn't the sole reason to distinguish District 3 from others. Many people around the world came to island for labor. However, incomers were also uneducated people, for that it was easy to get used to Kuramaçau's people. Hovercraft was approaching to the festival with haste. Because hovercraft was on Nix's hands. He was driving like he was going to crash any moment. He immediately drove to the park field in front of the festival and made a harsh landing. Elizabeth hopped out swiftly, she threw up on the nearest trash can. She had to prevent Nix from driving hovercraft; she couldn't bear puking every time he drove the hovercraft.

"You ready?" asked Nix. He concealed his guns under his long and black coat. Elizabeth finished puking, raised her head from the trash can, then made a weird sound. Nix said, "I can't wait you entire year, come on!" impatiently. They began walking into the festival field. The festival was colorful. There were stands set up in the sides of the street. Each of these stands were resembling the different cultures, first one was for Kuramaçau. The street was off traffic; people were standing in the road. People around the stands was dancing, singing to show their local cultures; people on the road was accompanying them.

Elizabeth and Nix -standing close to each other- were trying to break through the crowd. It was noisy around. Meanwhile, Nix yelled "ACTIVATE YOUR UI!' Elizabeth did so. As they were entering deeper in the field, the noise got higher; Elizabeth couldn't hear anything at all. A simulation appeared in Elizabeth's vision. She was seeing people as shadows, she realized one of them was darker. A small box on top saying, *Nix:Jax*.

'Who's Jax?' Elizabeth asked to Cutie.

'The Neurosist helper A.I of rider nicknamed Nix,' said Cutie.

'Nickname? Can you find her real name?'. This was redundant; however Elizabeth couldn't stop her curiosity.

'I need NAN to reach the repo,' said Cutie. A writing appeared in her vision NAN connection failed.

Nix-Jax: Need to climb the hill, can't see jack $s^{**}t$ here. Did Jax have a rude behavior against people like Nix too?

'No,' Cutie said. 'That's a message coming from Nix,' she added.

Elizabeth thought, 'Well then. Tell him I'm following.'

Cutie asked confirmation for the command and Elizabeth accepted it.

Upon that she thought, 'Well, I need to learn to use this Neuroshell.'

-grc Neuroshell_man, Confirmed?

'No,' she thought; however, she laughed noisily which drew some of the people's attention. She kept following Nix's dark shadow.

They got out of festival field from the other side of the street. Then climbed the hill at the right, seeing the entire field. There was a playground, in front of there was a grass field too. They went to that grass field. Elizabeth immediately found a place to lay down and away from other people and drop herself on the grass. She was enjoying the moment. Nix looked at Elizabeth first; then saying, "Good idea," lay next to Elizabeth. Meanwhile, he was looking for their contact. Down the hill the festival was visible, though not so noisy. Looked like people were here to avoid noise. Elizabeth realized that he was taking a flask out -which contained vodka- with a swift moment she snatched it from his hand, took a sip, then threw it down the hill.

"Ups!" said Elizabeth, "Sorry, it slipped through my hands." She was giggling.

Nix got quite angry to that, said 'F***g b***h,' then threw a punch to her shoulder.

"Aww!" said Elizabeth, with a grimace. That hurt a lot; Nix was a quite strong man; he didn't realize the effect of his punch.

"If you throw my vodka away again, I'll hit harder."

"But..."

"Shut up! F***k is that him?" he said and stood up. Pointing a man sitting in a bench alone, he said "This could be our guy."

"How do you know it?" Elizabeth asked. In the end they didn't know who the contact was.

"Look at him." His clothes were all black; black coat and glasses; it was like Nix's clothes. That man was staring straight ahead, at least he looked like so. He slowly faced towards Elizabeth and Nix, lowered

his glasses to looked at them over it. Nix said, "Come with me and be careful." He put his and over his coat. Elizabeth could see Nix's gun from side. Nix had his hand on that gun, but he didn't take it out. They walked towards this mysterious man.

When that man saw Elizabeth and Nix near him, he said "Sit." Nix immediately sat next to him; however, Elizabeth was suspicious; she decided to stand up and keep some distance. The man started speaking with Nix:

"You must be Nix."

"Yes, let's cut the introduction short."

"Your call," said the man.

Elizabeth realized he had a gun, '-sm:Nix 'That man has gun' she commanded. One moment later, she received an answer from Nix 'Don't treat me like I'm blind, you nitwit.' The mysterious man kept speaking:

"The package isn't here. We are going to walk a bit."

"Then why you are making us talk, let's walk," said Nix. He showed that he didn't like waiting with every single opportunity.

"I must be sure that you are not tracked," said the man. He checked the vicinity for a while. When Nix began mumbling, "Done, we can move on," he said, stood up and started walking.

Elizabeth didn't get anything from the events happened. She messaged, 'Why we are working with this man we don't know?' to Nix. We don't know him, but Sackville knows. These guys got something during the university attack and Sackville wants this thing, he replied. 'Fine,' Elizabeth answered, then they began following that man.

They went to a neighborhood behind the park. That man was taking his steps carefully. When they saw a police officer, both covered their front with their coat -to hide their guns- and greeted the police. They turned left into a narrow street. The man stared talking with another guy:

"Is the boss inside?" he whispered.

Upon that other man pointed upstairs. After that, the man said, "This way," to Elizabeth and Nix. They began climbing the stairs. At the end of the stairs there was a corridor. These three passed the corridor to the opposite side and came near a door. The man said, "You are alone after this point," and turned back. Nix immediately opened the door and messaged Elizabeth, *Don't talk inside*, *these guys are not normal*. 'You are not so normal either,' Elizabeth thought, however when Cutie asked for confirmation she refused.

The room they had entered was an office. Some meaningless stuff around, an office desk from good old days, a rotating chair and two sofas at the other side of the desk. Chair was facing back; someone was sitting there, smoking cigar against the window. There was another man next to him, standing still, the bulge of his gun was obviously visible on his t-shirt. Elizabeth and Nix sat to sofas. The man sitting on the chair, turned towards them:

"District 3 is so good at this time of the year, isn't it?" he asked. He had a weird accent; it was hard to understand.

Nix, setting his eyes on the cigar, "What about us?" he asked. The man nodded as no. Nix faced Elizabeth. Elizabeth shrugged, pouted her lips. Then, "At least give us some vodka," he said hitting the desk hard. "Mine was" -took a deep breath- "well, spilled," he added.

"Is it logical to drink in enemy territory?" said the man with weird accent.

When she heard this, Elizabeth giggled slightly, having seen two looking at her she covered her mouth saying, "I'm sorry."

Nix interfered, "Maybe back to business?"

"I think so," said the man. He made a hand gesture to his man next to him; that man immediately got out. The man who stayed kept speaking, "When the university incident happened, your guy reached me. What was his name?" he said leaning backwards.

"Sackville," said Nix. These two hadn't been losing the eye contact.

"Yes, yes. There was something valuable there... well, I don't know its name," as he was talking, the man who got out went inside. He was holding a rectangular-shaped, metal, black box like an airplane black box. The man sitting took the box, ran his hand on surface of the box, then putting his ear on it he tapped it couple of times. He kept speaking, "Could there be diamonds inside? Or money?"

Nix, "Neither of those. Even if it is full of diamond..."

"Your offer is higher," the man interrupted Nix. "That's why we didn't crack it open," he added.

"That's why I don't need to chop your head," said Nix. "Give me the box, and I'll transfer your money," he added. The man heard him but didn't care. He was listening to outside. Elizabeth started listening too. Yells, shrieks, gunshots... There was a combat going outside. The man got angry, turned to Nix, "Are those your friends?" he asked, taking his gun out. The man next to him took his weapon out too, he pointed that to Elizabeth. At the same time, Nix took his shotgun out too and pointed to the boss. It was a tense situation; everyone could have shot each other any moment.

"No, as we told you on the phone someone is on our tail," Nix said.

"Well, you won't run away from combat then, will you?" he asked, looking at Nix with one eyebrow raised.

Nix lowered his gun "Who is running away from combat!" he said. Then faced Elizabeth, "Elizabeth, get the box, go to the hovercraft, don't look backwards and don't wait for me; I might not come back," he said.

As Elizabeth was approaching the box, all three was getting out. There was a smooth, round hole at the side of the box. On the top there was a handle made from same material. Elizabeth pulled the handle to herself a bit. Grabbed the box from its handle and ran out. There was a man shooting in the corridor, he had taken cover at the other side. Elizabeth approached him. The man stopped her when he realized; he pointed the opposite side of where they came from, then showed three with his fingers. Faced back, shot a few times. Then she pushed Elizabeth. She began running. She was at the back side of the building, in a dead end. She could hear Nix from opposite side "Die, b***ds." Elizabeth got out of the street, turn right and kept running. She could see the park they had been before. While she was running, someone fired to her. Elizabeth swiftly peeked backwards. The man looked like one of The New Order's men. Again on his left hand, he had a tattoo like one in Herrmann's house, however she couldn't see what it says because she was too far away. Elizabeth faced to her front.

She came to the park where they met with the man. She kept running towards festival field. Meanwhile the police shot the man chasing her, but some others shot the police and get on her tail. Elizabeth thought, 'As if they are in contact with each other.'

'They might communicate with each other like we do,' said Cutie.

It was messy when she came to festival field. The people were running scared. The New Order's men were shotting around, searching for Elizabeth. She had to move smart, these 'A.I supported lunatics' were gunned men. She stopped, caught her breath, looked backwards. No one was on her tail; however, New Order's men was surrounding the field as they were fighting police. She did the first thing came into her mind; to dive into the crowd. She blended into the crowd. She was trying to get the other side of the street to the parking lot. New Order's man was trying to approach to the crowd. Probably the A.I guessed that she was there however, the combat with the police were preventing that.

When she saw the parking lot, Elizabeth speeded up. She came near the hovercraft. She opened the door and hopped in. She locked the door, took the box on her lap, then began waiting for Nix. Nix told to not to wait for him, but she was waiting regardless. She saw a woman: gunned, skinny with messy hair. She stopped, scratched her head, then took a few steps towards hovercraft. Then stopped again. They were looking at each other through the hovercraft's glass. After standing a few seconds, woman ran towards the hovercraft, screaming meanwhile. She clung to the glass, punched it couple of times, then she took aim to shoot. Elizabeth got worried; she ducked under the panel. Meanwhile, police shot the woman from behind. She fell to the ground. Police hand gestured her to take off. Elizabeth couldn't wait for longer, that was what Nix said. The pushed the button to take hovercraft into automatic mode, chose the house's coordinates-saved before. Estimated time of arrival:15 minutes and vehicle took off.

Hovercraft landed to the park. Elizabeth hopped out. She began walking towards the house. She had the box taken from that man. Elizabeth was wondering what was inside. Nix told her that it was the Neurosnapshot, but she wanted to see it in person. She went inside, put the box on the couch, slowly and carefully. Activated her UI and to Cutie, 'Do you know anything about this Neurosnapshot thing?' she asked.

Cutie replied, 'No, but we can search repos. For that I need NAN connection.'

Elizabeth began looking for the NAN receiver. They had used it in the living room last time, it must have been around here. She searched it for a minute. Then she realized it was next to the TV, on top of the TV unit. She took the receiver, placed it on her arm, sat on couch, '-reps Neurosnapshot,' she thought. Red writings began sliding down:

Data clusters found:

Neurosist_essential_guide

Memocell_guideline

Memocell_DNA_Overwiew

'-grc Neurosist_essential_guide S' Elizabeth commanded.

Syntheronic recording completed.

Another command, '-cc Neurosist_essential_guide'.

Now different writings appeared:

Neurosist essentials guideline

1.Syntheron: Structure, difference and guidance from NEOC (Prof. Thomas Williams)

2.TIMOS (Prof. Takamoto Yoshinori)

- 3. Nest repos and data cluster concepts (Prof. Clarie Fay)
- 4. SAIC: Definition, reason and mechanism (Dr. Nikolai Mikhailov)
- 5. Neuromemory: Syntheronic and natural recordings (Prof. Otto Herrmann)
- 6. Neurosnaphot: The uncertain key to immortality (Dr. Lucas Pinho)

Recommended additional readings:

Neuroshell: A bridge between A.I and human

Neurosist: The potential future for humanity (Neurosist Pantheon)

Elizabeth came across with many different names. She opened this guideline to get info about Neurosnaphot at first, but one name got her attention. That was, for sure, her father's name. She noticed something else. Writers of this 'essential guide' had been in Kuramaçau's academia for years. She downloaded (probably that was the term) this guideline to get info about Neurosnaphot, but she learned many more. Elizabeth to Cutie, 'Let's check that that article about Syntheronic circuits,' she said. Cutie asked for her confirmation. When she did:

Syntheron: Structure, difference and guidance from NEOC

Neurons, what makes us we, cornerstone to our consciousness. These natural structures that constructs the circuits of our thoughts are twin of our hand-made circuits. Neurons takes input from dendritic spines on the dendrites, these structures work like processor's logic circuits. Then, transfers that to the axons and crates a fixed output which is called action potential. Frequency and the pattern of action potential encodes the info and transfers it to a space -called synapses- via a chemical. With these mechanisms neurons constructs our biologic logic circuits. Neurons not only transfer and process the information but also changes itself as it transfers the data. When we repeat an action many times, neurons and dendrites change its biological structure to facilitate the transmission. Even though it takes long, in the end we get what we call 'memory'.

But sometimes this system isn't enough. Humanity despite not changing biologically, changed in culturally a lot. Because of these natural neurons needs help.

There our synthetic neurons enter the scene, syntherons. They look like our natural ones; they have an axon and dendrites. But, apart from its DNA, it has an XNA sequence that defines how its dendritic tree will be formed (Neurite Gene Code). This XNA sequence also expresses a protein on cell membrane. They can be copied quite fast because transferring XNA to another cell is enough. If its XNA changes, syntheron itself changes.

Another propriety of syntherons is it's replaceability (check: SAIC). If a syntheron is damaged, its XNA code will be sent to NEOC (Neuronal Origin Center) where new syntherons are synthetized. NEOC, by using XNA code, synthetizes new syntheron. New syntheron replaces the old one. With that replacement will be done.

Revised by Thomas Williams

Elizabeth was confused a lot. And she wasn't the only one that confused it seemed like. There was excessive amount of biology which made that quite tedious. How do they utilize the syntherons? Article was mentioning about the circuits constantly. Do they really make logic circuits with them? 'Maybe, but can they be used as photonic chips?' Elizabeth thought. Then, 'That's enough confusion for today,' she added, deactivated her UI.

Meanwhile Nix entered inside. He was laughing, shotgun on his shoulder, "Got those b***ds," he said.

Elizabeth asked, "Where did you find that key?" Because she didn't give him one. Actually, all keys were in electronic card form, these guys with that high technology could find a way to copy it. Or Sackville might have given him one.

"I have found it on your father's room," said Nix. With that Elizabeth's complicated plans were ruined. Nix continued, "Let's eat. If you are hungry of course."

"Sure, I'll make a nice salad to the champion," Elizabeth said, smiling Nix.

When heard the salad, Nix got irritated. 'What? Salad!' he said and hit his head to the wall a few times. Seeing Elizabeth didn't care, he accepted the defeat; he left the shotgun and went to the kitchen.

...

In a hallway which well-lit by lights embedded to the roof and all walls and roof were made from shiny metal plates; a man was walking in, a computer in one hand, a tiny NAN receiver on other; he was following a LED strip on the ground in the middle. He was excited, panting. He turned right, kept walking towards that direction. Then entered the first room on left. Contrary to hallway, the room was quite dark, if not for the light coming from the hallway and dim red light coming from the roof nothing could be seen. The man stepped into the room and shut the door. That red light was illuminating the desk against him only. He came near the desk, pull the chair in front and sat. Put the computer and receiver in his hands on the desk. He pulled the top drawer at his right, took a cable out. His excitement made him clumsy; he was rushing everything. He even knocked an empty pot while turning his computer on. In the end he managed to turn it on, connected the receiver using the cable. On the computer, *NAN connection completed: Panthe* appeared. Man punched some commands, waited for a while. Someone appeared on the screen and began speaking:

"We... adven... week Grigorev," said the man on the other side of the line. Line was bad and sound was robotic, he had difficulty understanding it.

"Sackville, can you hear me?" Vadim asked, getting closer to the screen.

"Ha...ly," line was bad still. Samuel added, "Drosop is in danger. Only 4 rider, 6 personal and 5 military robots..." The display got blurry; the voice was cutting frequently.

"Sackville! Samuel!" said Vadim, with anger. Samuel was in silent. After a moment he kept speaking:

"I'm fine. For now. Panthe must h... Can't stop Takamoto myself... Sooner or la... Drosop will ...Order's hand eventually."

"We cannot help you Sackville. We are on trouble too. Everyone wants this technology. The New Order's isn't the only one."

"Should... leave Dro... (The image on the screen disappeared for a while) New Order)"

"Of course not. Destroy everything there, take your man and leave."

"I ca..."

"Sackville, SACKVILLE." His shouts were meaningless. The line was dead. Vadim hit the table with fury. Then he calmed down, putting his chin on top of his hand "These first, and now New Order. Why Yoshinori, why?" he asked himself.

...

Nix and Elizabeth preparing to eat their dinner in the kitchen. Nix was sitting at the chair, leaning back. He was swinging left and right. Elizabeth was on her feet, watching the robot making salad. Robot finished the salad, took off holding the bowl, put it in the middle of the table. Elizabeth sat at the desk too, showing the bowl "Want some?" she asked. She was smiling; she liked teasing Nix, after all the rudeness he had done. "You like it, don't you?" Nix replied in anger, then took some from the salad and began eating.

"Mind if I ask you something?" said Elizabeth. She was mimicking a cute little girl on the chair, trying to look friendly, beaming, blinking her eyes rapidly.

"Is it technical?" said Nix, he didn't buy that trick. He was looking dirty.

"No," said Elizabeth, "It's about you."

"Then ask, so we keep eating salad(!)," mocked Nix and went back to eating.

"How long-uhm have you been using this?" asked Elizabeth; having her trick not been bought she went back to eating too.

"Ha, I'm of the first ones," said Nix. That answer surprised Elizabeth. How come did he manage to enroll as a volunteer to a project with that importance?

Nix continued, "Earlier than Sackville, even than your father."

Elizabeth couldn't believe what he had said. "How come can you be earlier into the project than the architects?" she asked.

"Pantheon's age," Nix replied. "I don't know what happened to them afterwards though," he added. Then he put his feet on the table and kept speaking. "I'm one of the first ones that Neurosist has been implemented," he said. He was proud while saying it.

"Wow!" said Elizabeth. She was shocked that this rude and crazy man was that important to the project'. Suddenly Nix was disturbed. Elizabeth realized that Nix had the NAN receiver on his hand. With curiosity, "What happened? Your face has changed," she said.

Nix shushed her with his hand. Moments later he turned back to Elizabeth and "We have a new mission to do," he cheerfully said. "Someone in the island, outside of our nest, has developed a new type of NAN receiver. We are going to get it."

"Our nest?"

"Yes, our nest. You are Nest Drosop's rider. You are connected to it," said Nix. Elizabeth was about to speak, Nix interrupted, "No more question, eat and go to the bed!". These two finished their meal and went back to their rooms.

Elizabeth didn't sleep when she came to her room. First, she turned her computer on to work on Cutie in the basement (not Cutie she doesn't know where and reads her mind) a bit. Then she went to the bed, closed her eyes and see that writing again *SAIC scheduled to 2 hours later*. This time she woke up immediately, lie on her back and glazed at roof for a while. Her UI wasn't active, she didn't get why she saw that. She got up from the bed, fixed her clothes and got out. She went to the room opposite which belonged to her father (or she should have said Nix's). Knocked the door, "Nix, are you there?" she asked. She heard a muttering from inside first. After a while, the door had been opened. Nix was standing against her, angry and sleepy. "WHAT?" he shouted to Elizabeth's face.

Elizabeth, scared a bit, said "Every time I close my eyes, I get a message about SAIC, even if my UI is disabled. Is there a problem?" she said. She lowered her tone with every single world she said.

Nix, after taking a deep breath, said "SAIC is done every day, ignore it and sleep," and tuned back.

After Elizabeth said "But..." Nix interfered "Do-not-ask-me-anything-again!" stressing every single world separately.

Elizabeth went back without learning anything. When she entered the room, she got an idea, the guideline. She enabled her UI.

Cutie, 'I tried to tell you that I found it, but I couldn't because your UI was disabled,' she said.

'My bad,' said Elizabeth, with the distress given by being scolded. 'Shouldn't have gone to Nix. I knew that was going to happen,' she continued. 'Anyway, can you show me Cutie,' she said.

SAIC: Definition, reason and mechanism

Please read Thomas Williams' 'Syntheron: Structure, difference and guidance from NEOC' before reading this.

Because there are faster and stronger. If you want to argue with some who wants to put his/her consciousness into a machine, that's the answer you'll get. This is the primary argument of the people who wants to get rid of their biological brains. Now, I want to mention a property that silicon-based machines cannot do. Biological machines have a capacity to regenerate themselves. Even while they are working.

SAIC (Sleep activated integrity check) is a mechanism that controls whether syntherons are healthy or not.

Protocol begins disabling TIMOS entirely (TIMOS is a system that connects syntherons with natural neurons. Check: TIMOS (Prof. Takamoto Yoshinori). With that, stimulation of natural neurons by syntherons is prevented. Then, syntherons are controlled whether they can stimulate natural neurons or not. If they cannot SAIC protocol starts; if they can, TIMOS' integrity will be controlled.

During SAIC, migratory gila (Glia=helper cells of the neurons) checks all syntherons one by one. Migratory cells bind to <u>dendritic tree map protein (the</u> one that is synthesized by Neurite Gene Code) controls the syntheron. Control occurs with following mechanism: If there is a problem in syntheron's dendritic structures, migratory cell clears that and cell makes a new one using its XNA. If there is damage on the XNA itself, that causes a different protein to be synthetized on the cell's membrane. Migratory cell defines that protein and sends an apoptosis(cell death) signal to the cell. Then, copying XNA from another cell in the same network, is transferred to the new syntheron for replacement.

SAIC is a critical mechanism that prevents bad decisions, thus is recommended while constructing a Neurosist rider. Besides, it can be done by using command '-bi' with Neuroshell anytime.

It has to be mentioned that SAIC isn't a mechanism that solely checks syntherons, it has detector cells that also checks natural brain's integrity. These cells alert riders through TIMOS when there is a damage in natural brain.

Revised by Nikolai Mikhailov

Elizabeth didn't get anything again in biology side. But this time she got really interested. 'Wow, that is a really good feature. I don't remember that my photonic computer regenerating itself. This could be really useful feature when Nix broke in and stole my mirror discs,' she thought. This technology was shaping her approach to biology. 'Well then, let's see what we can find,' she asked to

Cutie. With excitement she got up form bed, went downstairs to the living room. She took the NAN receiver, put it on her arm, '-reps syntheron' she commanded.

NAN connection failed.

Elizabeth was shocked, didn't understand what was happening. 'What's happening?' asked to Cutie.

'I don't know,' she replied.

'We'll think about it later,' Elizabeth said and went back to her room.

She was more confused than ever when she stepped in. She disabled the UI, lay on the bed on her back, began thinking with her hand under her head. Failure of NAN made Elizabeth think. If NAN connection can fail, could other one -one they used at the festival- fail too? Why there was two separate connections? Aside from these two, where was the exact location on her body where they put the machine to put A.I on? She began moving her hand on her body, she was looking for a swelling. When her reach came to her groin, she had an idea. 'What if...' she thought. Then she changed her mind, 'What about the men then?' she asked to herself. Then, the most logical explanation was that they put it inside her skull. Interestingly, Elizabeth hadn't noticed any scratch on her body since that day. 'Anyway, time to sleep,' she thought. Then, Elizabeth faced to wall and closed her eyes, again writing appeared SAIC scheduled to 2 hours later. At least this time she knew what was happening.

Elizabeth woke up from the noise coming from downstairs. Something was broken. Probably coming from the kitchen. She stood up, rubbed her eyes to recover. Then, from her bed, went to the bathroom upstairs. She heard Nix's noise as she was going, 'You little re***rd!' he was shouting.

Elizabeth washed her face; then went downstairs to understand the event. Nix was swearing the robot and there was a broken glass on the floor. Elizabeth, beaming meanwhile, "Last vodka?" she asked.

"Yes, and that little f**ng s**t f**k up everting," Nix said with anger. "Need to buy again," he continued.

Even though she said, "Easy Nix," Elizabeth realized this drunken man would never get sober. She continued, "Come, let's make our breakfast."

"Remove that sneaky grin on your face or I'll remove it by force."

They sat at the table. Elizabeth began speaking while they were eating:

"I couldn't make NAN connection last night. Do you think there is a problem in our receiver or is there something I don't know?" she asked to Nix.

Nix thought a while, "That thing is pretty old. It's likely to break," he said. "I hope you are fine, Sackville you little p^{***t} ,' he thought too.

Elizabeth didn't question that too much and "What are we doing today?" she asked.

"We were supposed to go to the man to take newly invented next generation NAN receiver he invented. But that man called me and told there is a problem" -showing his phone- "Instead of that I am going to buy vodka, which your clumsy, useless robot broke."

Elizabeth said, "May I come with you? I don't want to stay in the house, maybe I can get some fresh air too."

"Sure, that way my rich lady(!) pay it," said Nix, saluting from his chair.

"I'm not rich."

"Ye, ye! That hovercraft is a gift by your lovely president(!), I guess" Nix said. Pretending to be excited, "Cannot image how hard he into got trouble with the dissidents with that!" he said not forgetting to be sarcastic.

"Not from the president, it's from D&D R," Elizabeth replied, smiling. "I solved a problem with MR-10 robot's manager A.I. They gave me that saying I saved them from a great trouble."

"I saved the army from great troubles too."

That sentence made Elizabeth learn something from Nix. He wasn't a gangster; he was an ex-soldier. She leaned forward a bit, asked "What did they give you?"

"Termination note," said Nix. She stood up, saying "Let's go, we have eaten enough."

"But I have..."

Nix kicked Elizabeth's chair, shook her chair a bit, yelled "GET UP!"

Elizabeth ,reluctantly, stood up and began following Nix.

They got outside, walked towards the hovercraft. Nix was willing to drive the hovercraft again. He pushed the button to switch the automatic mode off and:

Authentication is required to switch into manual mod

Nix went berserk to that. He couldn't drive this lovely vehicle. He looked at Elizabeth. Elizabeth began whistling, looking up. While returning from festival, she configured hovercraft so to change the mode her fingerprint is required. Even though Nix pushed the button couple more times, nothing had changed. Having got quite furious, Nix punched Elizabeth saying "You," And another punch "little, weird, computer whiz lady."

Elizabeth ,rubbing her shoulder, said "It hurts. And you are the weird guy," with a crying tone. Then she punched the coordinates of the market they were planning to go. And hovercraft took off.

Market wasn't too far away, they arrived shortly. Elizabeth and Nix argued all flight along. However, Elizabeth was on her mood. Finally, she completed a flight without puking. Hovercraft landed; both hopped out of the vehicle. Elizabeth stretched out; she was happy however her shoulder still hurt. They came near the market. Nix pushed Elizabeth from behind, saying "You are paying."

Elizabeth took her phone out, had it scanned by turnstile and looked at the camera. Turnstile had unlocked; Elizabeth went inside. Then she passed the phone to Nix to do the same. They began moving between shelves. Nix was ,for sure, searching for the alcoholic drinks on the other hand Cutie(home) messaged Elizabeth a shopping list.

"Dammit, where are you?" said Nix. He was quite impatient. A moment later he saw boozes, "Yuppie!" he cheered and left Elizabeth.

Having seen Nix left her, she sighed, then checked the message coming from Cutie. First, she bought some cheese, then some stuff for salad. She wanted apple too, she began looking for it. There was an alarm sound coming from outside. Elizabeth stopped, took her phone out to control hovercraft, there wasn't any problem. She went towards fruits to buy apple. While filling a paper bag with apples, Elizabeth heard a boom. She dropped everything she had bought and looked at the entrance. There they were again, The New Order's man. They were scanning the perimeter at the same time shooting everyone regardless they hold a gun or not. Elizabeth hid at the back of the shelves. Activate her UI and

commanded '-sm:Nix They are here.' She waited for a while, though got no answer. Elizabeth got really nervous.

New Order was approaching to Elizabeth. 'We have to run away,' said Cutie. 'To my calculations, if they come closer than 5m, you have %88 chance to be wounded or killed.'

Elizabeth agreed with Cutie. She peeked from where she hid. Then, she took a deep breath and began running to other side. A route appeared on her vision. Cutie said, 'That's the most optimal route, the least chance that you are getting shot.'

Elizabeth managed to get to the depot of the market between the bullets of The New Order. However, here was also full of zombies. Route she saw had changed. 'Looks like they surrounded everywhere,' Cutie said.

Elizabeth got really nervous. UI showed her a room on the right. She went into the room and put everything she had found on the room at the back of the door.

•••

"B***s," he said while shooting. As always, he was holding a shotgun. He jumped out where he hid ,from the alcoholic drinks aisle, and began shooting at them. Even though New Order turned, no one could catch Nix. He shot 3 rounds, then back to cover at the aisle. Meanwhile market's robot was standing near him. Nix showed the bottle "Not mad, aren't you?" he asked. Robot nodded as no. Nix took a sip from that bottle and got out to shoot couple more rounds. Nix's UI was active, Jax began speaking:

"I estimate 2 zombies."

"What a help!" replied Nix mockingly. Once again got out from cover to shot.

'Though you not realizing, I'm helping you to aim Nix,' replied Jax.

Nix was offended to what Jax said, 'I don't need you little piece of s**t, I've been using guns for many years,' he said.

'Sure then.'

Nix's UI had been deactivated. Nix was surprised to that, asking himself 'Can A.Is get cross with us?' UI activated again, Jax saying:

'No sir, to deactivate the UI, I need your confirmation.'

'JAX!' said Nix while shotting, 'My old friend. We were always together at this; I'll never leave you alone,' he said cheerfully.

'If I had a neural network for emotions, I would be emotional sir.'

'Looks like you got one for humor, huh.'

'Logs says, I configured it 3 years ago with your command.'

'When did I command that f***ing s**t?'

He shot the last one in the market. Nix asked, 'Jax, do you have any idea about where she has gone?'

'Sir, if I were Cutie, I would lead Miss Williams at the back to the depot, for them this would be the most logical move,' said Jax. And he drew a route to the UI. Nix started following the route he saw. Meanwhile he was drinking from his vodka and whistling. He thought, 'That computer whiz b***h

probably listened to her A.I'. Jax were in silence. Looked like he got used to his rude behavior with all years had been passed.

Nix came into the depot, began clashing with the zombies inside. Someone was trying to break a door. "ELIZABETH!" Nix shouted. No one was answering. '-sm:Cutie Where are you?' he commanded. Got a reply 'I locked myself in a room'.

Nix realized the door was the zombie trying to break in where Elizabeth was. He was clashing still, 'Jax, we have to get to her, out lady cannot protect herself. Got a plan?' he asked. A simulation appeared on his vision, Nix granted Jax complete control, and he shot all. Meanwhile that zombie broke in. Nix heard a strong shriek inside the room. He immediately jumped forward and had shot zombie before he pointed his gun.

Nix was lying on the floor. He was tired, however not wounded. 'Are you alright Elizabeth?' she shouted. Elizabeth was steeping outside with caution.

"You save... Thanks," said Elizabeth, she was relieved. She couldn't get rid of her shock. "Are you OK?" she continued.

"Yes, I'm fine, just tired," said Nix. He was gasping.

"I mean-," said Elizabeth. "You have done so much despite you hate me a lot. I want to thank you for that." She stretched her hand to Nix.

"Don't mention it. Who am I going to call computer whiz, if not you?" said Nix. He held Elizabeth's hand and got up. Elizabeth ignored his rude tongue; she was laughing with her mouth covered by her hand. Nix started laughing with her. Elizabeth hugged Nix, put her head on his chest, "Shall we leave now, since you took your vodka?" she said. Meanwhile Nix peeked at Elizabeth, "I'm going to drop it out, really," he said. Elizabeth couldn't stop herself from laughing. These two got out of the depot.

They were walking towards the hovercraft. Elizabeth was still hugging Nix. Nix started to be annoyed with it.

"Get your head off me," he said to Elizabeth. He pushed her head slightly away with his hand. He was wobbling a bit. Probably due to effect of booze. "Let's go home, I want you to take a data thing from the repo," he continued.

"Our NAN receiver is broken," said Elizabeth. She couldn't understand how he forgot this without 24 hours passing by.

Nix stopped, said "Hah!", raising his finger. "That's what happens if you are smart lady," said mockingly.

"Move, you drunken soldier," said Elizabeth. They hopped into the hovercraft, set off for home.

They came back to the home. Both of them were quite hungry. Nix went to living room, fell into the couch. Elizabeth went to the kitchen first, commanded robot to make the dinner, then she sat near Nix.

"Well, what shall we do?" Nix asked.

Elizabeth, scratching her head with her finger, said "I don't know."

Nix jumped out suddenly and turned towards Elizabeth. He even managed to scare Elizabeth. He got closer to Elizabeth, "Tell me about myself," he said. "If you do something else then computer of course," he continued.

"Well, I used to. I mean before I came here," said Elizabeth. She pouted slightly. Nix leaned backwards and started listening to her:

"I was so happy when I was in England. My grandfather was one of the world's most prominent zoologists. My mother was interested in literature and education. She had even founded a school. My father, even though he wanted to be a writer, he became a scholar. I want to be a doctor at first, then a writer like my father, in the end I became a computer scientist. Then we lost our mother; my father married with another woman. My brother who was born from that woman, Andrew, wants to become one of the most prominent biologists in the world and I think he has already made it. One day my father got an invitation from the university in this island. But Andrew and my father's new wife wanted to stay in England. I came here with my father."

"But residents of the island aren't like where I come from. Uneducated, only thinking what they will eat, casual people. Nothing remained other than computers for me on this island. Each day became more and more meaningless for me. Then my father and his colleagues began not coming home and not spending time with me. For this project... Anyway, you know what happened afterwards. I think I achieved my dream. I wanted to be a writer and my life has been transforming into a story now. Anyway, that's enough for me, what's your story?" When she ended her speech, she heard snore. Nix had fallen asleep meanwhile. Elizabeth smiled slightly, then she went to the kitchen to eat.

...

In a bright room where all walls and floor white two people were speaking on their foot. One of them was old, white-bearded, white-haired man with a stick. Even though he couldn't stand without that stick but, he had a straight posture. Other one was a black haired, young woman. These two were in a rush, had a serious expression on their faces.

"Any world from Sackville?" the old man asked.

Woman nodded as no. That made old man quite nervous. But he kept speaking:

"Keep trying. We must contact Drosop no matter the cost," and he got out of the room. The sat at the desk. From drawer she took a NAN receiver and a computer out. Turned the computer on and connect the NAN.

NAN connection completed: Apodem

Woman punched something on the keyboard. A window appeared in the screen, Sackville inside:

"Young, how are you?" asked Sackville.

"I cannot connect to repo Prof. Sackville," said the woman. She was surprised by his appearance on the screen.

"Our NAN servers have been damaged. Drosop repo is offline. I had to connect via another channel."

"What's the nest's status?"

"4 riders, 2 personnel, 2 working war robot. We are trapped in the nest."

"Did The New Order capture anything?"

"Not yet."

"Prof. Sackville, Drosop cannot resist much longer. I suggest making everything useless and running away."

"Not possible for now. To move we need more time to produce more solution, can you help us instead?"

"Unfortunately, all of our riders are busy right now. I'll report your situation to the general."

...

Elizabeth finished the meal, stood up. When she peeked at the living room, Nix was still sleeping, barely moving at all. The box they took was standing next to the couch. Elizabeth was wondering what was inside. She came closer, peek at it. She started touching the box, she was looking for some kind of button or something like it to open the door. She stuck her finger at the side of the box. Hole got narrowed suddenly; Elizabeth's finger got stuck in it. Even though she screamed with fear, Nix didn't wake up; he grumbled and turned to his right. Elizabeth felt pain in her fingertip, like a needlestick. Hole got widened back, and the box cracked opened sideways. A layered, pyramid-shaped object as big as her hand was standing inside. 'Is that the Neurosnapshot?' she thought. What kind of info was that thing holding? Elizabeth ,realizing Nix was waking up, closed the box and left the living room with haste, to her room.

Upon entering room, she activated UI, said 'Open up the guide, next one,' to Cutie. Cutie asked for confirmation, Elizabeth accepted it.

TIMOS: Syntheronic control center

TIMOS (Thalamic Input-Motor Output system) is a system controlling all motor and sensory neurons by perceiving their state of excitement or by directly stimulating them. This system consists of syntheronic circuits configured on various parts of the brain.

TIMOS has two subsystems: One from natural motor and sensory systems to PSC (afferent); other to control motor and sensory systems with directives coming from natural and PSC (efferent)

TIMOS isn't a system that merely controls the relationships between syntherons and natural neurons. Aside from that it can control nautral neurons directly. For example, it can prevent some sensations by directly preventing the stimulation of natural neurons with its configurations on thalamus.

Revised by Takamoto Yoshinori

From the first line Elizabeth get why was that article for. She wasn't unfamiliar to a system which control every single input and output, it was a computer term. Maybe this 'biology' wasn't that tedious. 'I know how you read my thoughts now Cutie,' she thought. *Cutie*: ;) writing appeared on her UI. She deactivated it and fell to the bed.

New day, new possibilities... Elizabeth decided to look in that view. There was no benefit from thinking gloomy like 'What trouble are we going to get in today?' to her. Now, gloomy Elizabeth thoughts had been over, now there was optimistic thoughts. She activated her UI:

'What do you think about it Cutie?' she said.

'An accurate decision for psychological view.'

'Then let's go downstairs,' Elizabeth said, jumping out of the bed. She changed her clothes, stood against the mirror. The door crashed to her while she was combing her hair, that got her attention towards the door. It was Nix.

"Could you knock the door first?" Elizabeth said, as if she was scolding a child.

"I wanted to check you if you woke up," said Nix, ignoring what Elizabeth had just said. It was the usual Nix. Apologies are useless, maximum rudeness.

"I did, would you get out please?" Elizabeth had a fake grin on her face. Having mumbled a bit, he got out, shutting the door. Elizabeth first finished combing then got downstairs.

Nix was in the kitchen; he was tucking into the breakfast. Elizabeth joined him. As they were eating, "At last, our connection called us," said Nix, food was being scattered from his mouth. "Today, we are going to pick up new NAN," he continued.

"Well, what about Sackville?" Elizabeth asked.

Nix nodded as no, "He can save his own a**. Besides he has Alfred on his side," he said.

"Alfred?"

"The rider who protects Sackville, tough guy," said Nix. Elizabeth realized he got happier when he mentioned Alfred's name.

"Close friends?" Elizabeth asked.

Nix said, "No, he doesn't like me. In fact, most of the riders in Drosop doesn't like me." Then he stood up, looked at Elizabeth. Elizabeth realized her breakfast was over that moment; she got up from the table and began following Nix. As they were walking towards the door 'Isn't it normal that you are not liked?' she thought.

They hopped into the hovercraft. Nix just stood there, stared at Elizabeth. Elizabeth didn't get anything from that; Nix was supposed to punch the coordinates in not look stare at her. They stared at each other. Then Nix broke the silence and with an innocent face saying, "One time."

Elizabeth nodded side to side, "No way, I don't have to puke every time you drive this hovercraft," she said. But Nix was still staring at her. However, Elizabeth was sure about it; she said "NO!" with high tone. Then she turned her back on Nix, began staring at outside through window. Nix stared at Elizabeth a bit more, realizing not working at all, said "F**k!" and punched the coordinated into monitor.

Elizabeth knew here. They were at somewhere at the west side of District 4. Elizabeth had come here many times, to buy some photonic computer parts. Though this isn't a rich area, it had the most expensive and varied computer parts. Elizabeth, facing Nix, said "I know nearly all of the people here. Who are we meeting with?" she asked.

Nix shrugged, "I only have coordinates and the address," he said. Meanwhile the hovercraft had arrived at the target destination. These two hopped out. Elizabeth looked around. She knew here, she had come here before. Nix took a paper out from his coat; an address was on it. Elizabeth skimmed the address, saying "Ah, know there."

"Alright, ladies first then," said Nix, bowing at Elizabeth. Elizabeth took the lead and began walking. They took a right first, walking down the street. Then took a left and went into a street with dead end. This street was darker than the others, buildings rising every corner of it was preventing the sunlight coming. They walked towards the end. There was a man on the left, leaning to the wall. That man realized these two, raised his head and looked at them. Elizabeth knew that man. She got closer to him and asked, "Is Alfonso inside?"

Man scratched his chin, saying "Wait," then he went into the building.

Elizabeth and Nix was waiting worlds from the man at outside. Nix was whistling as he was glancing at the buildings. Elizabeth was glazing at door. A moment later, a man appeared from the door. He didn't have right arm and leg, instead prosthetic ones. In his prosthetic hand he was holding a stick. He was hobbling, some of his hair was whitened. He had eye band on his left eye. Slightly bellied man, his normal hand on his belly, hobbled near Elizabeth.

"ALFONSO!" Elizabeth yelled cheerfully. It had been a while since the last time she saw a familiar face. She ran to Alfonso, hugged him. Elizabeth had to lean forward to wrap his neck due to Elizabeth's height.

"What up Williams?" Alfonso asked. He was the friendliest man she had ever met. He faced Nix, peeked at him, said "Who's that gentleman?" he asked.

Elizabeth, putting her finger to her lips, "Uhm... A friend I have met," she said. "Name's Nix," she added.

"Ah, Prof. Sackville mentioned about you." Alfonso reached his hand out to shake Nix's. Nix shook his hand unfriendly. It was obvious that he didn't like that man. "You know this man is a smuggler, right?" Elizabeth nodded up and down, "No goods are coming here otherwise," she said.

"What are you doing with that rude man?" Alfonso asked. He knew Elizabeth was a kind, good-mannered lady, he didn't get why she was with that man.

"That a long story," Elizabeth said, smiling. She was about to keep on Nix interfered:

"Maybe back on business?" he said. He was impatient, obviously.

"Alright, so be it. Follow me," he said and turning back he began walking. He stopped when Elizabeth and Nix began walking too, again turning back. He pushed Nix with his stick saying, "You are waiting outside," and winked at Elizabeth. Nix lit a cigarette. Elizabeth tailed Alfonso, these two went inside the building.

Foyer with darker than outside. If it wasn't the lights nowhere was to be seen. The apartment stairway was narrow, it was very difficult to walk side by side. They went to third floor, entered inside from the opened door at the right. There was a sign on the door, saying SANYOTO's Tech World. Elizabeth had come here before; however, she didn't like here at all, this building was dark and airless.

Alfonso sat at the desk opposite to the door. Elizabeth on the chair against him. Alfonso got closer to her, squinting at Elizabeth. He took the eye band up. Skin covered where the eyes were supposed to be. That disgusting view made Elizabeth frightened a bit however she didn't show it.

"Alright sweetie, how are you?" Alfonso asked. He knew she got questions in her mind for her face.

"I'm fine, I guess...," said Elizabeth. She was twirling her hair. "Can I take the NAN receiver?" she asked.

Alfonso nodded as yes. Then he took a piece of cloth on the table and wiped his forehead with it. After then he took a box out under the table. Opened the box and took the receiver on his hand.

"Smaller than what Mr. Sackville sent," he said, touching some parts of it by his prosthetic hand.

"Is this NAN different than you have seen before?"

"Not electronically but it uses another protocol. I don't know what they are doing with it, all I know is they use a closed-circuit system. They don't use the internet we use in short."

Alfonso handed the receiver to Elizabeth. It was really small; instead of a bulky device, a small one with four stands. And an antenna on top. Alfonso continued:

"I had to add that four stands. According to old manual it is for connection; but I don't know how the connection is made."

"I know how," said Elizabeth, placing these four stands on her forearm.

Alfonso began laughing, Elizabeth joined him. Actually, there was nothing to be laughed at.

Elizabeth thanked Alfonso. Alfonso stretched his prosthetic hand, Elizabeth shook it. Then they went back downstairs from where they came from. Nix was leaning against the wall, as always drinking vodka. The bottle was almost empty. When he saw Elizabeth, he tried to straight up but failed and fell. Seeing this, Elizabeth began laughing. However, this time Nix was quite furious, due to effect of vodka.

"STOP LAUGHING DAMMIT!" Nix said. He couldn't stand still yet. Elizabeth covered her mouth, but she couldn't stop giggling.

"STOP IT!" this time with higher tone. Having heard the noise, Alfonso came near Elizabeth. Nix could barely stand still, spreading saliva.

Elizabeth went near Nix. He said, "Calm down, you are drunk," tried to calm him by touching his shoulder. Nix pushed Elizabeth's hand back violently, stepped back a bit. He was about to take his shotgun out under his coat, Alfonso took his taser out and shot Nix. Elizabeth was shocked by that; she couldn't believe her own eyes. Alfonso, touching Elizabeth's shoulder, "Don't worry, go back home," he said, "We'll send him when he gets sober." Touched her shoulder again, then turned back; showing Nix to a guy looking at the window upstairs, went inside. Nix was lying on the floor, writhing and groaning at the same time. Elizabeth, stunned, began walking, leaving Nix behind.

When got near hovercraft, Elizabeth received a message. It was from KPD. Mentioning she has to visit police center. But first she had to wait Nix's return. To be more accurate, she had to think about the events. She thought Nix wouldn't hurt her, especially after the market incident. However, that wasn't true; Nix ,by his characteristics, was someone who could do everything. His alcohol addiction made him unreliable. She activated her UI, told everything to Cutie as she was hoping inside the vehicle.

'I know,' said Cutie.

'How could you know it?'

'Through TIMOS. It never closes. I can perceive everything. I have a 5-minute memory block, from what I get it's a volatile block though I can save it on your demand.'

'That looks scary to me. Only way I can be sure is by seeing the code.'

'Long live to wildebeest! Long live to fat penguin!' said Cutie.

Elizabeth went back to the topic, 'So if you know what I go through, what do you think about it then?'

'We should talk with Nix and Jax'. Cutie was right.

'We should even talk with Sackville, but how?' said Elizabeth. She placed the NAN receiver on her forearm, told Cutie to check the connection. The result was same: NAN connection failed. 'Cutie is there another way to reach Sackville?' she asked. Elizabeth saw 3 lines, from top to bottom: Face-to-face, phone, flare gun.

Hovercraft retuned home landed its usual place. Elizabeth hopped out. Meanwhile Alfonso messaged her, *Nix got sober*, *he said he just wanted to silence you by threating with gun*, *he had no intention to shoot*. "Not intended to shoot, how nice," she reproached. She took a deep breath, calm down, kept walking home. She stepped inside, first she checked the box. It was in its place. Elizabeth, like last time, cracked opened it, pyramid was in its place too. She closed the box, put it back to its place.

She went back to her room, sit on the bed. Told Cutie to read something while waiting for Nix. Cutie put the unread parts of the guide on her vision. Elizabeth chose Clarie Fay's article:

Nest repos and data clusters: Basics for reaching information

All Neurosist riders have to access some information for themselves and their A.Is. Neurosist provides useful tools to gather data, to be used properly some concepts need to be understood.

According to the data provided by neuroscientist, learning is done by associating in natural neurons. Some stimulants are associated with others during the leaning process and stimulating one with stimulate the rest. Like when the world 'Doctor' is heard, 'Nurse' can be called, learning how to make a movement will ease the learning of the similar movements. This system is different from what we use in computers, which is 'Every data is stored in different address independent from each other' and needs to be adjusted for Neurosist.

For that reason, data cluster term was implemented. A data cluster is defined as all data corresponding a function or a state. A data cluster can consist of subclusters. When a part of data is needed, all the cluster is called and the wanted data is selected from it.

All Neurosist nests have a database which has every single data cluster has been made so far. These databases are called Repository (in short repo). Riders can use a special, closed network system called Neural Area Network (in short NAN) to reach this data clusters and can memorize them. Please note if a rider wants to add a neural network to his/her A.I, it must be known that neural networks directly configured on PSC instead of being saved into memory. [To know the Neuroshell commands required for to get data clusters from repos, learn more about Neuroshell]

Note: All A.I modules in riders has the ability to convert data perceived by TIMOS and movements done into a data cluster.

Revised by Clarie Fay

'Centralizing control of all the data Neurosist rides gets. That's a good idea. I would do the same if I were them,' Elizabeth thought. This technology was becoming more and more interesting. The biology which she found tedious was getting closer to computer science. And Elizabeth liked that. If she could have done a NAN connection; she was willing to surf through the repos.

'Isn't it like that already?' Cutie interrupted.

'Yes, some do. It naturally has pros and cons.'

Meanwhile door rang. Elizabeth went downstairs, went to living room and look at the visitors. It was Nix. Two men holding him from his arms. Probably these were Alfonso's men; they helped Nix to return home. Elizabeth opened the door. Nix was sober; however, he didn't look like he was regretting what he had done, he had a smile on his face. "What's up Eliz?" he said.

Elizabeth took him in though not speaking. She had crossed her arm, turning her back to Nix. Nix glanced at Elizabeth for a while, then said "Better get some sleep." Elizabeth didn't answer. Nix went upstairs; Elizabeth to kitchen to drink some water. Then she too went to her room to sleep.

...

KPD HQ was being echoed by the sounds made by high heels. Vera was walking by while greeting her coworkers with her head. She reached the end of the corridor, entered into a room on the right. Inside a man watching outside with a cigar in his hand and his feet put up. Vera began speaking:

"Sir, report of the assault made on market in District 2," she said, handing her tablet to the man.

Man pushed the tablet away, "Is there something noticeable?" he asked.

"14 attackers dead, according to the camera recordings in the vicinity the man who killed them - which is one of the men we are looking for- was in the campus attack too. He did the same, killing the attackers."

"Aha, let me guess the attackers in the campus attack are the same too."

"Yes sir, whoever is that guy is has a conflict of interest with them."

"What else?" he asked, extinguishing his cigar.

"Elizabeth Williams." She was bursting flames from her eyes, after the interrogation that name made Vera nervous.

The man, seeing Vera like that, "Calm down first," he said. Then "What's up with Miss Williams(!)"

"Witnesses says that she was in the market during the attack. If u remember sir, she told us he didn't know him, however they tripped a lot recently."

"Let me guess, Local Cultures Festival?"

"Exactly sir. Allow me to take her into custody again to reinterrogate her. She won't be able to lie this time. We can learn what exactly this Neurosist is and who is the guy killing every single man who holds a gun."

Man turned back, began staring outside. Meanwhile he gestured Vera to get outside, saying "Do whatever you want."

"Yes, sir," Vera said, got outside and closed the door. She began walking across the corridor once more. While walking, she took her phone out to call someone.

"What Rojas?" said the man on the phone.

"I need your help."

"I know, I wouldn't call you otherwise. What do you want me to do?"

•••

Chapter 5: The Light at the End of The Tunnel

Nix was sitting at the table when Elizabeth stepped into kitchen. He had cigarette in his hand. He was avoiding eye contact with Elizabeth. Elizabeth gave a signal to robot and asked, "Do you want to eat something?"

"No," said Nix, "Not hungry."

Robot dropped the breakfast it prepared on the table, Elizabeth took some and began eating. She had distance with Nix still, she wasn't keen on speaking with him.

"Better take a little break," Nix said, looking at the vodka.

"Little?" Elizabeth replied, raising one of her eyebrows. Nix's worlds made him angry, but she suppressed her emotions.

Nix extinguished his cigarette and went to the living room. Elizabeth sighed and kept eating. A moment later door rang. When Elizabeth turned back, she saw Nix moving towards the door. She turned back, kept eating. She carefully listened to sound coming from living room. Whoever came was having a debate with Nix. Elizabeth finished her meal swiftly and went to living room.

"What you have done is irresponsible," said the man. He wasn't as muscular or long as Nix. He was talking with Nix as he was scolding him. Could this man be Sackville? No, because though she couldn't claim that she knew her, she had seen her couple of times. That man didn't look like him.

"Fine, fine. I got it," said Nix, regret could be felt from his tone. The fact that he wasn't speaking so rudely got Elizabeth's attention. He was feeling guilty; that was obvious.

Man realized Elizabeth. Facing her, he said "Hello, Miss Williams," and stretched his hand to her.

"Oh, hello." At last Elizabeth had met someone with manners. "Please call me Elizabeth," she said.

"So be it, I'm Alfred."

When Elizabeth shook Alfred's hand, she realized her UI got activated. NAN connection needed for rider fingerprint authentication. Then it deactivated, Elizabeth didn't get what had happened.

"Where's the bathroom?" Alfred asked.

Elizabeth pointed the bathroom next to the kitchen. Alfred thanked her, then got out of living room. Elizabeth, approaching Nix, was smiling. Rubbed his back, kissed his cheek and went back to her room.

NAN receiver was on her desk, she took it and put it on her arm, activated her UI. NAN connection established. She was amazed that it worked; looked like the new one was working. '-reps rider_fingerprint,' she commanded. But she had found nothing. Meanwhile:

Message over Drosop: Sackville-Melanie: The thing you are looking for is the SHA fingerprint protocol to recognize riders. Nothing different from usual. Don't make a search for a for details Elizabeth.

Elizabeth was more amazed, she asked "Is it possible to send messages through NAN?" to Cutie.

'I don't know Eliz. I'll look for a protocol for sending such message,' said Cutie.

She went out of her room with NAN receiver on her hand. She saw Alfred downstairs, moving towards living room. Elizabeth ran downstairs to the living room. Sat beside Alfred, "Alfred, mind if I..."

Alfred smiled, "That's curiosity," he said.

Elizabeth shook Alfred's hand. Fingerprint confirmed: Drosop, Alfred-Noxie

"Done?" asked Alfred, he was still smiling. He continued, "We have something to do. That's why I came here."

"What is it?"

"Can't give much detail, it's a bit complicated. In short, I need to go somewhere and speak with someone."

"When are we going?"

"Tomorrow. We need to get prepared beforehand." Alfred got out from couch. "I'll get some water to myself, want some?" he asked. Elizabeth nodded as no. Alfred got out from living room.

Elizabeth leant backwards and relieved. She felt that gloomy, disgusting life was about to end. Alfred's arrival had changed Nix dramatically. Nix wasn't behaving as he used to do. She even thought that Alfred's arrival could overcome the New Order problem. Having realized her UI was still active, Elizabeth said 'Let's read the next one,' to Cutie.

Neuromemory: Syntheronic and natural recording:

Article required to be read before: Nest repos and data cluster concepts (Prof. Clarie Fay)

Neuromemory is defined as sum of all systems that is related with human's and A.I's memory. Syntheronic neurons have a dedicated center under PSC, but none for natural memory. For that Neuromemory cannot be defined as sole memory center.

Neuromemory can be divided into two: One that supports natural memory and one that handles syntheronic recording. Syntheronic memory can hold a limited number of data cluster, but the recording is guaranteed. On the other hand, natural memory has more capacity than syntheronic one, but the recording is not guaranteed.

Syntheronic recording:

To understand syntheronic recoding, we must mention a specialized synteron called memocell beforehand. Memocell is a special syntheron. A memocell has a gap junction (a connection carries ion between cells). Aside from that, memocell has an axon like other neurons. Each memocell hold an XNA which has two parts. First part is the head piece which hold a unique ID and is expressed as a protein in cell membrane. Second part is the body part which holds data in memory.

Syntheronic recording section consists of levels. When the first level is stimulated, it starts chain reaction for all associated cells below. All memocells convert their data written on XNA into action potential and redirects it to output circuit (reading circuits). Output can be read by PSC directly or can be reflected to cortex.

Natural recording:

Nautral recording is a boost to existing human memory. As far as we know in human's limbic system has a part called amygdala which decides whether data will be recoded or not using emotions. Neuromemory's natural recordings, a syntheronic circuit over amygdala, gets excited on demand which creates an artificial emotion over amygdala. This emotion eases the formation of memory, but results aren't certain.

Elizabeth wasn't expecting something like this. If there is a chip (which what she was thinking), why there is a need for syntheronic record? Why didn't they use something like photonic discs? Let's assume they couldn't because of energy, then why these people made this advanced technology, made a bioenergy center instead? This was ridiculous. Elizabeth was confused.

Elizabeth didn't realized Alfred, while she was thinking deeply. Alfred was behind the couch, at the piano. Nix wasn't around still. Elizabeth went near Alfred. Alfred was playing piano with skill. He was swinging left and right with the magnificent sound of music he was making. Elizabeth began listening to Alfred. That music was calming her down. Alfred finished playing. Elizabeth clapped him. She sat beside:

"How long have you been playing piano?" she asked.

Alfred- showing the old, bulky NAN receiver, "Not for so long," he said.

Elizabeth was amazed to that answer. "Does Neurosist play piano too?" she asked to Alfred.

"There are lots of configured neural network in repos for A.I. You should try them."

"Interesting," said Elizabeth, she looked at her own NAN receiver; she was keen to try. She had taken piano lessons when she was young however, she couldn't play well. '-reps piano' she commanded.

Data clusters found: 'piano_essentials'

'piano_guide'

'piano_neural_network'

'-grc piano_neural_network S'. Elizabeth received an error; Neural networks cannot be saved to Neuromemory; to transfer it to PSC leave an empty parameter.

Elizabeth tried again, '-grc piano_neural_network'. But nothing happened. Elizabeth faced Alfred, "Nothing has happened. I feel same," she said.

"It takes time, keep NAN on yourself for next couple hours," Alfred replied. "First, synterons make a synaptic network between each other. Then internal signalization happens for receptor density. NM... sorry Elizabeth my biology isn't so good."

"Better than Nix's," said Elizabeth. Both smiled slightly. Meanwhile Alfred, shaking Elizabeth's hand, "Tomorrow could be dangerous. Just in case," he said. Alfred-Noxie: Request to configure a data cluster called Military_neural_network with 8 sub-clusters. Do you agree?

"Is that necessary?" Elizabeth asked. She had never touched to a weapon before. Alfred nodded as yes. Elizabeth had trust on him. She accepted it. Again, nothing happened. A moment later Cutie asked, 'Should I send feedback over Shellcon?' Elizabeth thought, 'Yes.' Alfred, having seen the message, made a thumbs up.

"Going back to my room. See you Alfred," said Elizabeth.

Elizabeth came to her room, deactivate her UI, changed her clothes and went into bed. She began thinking about Neurosist of course. This time she had a different approach of the topic. 'How different we are from what we have created?' she thought first. Elizabeth remembered what she had read. What they did with syntherons was similar to what had been done with computers. 'If I consider humans as biological machines,' she continued thinking. 'That means it shouldn't be so hard to connect a photonic chip to brain, isn't it?' Then she began thinking the computer side. How come a photonic chip can work inside body? She didn't have an answer to that. Besides how do they handle thermal

throttling? Elizabeth didn't have an answer for that question too. Neurosist was like a quicksand for her, the more she tries to get out the more she sinks. However, she couldn't stop moving because her curiosity wasn't allowing her to stop. She thought, 'I think the only way out is to sink entirely. I have to go Drosop nest somehow, need to get info about Neurosist by talking with Sackville. Only by that I can keep my sanity,' she thought, put the blanket on herself and closed her eyes.

Elizabeth woke up. She yawned and got out of the bed. She still had NAN receiver on her hand. She took it out and activated her UI. *Configurations completed*. She looked at herself from the mirror for a while. Then she changed her clothes and went out of the room. Immediately she went downstairs and washed her face in the bathroom. Then she went to living room. Alfred was there too.

"If you are hungry, eat immediately. We are leaving as soon as Nix comes," said Alfred.

"I don't feel hungry," Elizabeth replied. "In fact..." she said and sat at the piano. She was very excited. 'Alright baby, make us some music,' she thought.

'What do you want?' Cutie asked.

'Flight of the bumblebee,' said Elizabeth.

Cutie began playing the piano. Elizabeth was having the weirdest feeling she had ever experienced. She was playing piano without doing anything at all; it was like a dream. A sliding staff has note in it was passing by. Some notes are black, they were becoming red as they were passing by. Elizabeth realized the red ones the ones they had been played; in the end she at least knew some music. She should have congratulated Cutie; she was really good at playing piano!

Elizabeth finished playing. Alfred clapped her. Elizabeth was quite happy at that moment. After getting through all this events she had a beautiful day and more importantly she had found a friend for her, first friend after coming to Kuramaçau. Meanwhile Nix stepped into the living room. Elizabeth and Nix stared at each other for some time. Alfred had already gone near the door.

Elizabeth asked, "Can you at least say something about where we are going?"

Alfred didn't reply that question. He faced Nix, "Take the Neurosnapshot with you, the house might not be safe from this moment."

Nix muttered, then said, "Begun making errands, huh?" clearly; then took the black, metal box.

When Elizabeth began laughing to what Nix said, Nix pulled her hair, saying "Stop laughing to every single s***t." Elizabeth, with the irritation given by pain, went outside with these two guys. These three stepped into hovercraft; Elizabeth was at the back. Nix gave the box to Elizabeth, she put it on her lap. Alfred punched the coordinates in, and hovercraft took off.

During the flight, Alfred and Elizabeth made an intriguing conversation. Elizabeth shocked by Alfred's knowledge about Aristotle. He said, "Thanks to Sackville's library," when Elizabeth asked where he had learnt all of that. Meanwhile hovercraft began landing. There was a café at the side of the road, a building opposite to that. They hopped out. Alfred, showing the café, "You two go ahead and sit there. I'm going to speak with someone in the building," he said.

Elizabeth and Nix were standing near hovercraft. Alfred went across the road. Nix said, "Active your UI and never deactivate it," to Elizabeth and pushed her towards the café. Elizabeth began walking, Nix was following her from behind. Elizabeth saw a message, *Jax: We are keeping a distance*, *choose a seat away from me at the café*, *far from windows*.

Elizabeth went inside first. Nix wasted some time in front before entering inside. Elizabeth chose a seat as Nix said to her. Having seen her, Nix went inside behind her, seated in a different place away from her. Elizabeth commanded '-sm:Nix What are we doing now?' Waiting. If you see something, lie on the floor. These two began waiting. Elizabeth ordered a tea, then peeked at Nix. He too ordered something. '-sm:Nix Hope it's not vodka ~_~ '.

Nix replied, Nope.

Waitress put the tea on the desk, saying "Here you go." A long, blonde haired, sexy woman, around the same age of Elizabeth, with a cute smile on her face. She seemed familiar to Elizabeth. Elizabeth reached to tea, however an unexpecting change happened to her body. Her leg was shivering. Woman looked at Elizabeth closely, "Aren't you Prof. Williams' daughter? I saw you at the university," she said. Her cuteness never faded off from her face. Then, "May I sit?" she asked. Elizabeth pointed the chair with her hand, and she sat where Elizabeth pointed. "Irina," said the woman, they shook each other's hand. When Elizabeth held her hand, she felt something was happening to her. Her legs began shivering more; meanwhile she was sweating, and her heart was beating rapidly. The woman was talking while twirling her hair however, Elizabeth couldn't focus what she was saying. Elizabeth saw the writing *-si command waiting for your confirmation*. However, she thought 'No.'

"Are you alright?" woman asked, coming closer to Elizabeth.

"Yes," said Elizabeth. "I just..." she was still sweating.

Woman said, "Got it. It's a bit hot inside." After a moment of silence, "Better leave now," she said and stood up. Afterwards she greeted Elizabeth with her head.

'Why didn't you allow me to make a somatic check?' Cutie asked.

'Because there is no problem,' Elizabeth replied. 'I just... got attracted to her, that's it,' she continued.

Cutie, 'Interesting, you are...' and Elizabeth interfered, 'Yes, I am homosexual.' Cutie ignored this because there was nothing interesting for her. Elizabeth took a sip, then to Cutie, 'Let's just wait for Alfred for now,' she said and began staring through the window at other side of the road.

They waited for a few minutes. She was about to finish her the second tea she saw Alfred coming towards. She messaged Nix about it. Nix too began looking at him. When he saw Alfred, he messaged Elizabeth to get out calmly. Elizabeth took another sip from her tea. Nix left first, because he was closer to the door, signaled Elizabeth to stay a bit more. Elizabeth waited for a minute; meanwhile finishing her tea, then moved towards the exit. However, on the door she had surprise she hadn't expected. The moment she stepped out; she came across with two police. Both by showing their IDs said, "You are coming with us Miss Williams." For some reason, they hadn't noticed Nix yet, or they came exactly after Nix went outside. Nix and Alfred was chatting at the back as if they didn't care. Police, by locking her both arm, began walking. When Elizabeth looked back, she was Nix was following her, to not draw attention she didn't looked at him much further. 'Jax:Stay calm, I have a plan, just don't f**k it up.'

Elizabeth walked with the police for a while. They came at the end of the street. There was a building at the corner; road curved to the left. Meanwhile Cutie asked, 'I have prepared a simulation with Jax, want to see it?' Elizabeth said 'Yes,' to Cutie. And an image consisting of shadows appeared on her vision. Nix was marked like last time. A shadow came from corner, crossing his/her hands in front of Elizabeth. Police at sides left her arms, but still standing near her. Then Nix's shadow approached to them, after waiting for a moment, something was happening then all shadows except Nix and Eliz-

abeth knocked down. Then a red strip appeared on the ground, leading where they had come from. Suddenly simulation disappeared, Elizabeth went back to real life.

Police left Elizabeth arms at the corner of the street, with one of them saying "We are waiting here." There was a police hovercraft standing next to them. Sounds of high heels was rising from the corner. Elizabeth knew those sounds. That was the sound of the woman who interrogated her. Woman turned the corner, stopped in front of Elizabeth.

"You are on trouble Miss Williams," said the woman.

"Fine," said Elizabeth, "But I'm not leaving without learning your name."

"Vera Rojas, you happy now?" said woman, smiling. Then facing those two men, "Accompany Miss Williams," she said with a mocking grin on her face.

Meanwhile Nix run towards them saying, "Hey! You forgot me." When police saw him, they immediately pointed their gun towards him. Nix, raising his hand to his chest, "No weapon, Just ID," he said. Vera approached Nix:

"Really? Mind if I see your 'ID' then?" she asked.

Nix, with a serious face, said "With my pleasure, ma'am." He searched his pockets, then saying "AH! There it is," and took his gun out and suddenly fired on Vera. Police was about to shoot back; Elizabeth hold one of police's hand, she redirected it to other one's leg. Which made police shot his friend instead of Nix. Elizabeth left police's hand and hit his face with her elbow. Police was stunned; however, he was alright. He was about to interfere Elizabeth, Nix shot him. Nix, turning Elizabeth, 'Wow, look at our lady(!)' he said. Elizabeth was excited "Uhmm... It wasn't me though," she said.

"Then," Nix replied, "Say thank you to Cutie, the plan went well thanks to her," he continued. Then "Let's go, we don't want to make Mr. Alfred(!) wait," he added.

"Do you mock every single non-rude person?" Elizabeth asked, looking at Nix.

"Watch out!" Nix pushed Elizabeth aside and shot again to the man who was shot from his leg. This time fell on the ground. Nix went near the other one, said "Just in case."

Elizabeth didn't want to look at that, so she turned back. She didn't see the anything, just heard couple rounds of gunshot. Elizabeth asked, "Have your violence show ended?"

"Yes, let's go," said Nix. Both of them moved towards the hovercraft. When he saw the hovercraft, Nix began running. There was a man near hovercraft, with that black box on his hand. Seeing Elizabeth and Nix, he began running away. Nix passed the hovercraft; keep following him. Elizabeth got closer to hovercraft; saw a man lying near hovercraft in blood. His blood had spread from near hovercraft to road. Elizabeth went near the man lying. Meanwhile she heard couple of gunshots. When she saw man on the floor, she went astonished; it was Alfred on ground. Poor man had been shot 3 times; he was lying there. Elizabeth couldn't stand looking further; she was getting pretty nauseous. For losing his only friend in this island and for he had ended like this, she was sad.

Nix, gun on his one hand and box on the other, came out suddenly. He raised the box, saying "Got that b**rd," filled with joy. Elizabeth just stared at Nix. She was speechless. Nix too saw Alfred; he was frozen. He lowered the box, strode towards hovercraft. When he came near Alfred, "Poor man," he said. Then facing Elizabeth, "Cops are about to come here, we must go."

"What about Alfred?"

"We have to leave him, don't have much time," said Nix. For the first time she spoke with a sad tone.

"No, we can't. We can't..." Elizabeth began crying.

"We don't have time," Nix replied, holding Elizabeth's hands.

"No. No..."

Nix, slapped Elizabeth hard and said, "You better get used to it." He held Elizabeth's hand to put her to the hovercraft and they took off to return.

They didn't speak at all during flight. Elizabeth just glared through window. Hovercraft landed on parking lot in front. But Elizabeth didn't hop outside, she just kept glaring. Nix, touching Elizabeth's shoulder, "Elizabeth! We have arrived," he said.

Elizabeth pushed his hand away, "Okay, I'll come. You go, I'm coming."

"Are you alright?"

"Yes, just go Nix. I want stay alone for a while."

Nix hopped out, began walking towards the house. The box was still in his hand. Elizabeth still wasn't moving inside the vehicle. Streetlight was blinking, Elizabeth stared at it without moving her head for a while. Then streetlight went off completely. Elizabeth was being illuminated only by the Moon and hovercraft screen's light in the twilight of the silent, gloomy night.

Couple minutes later, Elizabeth went out of hovercraft. Feeling exhausted, she walked through the house slowly. There was no light inside. She stepped into the living room however, she didn't want to turn the lights on. Living room's windows being big, the objects inside were roughly visible, but when Elizabeth looked at other room through archway, she saw the other rooms are in complete darkness. She now didn't have energy to get upstairs. She slowly walked towards the couch and fell on it.

With sunlight hitting her face, Elizabeth woke up. She squinted, tried to cover her eyes using her hand. Then rubbed her eyes, looked around. She looked at piano too. There was no one there either; however, that made her remembered what happened yesterday with Alfred. She was panting heavily. She stood up and went to the kitchen. When she saw kitchen empty, she yelled "Nix!" No answer. Yelled again "Nix!" Wasn't Nix at home? Elizabeth wanted to go upstairs to check Nix. In the stairs she was relieved with hearing snoring from up and went back to kitchen. She wasn't willing to wake Nix up; what happened yesterday was exhausting already. She stepped in, sat at the desk, gestured to robot. Robot dropped the breakfast on the table. Elizabeth ,unwillingly, began eating.

Yesterday's events weren't like the others, this time police were involved too. She was a wanted woman now; she didn't know how to get out of this. 'Wonder if Sackville knows about it,' she thought. Finished her meal, went to living room. NAN receiver was on the coffee desk. She took it, first activated her UI, then placed the receiver. 'Cutie, how we are going to message Sackville?' she asked. There was no answer for a couple of seconds. Then Cutie:

'I need to redirect a Shellcon message to repo then to Sackville,' she said.

'Alright then, do the adjustments, I agree all,' said Elizabeth. She saw lines of text sliding down.

'Ready, which message should I send?' Cutie asked.

"Send this, 'Mr. Sackville, we are on trouble, Alfred was shot, and police is on our tail. What do you think we should do?'"

She got no answer. Having gotten no reply, Elizabeth remembered her loneliness once more: First her father, Then Alfred. She pulled her legs to her stomach and put her head between her legs. Meanwhile Nix stepped into living room, sat next to Elizabeth.

"Are you alright?" he said touching Elizabeth's shoulder.

Elizabeth said "No! Everything has been going worse for the last week," and began crying. Nix hugged Elizabeth, trying to calm her.

"Calm down Eliz..."

Living room's glass was shattered noisily. Elizabeth, shrieking, lay on the ground. Nix was ready; he took his gun out and began shooting. Elizabeth realized her UI had become active without doing anything. A route appeared to Elizabeth's vision. Route was leading to archway, stopping at hallway. Elizabeth began moving forward, crawling. "TAKE THE BOX!" Nix yelled. Elizabeth -taking the box standing near archway- went outside of living room. Leant against the wall when she entered, pulling her legs, she began waiting. Nix dived to hallway and came near Elizabeth. Elizabeth was locked in fear, she couldn't do anything. Cutie said, 'Try to calm down Eliz,' however Elizabeth was in great dismay that she couldn't understand it. Nix tried to calm Elizabeth down too, however he failed. 'If you keep going like that, I have to take the control away from you,' said Cutie. Meanwhile Nix grabbed Elizabeth from her throat, with his other hand he slapped her. Then he said, "Come up with yourself. This is not the place to cry. Now let Cutie take control. Any way out then door in living room?"

Elizabeth was still not able to reply, she saw a writing, 'Emergency: TIMOS control has been taken over by PSC.' Elizabeth, despite wasn't able to speak, pointed the basement. Nix, handing his gun to Elizabeth, "Take this. I'll go up and take the shotgun. You are going out from basement. MOVE!" he said and ran upstairs. Elizabeth, standing up, leant against the wall close to archway, she was waiting with a gun in her hand. Obviously, Cutie was in charge; Elizabeth couldn't think normally because of her fear. Someone entered the house, the others were outside, clashing with Nix. When man inside came closer to archway, Elizabeth popped out where she hid from, and kicked him from his stomach. Then she shot him. Afterwards, Cutie led her towards basement.

When she entered the basement, Elizabeth said "I-I killed- some-" She couldn't get rid of her shock.

'If you take the piano example, I killed him. I am the responsible but to my calculations you could have been in danger if I hadn't done that.'

Elizabeth took a deep breath. She calmed down a bit. There was a door leading to garden at the back. That was why she came to the basement. She was going to run away from that door. However, she didn't want to leave Nix behind. She took a few steps, meanwhile she shot someone else incoming. She shots were fatal, Elizabeth realizing that said 'Can we at least injure only?' to Cutie.

'For that I need to set a neuro-ethic surgery but that takes time' she replied.

'Neuro-ethic surgery? This isn't written on anywhere.' Elizabeth slightly opened the door slightly to peek at the garden at the back.

'Neither PSC,' Cutie replied. She was right, the guide didn't cover anything, only essentials for user were documented. Cutie said, 'This is not the time for thinking that.'

Elizabeth had gone out, she shut the door tightly behind. Then she reinforced it with a wood plank she found. When she turned back, she saw two men surrounding her from both sides. *Jax: One on the right*. A mark appeared on the man her right. The control was on Cutie still. She immediately shot

the one on the right, Nix shot the one on the left from up. Nix jumped down from window to the garden and said "Come on, let's go. If we don't, police will bust us."

"Where?" asked Elizabeth with curiosity.

"Only you could know it," said Nix. He pointed the NAN receiver on her arm. But Elizabeth didn't react because she couldn't get over the events. Then saying, "Come on, let's go," again, took the box from Elizabeth's hand.

They wanted to go frontside and hop into hovercraft but, police were at frontside also. It was impossible to reach hovercraft. Because of that, they went the house next to theirs from behind. From there they went frontside. Without being seen, they left the street.

"Any worlds from Sackville?" Nix asked.

Elizabeth went furious to that question, "You asked it like 10 times!" she said, she clenched her fist, trying to control her anger.

"Come, let's drink something here," Nix said, pointing a café. "But we cannot stay there for longer, every second we stand still will make us closer to the police. We must leave as soon as we hear from Sackville." They went into café together. This time they didn't get separated, these two went in together and sat at same table. Elizabeth ordered a tea, Nix an expresso from the waiter.

Elizabeth got closer to Nix, whisperingly asked, "Is there anything other than waiting for a world from Sackville?" Nix nodded side to side. Elizabeth leant back; she was sad. She crossed her legs and began waiting for her tea.

Elizabeth thought, 'If we are going to wait uncertain.' Cutie got what Elizabeth said

Neurosnaphot: The uncertain key to immortality

Elizabeth didn't forget to command '-b follow Nix -c take TIMOS control.' That last article could keep her thoughts away from the events occurred today:

The articles must be read before:

Neuromemory: Syntheronic and natural recordings (Prof. Otto Herrmann)

Nest repos and data cluster concepts (Prof. Clarie Fay)

Neurosnaphot is recording of all natural neurons and syntheron's memory states. Due to syntherons and natural neurons having different memory methods the recordings apply separately. Having a back-up in somewhere that doesn't mean you are going to reborn in another body. When you got loaded back you may forget your natural memories (such as your childhood memories, faces you know...) and some of this cannot be determined.

However, there is a way to increase the precision slightly. This is by converting natural memories into syntheronic data cluster to save them. These recordings will be coded by separate memocell, and A. I's access can be disallowed on demand.

Copying of syntheronic memory is an easy process. Back-up is completed by copying all XNA of all memocells.

However, in natural neurons there is no dedicated space for memory. Because of this, in the brain all neurons' associations with other ones are saved. This process is quite complex and long, for that there is no need to know the details.

These two processes mentioned above is done via special tools in repo.

Revised by Lucas Pinho

When Elizabeth finished reading, she found herself following Nix. They had gone out of café already and were walking by the street. As far as she knew this road was leading District 4. Looking at her right arm, she realized NAN receiver was absent. Cutie said, 'Nix wanted it and I gave it.' When Elizabeth looked at Nix, she realized a bulge under his coat. Meanwhile Nix noticing Elizabeth, "What wrong, you seem dizzy," he said.

"When did we get out?"

"Haha!" That's Nix's annoying laugh. "That's what you get if you let control to A.I."

Meanwhile Cutie interfered, 'Do you want the TIMOS control back?'

Elizabeth accepted and got her body's control. After losing her balance and immediately gaining back, then she began following Nix. Elizabeth asked, "Why did you get the NAN?"

"When I asked, 'Any world from Sackville?' Cutie messaged me that you had given the control to her. And I took the NAN receiver'. These two turned right.

"Any world then?" said Elizabeth. She wanted to know what she needed to do.

Nix nodded as yes, "We are going to nest," he said. "We will go to District 5; you know we don't have a hovercraft anymore and I'm not a good swimmer. For that we need a vehicle to go to District 5. Sackville have already sent one, with NAN receiver he's going to locate us. And I was looking for a place for proper hovercraft landing. Then you came(!) or joined. Hard to describe." Nix noticing Elizabeth's sudden strange behavior "Are you okay?" he asked.

Elizabeth nodded side to side, she was filled with dismay, "No... I."

"Ha!" said Nix, smiling. "That's the first time."

"I killed som..."

"I've been doing this for years but as you can see, I don't cry like you," Nix said showing himself with his hand.

"What, am I going to get used to it?"

"You aren't going to cry constantly, right?" While laughing, "You are really funny," he continued.

They walked for next 2 minutes. Then they came across with a big parking lot. It looked like the one in festival. The only difference was there was a big bridge next to it. When he saw the lot, he said "Here seems ok," grabbed Elizabeth's arm and dragged her along. Nix said, "Let's find some place to wait," then began looking around. He decided on one of the columns of the bridge. They hid somewhere dark in one of the columns of the bridge.

"We are lucky," said Elizabeth. "President Carbajal wanted to put camera on every street. Unfortunately, he couldn't," she continued.

Nix and Elizabeth began giggling. Then a long waiting had begun.

"It's coming," said Nix. They slowly came out for where they hid. Everything seemed usual, no police were around. Elizabeth noticed there was a chimpanzee on the driver's seat. "It's not driving, isn't it?" she said surprisingly. Chimp hopped out, ran and hugged to Nix.

"Hey, how are you Chap?" Nix asked. Then he gave Neurosnapshot box to chimp. Chimp went back to place the box to the vehicle. Nix, facing Elizabeth "This is Chap, he's very friendly," he said. Elizabeth keeping staring at Nix with confusion, Nix asked, "Neurosist, remember?"

They hopped into hovercraft together. Nix, seeing chimp on driver's seat, said "Go back Chap." Having seen Chap pouted, "Everyone hates your driving, why you keep insisting on not understanding it?" she said. Chap nodded to agree Elizabeth.

However, Nix was decisive "BACK!" she shouted. Chap went backside, hid at the back of driver's seat. Elizabeth, seeing Chap, decided to sit at back. She sat beside Chap, petting her she said, "Poor Chap." With everyone seated, hovercraft took off.

District 5 was a small island connected to main one. Nearly nothing was in it. Only some places for rich to have vacation. In short, was a good place to hide something like District 4's ruined part. Elizabeth was excited, this was a place where every question will be answered, and everything will be solved. Chap held Elizabeth's hand, was trying to calm her down. That black, metallic box was standing between Chap and Elizabeth, where they held each other's hand. Nix said, "We have arrived," and began going down for landing. After landing Nix turned back, "You are carrying the box, Chap," he said and hopped out.

Elizabeth, Nix and Chap walked towards a wooden shack together. It was sunny, and everything was clear. They stopped in front of a wooden shack. All the glass on the wooden shack were broken, there was a bench, a lamp on the ceiling and a broken mirror against the bench pieces of it were scattered through the shack, some of them had blood on.

Nix said, "Careful, don't step on the glass." Chap took couple steps back and began yelling. Elizabeth went down on Chap's level, looking at his eyes said, "What wrong baby?" Chap first looked at his bare feet, then to Elizabeth.

"Fine, I'm going to pick you up but don't bite my hair or something, ok?" said Elizabeth pointing Chap. Chap nodded as yes, he was smiling. Elizabeth embraced Chap and went back to the shack. However, Nix wasn't there. Chap pointed a hole behind the bench. When Elizabeth put her finger there, a red light blinked; it was coming from that lamp. Then bench rose upwards, revealing a stair underneath. That was built from a silver-colored metal. They began walking downstairs. Stairs led to a corridor. All walls of the facility were made from that silver-colored, shiny, smooth metal, all rooms were lit well from the lights embedded to ceiling. Floor was made from square-shaped silver-colored marbles. Chap left Elizabeth and held her hand. These two walked along the corridor.

They stepped inside a big room. Against them there was a reception desk. Nix was sitting on a chair behind it, with his feet up. When he saw Elizabeth, he stood up saying, "Welcome to the Drosop Nest, how may I help you?", he greeted them. Then he crossed the desk and stood in front of Elizabeth.

Elizabeth asked, "Well Mr. Comedian, where is Sackville?" Chap answered the question by pointing the corridor leading to right. Suddenly, everyone frightened with a booming sound. That was coming from the corridor they had passed. Chap -being closer to the corridor on left- run there as soon as he heard the noise. Nix had already taken out his gun from his coat, "Get ready, they are coming," he said and covered at the back of the desk.

Elizabeth immediately strode to corridor on the left. Chap was waiting at the end. Elizabeth went near Chap. Gunshots were coming from the room they had left. Together they stepped in on the room at other side. This room was as big as the other one, there was another hallway at the opposite. Both sides of the room had doors. Each door had a label which had a name in it. Elizabeth took

the gun out which Nix had given and facing where she had come from, began walking backwards. A robot passed him with a gun on its hand and dive on the sounds of gunshots. Chap was hiding in a corner with the box in his hand. Suddenly, everything became weird to Elizabeth, her vision got blurry. Elizabeth began shivering; she was barely standing. She fell on her knees, she was gasping; when she tried to get up, she saw a writing *TIMOS error: Failed to execute requested motor command*. Elizabeth saw three men however she couldn't recognize them. The old man in the middle began speaking:

"You must be Miss. Williams. I know you and your father; you are not as fool as N..."

Elizabeth couldn't understand what he was saying. She looked at back, saw a tunnel. There was a light at the end of the tunnel. Everything was moving; that was making Elizabeth dizzy. What she saw became meaningless. Meanwhile old man kept speaking, Elizabeth was hardly understanding it:

"You... under... Miss Williams, I'm not..to harm, this is our future."

"Not yours Yoshinori," said a voice coming behind her, a robotic male sound. She heard gunshots along with robot creaks, as Elizabeth's vision getting black.

. . .

Elizabeth found herself in an office; she was stunned. There was a table next to her, behind it a library leant against the wall, covering entire wall. The room was lit by a lamb ,emitting yellow light, in the middle. She had a headache, trying to regain her consciousness. What she had gone through was like a dream. Or was it really a dream? She could see clearly now. She realized there was a solution attached to her right arm.

"To resolve the effect of Timoplegia," said a robotic male sound. A robot was reading a book -a pressed book- on the chair against her.

"Someone(?) reading a pressed book who has an electronic body..."

"Weird, isn't it? But I think this is the least weird thing you have seen today."

"Yes," said Elizabeth. Looked like the things she had lived so far wasn't a dream. "Can I talk with Prof. Sackville?" she asked to robot.

Robot pointed the nameplate on the desk with its fingers, *Samuel Sackville*: *Military bioengineer*. Robot said, "Right in front of you," "Appearance is deceiving Elizabeth, I'm a human just like you," he added.

Sackville stretched his hand to Elizabeth. They were close to each other to shake hands. When Elizabeth shook it, Fingerprint confirmed: Drosop, Sackville-Melanie.

"How?" said Elizabeth. She checked her arms, there was no NAN.

"There are two types of connections: local and wide. When you are inside nest your local connection is enough for a fingerprint check, NAN is only needed for far distance and speedy connections."

Elizabeth said, "Well if that's you, then there no harm asking a question I had in my mind for a long time." This time there wasn't a man snubbing her with every question, a robot (or a man, whatever) that could answer her questions.

"Sure. Go ahead," said Sackville, with his robotic voice.

"Why do you need organic synthetic circuits to connect brain to a photonic chip inside body? I mean..."

"Neurosist doesn't use photonic chips Elizabeth, only for NAN we just inorganic circuits and these are really small, besides when it becomes bigger, it gains antigenic property," Sackville interfered. He stood up, "Come with me," he said. Behind the robotic body of Sackville, his spinal cord was visible in a glass tube, his nerves were connected to his bodies' cables. They went to the room next to it by stepping down a small stairway. That room was covered with glass, only seeing the sea.

"Usage of photonic chips increased the capacity of A.I by a large margin; I can't deny that. But these photonic chips aren't the only way. We have an alternative Elizabeth; one we haven't solved the misery of it."

"What's that?" calmy asked Elizabeth. They came in front of a desk which has no chairs around.

Sackville pressed some buttons on the desk. A blue holographic image of a brain appeared and began rotating. "Human brain," said Sackville. Elizabeth didn't inch at all, didn't react. She had gone through a lot in this week that she thought this was normal. "With the symbiosis of synthetic and natural biology, it has a big potential."

"Syntherons."

"Yes." Sackville pressed another button, and a syntheron scheme looked like, appeared this time. "Neurons configured for a purpose. These neurons are accumulated in prefrontal cortex where you made your decisions. PSC, or Prefrontal Syntheronic Complex, is where that A.I resides which you wonder about."

"Which one could pass the other, syntheronic A.I or photonic chip A.I?"

Sackville faced Elizabeth, "I am a scientist Elizabeth, not a fortuneteller," he said. Then 'You must rest now; we are leaving tomorrow. I'll accompany you to your father's room, you can rest in his bed," he said, and they left the room.

When they stepped into entrance, Elizabeth saw Nix lying on the ground in blood. She went down on her knees and caress his cheek. Sackville realized the state, "Forget him, he always wanted to die. Mr. Clerk isn't one worth to be saved," he said.

"He told me that he is one of the first Neurosist rides, why did you choose him if he wasn't that successful?" she asked.

"Mr. Clerk isn't successful," said Sackville. They were moving towards the left, where she passed out. "He was kicked out of army due to alcohol abuse, and he was incompetent. Neurosist was a project with unknown result at that time; and we needed someone who gave up on his/her life. He didn't complete any mission given to him. Like he sent him to take that Neurosnapshot box in university. And he returned without taking it, then we had to take it from mafia by paying them. Same thing on Takamoto; he failed to stop him. That's the reason why we made you a Neurosist rider."

"To babysit," said Elizabeth, laughing. "Talking about Neurosnaphot..."

"Where it supposed to be," said Sackville. They stopped in front of a door. There was a nameplate on it: *Thomas Williams*. Sackville "I have to go. I have some work to do for tomorrow," he said and left Elizabeth.

Elizabeth went inside through the door. Her father's office was the same as Sackville's. Only difference was there was a bed instead of a chair where she woke up in Sackville's office. Elizabeth went into the bed, she was crying. After a while she began sleeping.

As soon as Elizabeth woke up, she went to Sackville's office. There wasn't Nix's body at the entrance anymore. She stopped in front of his door, knocked and went inside. Prof. Sackville was sitting at the desk behind, not on couches in front, he had a solution attached to his right arm. Elizabeth asked, "Solution for a robot, isn't it?" she asked mockingly.

"No, this solution is required to feed my brain," said Sackville. "We are evacuating here today; I completed everything while you were asleep. Nothing will remain from this nest in a couple of hours," he added.

"Mr. Sackville, I want to ask you some questions," said Elizabeth.

Sackville nodded to agree. Elizabeth, "First one could be personal."

Sackville, after laughing with his robotic voice, "Melanie is the name of my wife died from cancer, ten years ago. You don't need to apologize, get to the next one," he said. Mr. Sackville was almost reading her mind. Maybe he was actually reading her mind.

"Mr. Sackville this technology...", stopping for a moment, "the things we've been through, sound logical to you?" she added.

"You should report it to author if you think something doesn't," said Sackville. Then, "We have to go now," he said, and they went outside.

While walking inside Elizabeth asked another question:

"Well, Mr. Sackville what about The New Order's 'zombies'..."

"Because Yoshinori doesn't have access to nest resources the Neurosist rider he has created isn't so effective. But somehow, he managed to mass-produce it. What he does which the people he found is so cruel: After cutting connections between Prefrontal lobe's dorsolateral field and all motor complexes, he creates the syntheronic complex. For that, all riders aware of what they do but they cannot control it. This is completely unethical."

"But for my observations, they can control it a bit."

"Plasticity Miss Williams, Plasticity."

They went out of nest, they were at the large landing site built on a cape in the island, the ocean surrounding District 5 can be seen. They stopped in front of a big hovercraft. Bunch of robots were loading something on hovercraft's rear. Sackville and Elizabeth hopped into the hovercraft.

Elizabeth had a feeling that she was confidently steeping into a giant dark abyss she didn't know what. What would be her next adventure, which people she would meet, what she would go through? While steeping inside into the hovercraft, her mind was busy answering these questions.