The Damage

Aby Malbeyo

## PART I

At this hour, the balancing rocks on the horizon would be dancing. Beni only had to look out the window. She turned over on her left side to face the back of the couch. Beni spent most of the afternoon on this couch, but she did not want to get up yet: she wanted to read the dog story first, and to find out what it could possibly have to do with learning languages.

"Imagine that you are five, and you have a dog. You have been asking your parents for a dog for a long time, and now, you finally get one. A sleepy blob of fluff in the bottom of a large cardboard box, for you to love and take care of. The dog is going to be your responsibility, they warn you; what does it matter? — You are a child, and you are happy. Quickly, you become friends and start spending most of your time together. Then, one day

comes when your parents summon you for a serious talk. "We see that you are getting on well with the dog. It is very much attached to you," they say. And you can clearly see that. "You are handling your responsibilities very well," they say, "the dog depends on you for its every need, and you take good care of it." You want to agree, but you feel that it is not necessary, for it is not to be praised that you are summoned; something more is coming, something more serious. "It is time to strengthen your bond with the dog much further," you are told. "It is time for you to deepen and develop your own feelings, your love for your pet. For this, you will have to depend on it as much it depends on you.

"We shall take away your eyes. The dog will be your eyes from now on."

You are five, and so you submit. Perhaps, the decision seems reasonable to you. After all, it was you who wanted to have a dog. You have been asking for it. Begging, even. Now that you have it, you have to go all the way.

And so it is done. At first, you are bitter and resentful toward the animal, but a child accepts the world as it comes. You depend on the dog now. You spend all your time with the creature, and slowly, the resentment passes, giving way to other feelings. A whole spectrum of them, since, indeed, the relationship with the dog now occupies most of your emotions and fills your life almost entirely."

Defying the ray of sunlight that was intruding from the other side of the window, Beni drew a spare pillow up to her face, arranging it over her bushy hair in such a way as to protect her right eye that was still exposed. Life was rather comfortable at this point. Even her hair that she was undoing with the pillow would be fixed: the new machine at the dorm's entrance would make it into a perfect, black, wiry halo, whenever Beni decided to make her way downstairs.

"Years pass. You are grown up now. The dog is long since dead. Perhaps, you had other dogs, or you get by on your own. And then something prompts you to reflect. It could be your birthday. Or maybe an old friend has shown up and brought back some memories, and from those memories you went reminiscing back, and back yet farther. Or it was something else that made you ask yourself: Was it worth it? Indeed, your love for that dog had become much stronger than it could have ever been; it had been an emotional journey much richer and fuller than it could have been had you not been blind. Yet, you lost the ability to see. True, you can use audiobooks or Braille, but you cannot watch

movies. Your sense of smell and touch are much more acute, but you cannot enjoy colors. You can listen to music, but your ability to move and travel are greatly reduced because of your impairment. You lost all this — to be bound to a dog. Yes, the dog was a wonderful friend, but you had loved it before — was that love really that much wanting? So much wanting that you had to pay with your eyes to fix it? Was that emotional journey that you gained worth all this perceptual loss, that price that you managed to accept but that you keep on paying? You start questioning the decision your parents made for you, and you find it to be ambiguous at best. Perhaps you find it downright wrong; anger overwhelms you, because there is nothing you can do that will bring your eyesight back. Or is there? Would you be ready to make another sacrifice just to get a chance at it?

If so, then you should read on, for this story is about you."

The bizarre dog story left Beni somewhat annoyed. She was expecting an explanation of how the app was supposed to help you learn languages, and so far, it was no clearer than before she started to research it. The app was distributed in a rather unusual way: not through the Store — probably not allowed there — but via its own website, and before being able to download it, one had to make one's way through walls and walls of explanations. Still, Beni was intrigued, and she knew that, sooner or later, she would get to the bottom of it.

Beni's room on campus was small and filled with second-hand furniture left by the previous tenants, but the savanna views it afforded from its twentieth floor were splendid. The first few months she would try to be home every evening just for the sunset. Now, after more than two years, she was already used to the views. She would no longer take out her camera to try and fix the dancing shapes of the balancing rocks, barely visible in the distance without the zoom. Instead, she would calmly watch them do their show in the hot turbulent air that started to move up as the dying African sun was finally letting it go. Now that the afternoon heat had subsided, it was a good time to go to the lab.

On the ground, the campus looked very different from what Beni could see from her top-floor apartment. It looked like it had been transplanted straight from the old island as it was a couple of centuries ago. The sprawling squares of the brick university building, complete with a clock tower, lawns of thick grass and somber apple trees planted seemingly at random here and there, were perhaps meant to communicate the idea of the roots of scientific tradition. At least to Beni it was difficult to explain it otherwise, as she found the whole ensemble rather dull. Still, she knew the impression was superficial, and it was enough to search for a few moments to find something different. Just as she was thinking that, a blue shape dashed across the scene. In this light it was blue, in another light it would be purple. When seated, this restless little bird, a lilac-breasted roller, could be seen to wear almost all the colors of the rainbow.

The new research center had been started some thirty years ago as a refuge for everything weird and ethically questionable, from AI in politics to human embryos and brain merging. It used to be a small, gray building hiding in the shadow of the menacing concrete blocks of the old Bulawayo campus that was hailed from the end of the last century. As the funding kept flowing in, the strange-science professors were offered permanent

contracts with obligatory undergrad teaching, and little by little, the project revealed itself in its full extent. Presently, it was a sprawling campus full of students from all parts of the continent and beyond, quite indistinguishable in its scientific and human output from any of the major universities of the old world.

A small group of Victor T's fans had set camp in front of the brain-merging lab where Beni worked. At first it had been annoying for the researchers: the cheap bright colors of the tents had defaced the peaceful view of the lawn. Some of those tents had been put directly on the path that led to the lab, constituting practically an invasion. At the same time, it was hard not to feel like an intruder oneself, seeing the shadows inside the tents in the morning, with sometimes a pair of legs or a swollen face and a hand holding a cigarette sticking out. In a matter of weeks, however, everyone got used to the fans' presence, and by now the group of about a dozen teenagers, most of them girls, was nothing more than a good subject for lunch-time jokes. A much bigger group had set camp outside the hospital where their idol was. Victor T. had been in coma since his suicide attempt three months ago. They wanted to offer their brains to be merged with his. When this idea appeared on social media, critics were quick to point out that this was technically impossible: merging human brains had ever only been performed on pairs of genetically identical brains. On mice and other lab animals, every attempt to merge brains that were not identical had failed, and opposite-sex merging had never been attempted. This did not deter the young fans. They were willing to sacrifice themselves for a fleeting chance to offer another life to their idol. Or, perhaps, simply to sacrifice themselves, in which case, the smaller the chance of success the better.

The coffee machine was in a tiny kitchen attached to the common room. It was curious how something so important to the researchers was given so little thought and consideration. The kitchenette could fit no more than two people at the same time, and only if neither was using the fridge. The fridge was next to the kitchen entrance, and if its door was open it blocked out the rest of the space completely. Next to the fridge was a sink, followed by a microwave and then the coffee machine. If someone was using the sink or the microwave, then whoever wanted to use the coffee machine would have to get behind the

back of the first person. Doing that without brushing against each other was difficult, making the use of the coffee machine, if someone else was present, a feat almost impossible for many of the lab members. For the lab composition was somewhat peculiar: social situations like this, that would be negligible to most, were very important and even dramatic for many in Finker's merging lab. Research centers are known to shelter a variety of people that are socially awkward if not downright crazy. Still, if you take any single lab or any faculty, you would find that, while there may be a few people that are borderline autistic, most are surprisingly normal. A little eccentricity or extravagance would usually be better explained by the liberty afforded to the position: professors exhibit these qualities much more often than postdocs or Ph.D. students. Finker's lab was different. Perhaps the only person that was clearly normal was Professor Finker himself. And maybe Neguin, but then Neguin was somewhat of an outsider, and had been long expected to finally finish and leave.

There were four people in the common room adjacent to the kitchen. Their positions were distributed along the perimeter in such a way that the distance from every person to his nearest neighbor was maximized, as Beni observed. Two were stand-

ing at the large window, at its opposite sides, looking outside. Everyone had some object in their hands that they were not using — an empty coffee cup or a pen; Ghazaleh had a fresh printout that she was holding in both hands, in front of her, like an apron. Her elongated face with thin features and a bony nose was frowning, as if to her own thoughts that were elsewhere; but her restless eyes, darting from one person or object to another, were giving away her presence. Calm down, Beni thought smugly. Nothing is supposed to happen and you don't have to do anything. You are just being new. From the height of her twenty-six, and two-and-a-half years of Ph.D. study, Ghazaleh — who had just finished her first year — looked to Beni almost like a child. Besides, Beni had reasons to feel distant from her colleagues, if not superior to them. The story that Mara told Beni about how she, Beni, came to existence, made her take a fresh look at her life, and in particular, at what was to her the most important part of it – the recent years. As a result, Beni decided to write up her thesis. She was so angry with herself for wasting too much time previously, that she finished putting it together in just a few weeks. And now she was blissfully free. Nobody knew that she'd finished, and she still had a few months of funding. This meant she could do pretty

much what she wanted, while everybody who would bother to care — probably nobody would, including Finker — would think she was working on her thesis. She did not quite know what to do with all that remaining time and energy, but she knew that whatever she wanted to do, she could do it, and do it on time.

Presently, though, stepping out of the kitchenette with her mug of coffee, Beni was hesitating. She would be quite a disturbance to the equidistant configuration of people in the room. Should she assume the position between the two persons at the window, looking outside at the lawn with those trees and the tents? Or simply step outside the kitchen entrance and stand by the door there? Or maybe walk right to the center of the room and say something loudly — but then what would that be? Too late in the day to just say Hi; maybe she can say something about the weather. This all would change if Martin were to come in.

At first glance it could seem Martin was a completely different character from the rest of the lot. Where others were quiet to the point of being timid, Martin was loud. Where others were struggling to find a topic of conversation, not knowing where to start even if they had one, Martin would not wait for any excuse or provocation. Briskly, he would come into the common room, as if the urge to talk was always too much for him to hold. He would come right into the center, and say, "Have you heard about—" And then something from the recent tech or science news would be mentioned, or it could even be some recent TV series news. Just a simple topic for a conversation— easy to find, everyone can do it. Each of them would turn toward Martin, some holding their positions, some starting to approach slowly. Yet someone would perhaps quietly leave at this point, suddenly recalling some work to take care of. Martin would then pick one of those facing him to address, and would hang onto that person until the topic was exhausted.

"So about this language-learning app," burst in Martin. The others slowly turned toward him, as if waking up from their contemplative state. Beni turned away from the window. She was glad not to have to look any more at that tree, which was dying of shame as a pair of kids tried to light up a portable stove right under its skirt.

The lab had been abuzz with the app for the best part of the last week. It was supposed to help you learn any language — indeed, any number of languages — the way a child does. Exactly how this was accomplished Beni could not make out from whatever attempts of explanation others had been giving her, which was most likely because they had not understood it themselves. More importantly, nobody in the lab had tried the app yet. "I don't have time for this now" — the usual pretext. They were right, though: the instructions said you needed to take at least five days off all of your activities — work, family, everything — to be able to acquire another native language by the end of these five days. Or you will just have your brain messed up, thought Beni.

"What about it? I still don't get how it is supposed to work."

Martin was prepared to give a speech, but Beni's question disturbed its course, so now Martin had to readjust. He gasped, and for a moment, paused with his mouth open.

"Do you know how it is actually supposed to work?" pressed Beni. She knew that if she wanted Martin to answer her question rather than to deliver his monologue — which would rarely be interesting — she had to insist. Beni had not built up her own understanding of the subject yet, so why not see how far Martin had gotten.

"Yes, he replied, let me tell you —" He paused, gaining time to gather up his thoughts. At this point John, who was standing in the corner, looked into his cup, said "Ah" as if he had only noticed now that it was empty, and headed for the exit.

Ghazaleh was looking at Martin, prepared to listen, but Martin was only addressing Beni. "Let's start with how babies learn a language. Or rather, what do they need to learn a language? If you recall Wouldberg's experiment on children learning from TV, babies really need very little to learn. Wouldberg wanted to show that children don't need any meaningful feedback from the environment. His premise was that speaking a language is so important for survival and reproduction that a child should not need to rely on pesky parents to teach him speak, or indeed, to provide any helpful feedback. What if they had too much trouble fighting with each other, getting drunk, or working their asses off, to take care of the kid any more than giving him food and yelling at it from time to time? Or what if they just hated the kid? Would the child not learn to talk? Well, if it did not, then it would not survive or at least would not reproduce. The people we see today are those whose learning system was sufficiently robust to be able to pick up the language despite the fact that, sometimes in the course of generations, the parents were not quite up to the task of teaching the children to speak. And, by the way, what about good parents? How helpful are they? Yes, they do speak to the children and even make some attempts at teaching. However, they often use some

special mock-language made specifically for kids — distorted words, grotesque intonations, incomplete sentences. They are playing more than anything else. Luckily though, children are able to filter this out and do not learn to speak the funny-speak they are taught."

By this time, Beni saw that Martin was well on track with his monologue and there was no way to stop him. She was looking at his mouth opening and closing, trying to figure out what color was his beard. Most of the hairs in it were reddish or brownish, but some were yellow or altogether colorless, yet others somewhere between dark gray and black.

Looking at Martin speaking, it was easy to see that he was, in fact, not so different from the rest of the group. Were Beni to ask a question at this point, he would not really listen, only eager to continue with his speech; while waiting for her question to end, he would be breathing irregularly, his jaw would make small movements down and up as if the words were trying to escape, as if he were holding them with a physical effort of his mouth. Sometimes at such moments he would have a pen in his hand, in which case he would lift it up and start agitating it in front of his interlocutor. Martin would pay no attention to the reaction of his audience — even if it were, as at present, a single

person — because for him, like for the others in the group, it was too difficult to interpret other people's emotions. Martin's difference with the rest of the socially awkward bunch was that where others were subdued and inhibited, he was overexcited. Beni was observing Martin speak more than she was listening to him. She realized that he did not know how the app worked — otherwise, he wouldn't be talking about Wouldberg's TV-kids experiments. And as for these experiments, they were familiar enough to Beni.

Wouldberg wanted to show that a child could pick up language from an environment that not only does not teach, does not provide new material according to the child's progress, does not correct, but in fact does not provide any feedback at all. All the environment did was, according to Wouldberg, providing examples of the spoken language. So he created such an environment for children — a TV that showed people speaking in various situations. Of course, there was no question of putting real children in a deprived environment, of replacing a family with a TV set. The children lived in their respective families and interacted with their natural environment as they would normally. The experiment was about teaching them a second language. Each young subject, from two to four years of age,

was given access to a TV that they could switch on and watch for up to two hours a day. The TV was delivering programs in a language none of the people in the child's environment was able to speak — in Wouldberg's experiments, it was Chinese.

When she first read about it, Beni couldn't help thinking that the experiment was exceptionally bold. What was Wouldberg going to do if it didn't work? He couldn't very well publish a paper saying "Hey, you know, children can't learn to speak by watching TV!"

Reading the introduction of his first paper on the subject, however, she was able to surmise why Wouldberg was confident he would be able to get at least something out of the experiment. Previous research showed that infants as young as a few months learn to distinguish between different phonemes in a foreign language, and then this ability slowly dwindles as they age and are exposed to a single-language environment. Wouldberg's TV-kids were shown video rather than just listening to phonemes, and they were a bit older. At the very least, he would be able to say something about whether the kids learned to distinguish different phonemes and different labial expressions after being exposed to this kind of material, and to compare it to the previous results on infants. Between this, and his goal of mag-

ically getting the kids to speak Chinese, he'd probably end up somewhere in the middle.

In fact, Wouldberg's first results were surprisingly strong. No, the kids were not able to speak — only one subject was able to clearly pronounce a single word in Chinese by the end of the two-year long experiment — but they were able to understand this language surprisingly well. Over the next ten years, Wouldberg, with sometimes as many as twenty different co-authors, published a series of papers perfecting these experiments. He stuck to the same hypothesis: feedback is not necessary for a child to learn a language. But it had also become clear to him that children had to speak in order to learn to speak (shouldn't it had been obvious to begin with?) and they were not speaking enough in front of the TV. The one child that was able to say at least something in the first experiment was the one that vocalized the most during the TV sessions. So, the rest of Wouldberg's experiments were mainly focused on encouraging children to talk to the TV, using a plethora of rather ingenious methods.

"I wonder how Wouldberg managed to get all these through the ethics commission," put in Beni.

"I don't know, but it must have helped that he had been the

president of the commission for over ten years!"

Now that Martin was done with Wouldberg, and Beni was done with her coffee, she wanted to wrap up the chat and get back to the comfort of her desk. "Anyway, I don't think this app can work," she said. "Why does the author think it could work anyway?" Probably a lame way to end the conversation, but it is always hard to answer a lame question, so this one should do.

Martin's reaction was quite unexpected. Perhaps this was exactly what he wanted to talk about when he came into the room, his speech all prepared. He opened his mouth as if expecting the answer to come out in a perfect form he had imagined it in, but it was not coming, and he had to close his mouth. Martin pulled out a pen from his pocket, pointed it at Beni, opened his mouth again, stretched up and stood on his toes so that it almost seemed he jumped a little.

"Why did you jump just now," Beni wanted to ask, but checked herself — she did not want to be mean.

"Read the dog story," Martin finally managed to breathe out. "Read that stupid dog story!" he repeated walking fast toward the exit.

"There was this one trip to the Philippines that we did. It was supposed to last between six months and a year, or until such time as the money runs out. Philippines was cheap to travel at those times. We stayed mostly in hostels and moved around by bus and by ferry. This way we could save cash and travel even longer. It also allowed us to meet people. Quite a mixed lot, to be sure. Once we shared a room with a group of rich kids from France and a hippy couple from Belgium, if I remember correctly, or maybe they were from the Netherlands. The hippy couple was really trying to save every penny. They kept telling us where to find the cheapest food — the cheapest supermarkets, the cheapest street food — they were making money-saving a sport and taking this sport to the extreme. For the same reason as us, of course – to be able to travel longer – only we were much more chill about it. They were also making comments about those rich kids, how they were wearing threehundred-dollar shades (I would never be able to tell how much people's shades were worth) but stayed with us in this hostel for three dollars a night. And then, when the French kids left,

the hippies invited us for drinks at the hostel bar. This was already quite unusual, but what was more unusual was that they kept standing us drinks, and would not let us pay for a single round. They also had these enigmatic smirks, and kept exchanging some remarks in Flemish, or maybe it was Dutch. Quite annoying, really, at least if you don't speak Dutch.

After a few drinks, it came out.

'The drinks are not on us,' said the girl. I can't remember now what her name was. Delphine, or Florence, or something like that. 'The drinks are on the rich kids.'

We were quite surprised, naturally. They explained that taking some cash from rich kids' backpacks was a normal traveler's practice. For them, anyway. They did it more for the thrill than for the money, and the victims wouldn't notice anyway. Or so they said.

I would not be sure they wouldn't notice. Some would, probably. Others, maybe not. Or maybe they'd notice that some cash was missing but wouldn't want to acknowledge that they'd been robbed. Then they'd just keep thinking about it: did I spend this much, or did I lose some? Or maybe they noticed and understood. One blames oneself for being robbed instead of blaming the robber. How could I have been so stupid, how

could I have let this happen — leave the money unattended, or let the thief divert my attention, or whatever else, depending on the situation. Come to think of it, even if the loss is not that big, this guilt alone can screw up one's trip quite a bit. Or entirely, for some. Anyway, it became a sort of a recurring joke between us, your mother and I. Whenever we had extra spending to make, like, the boat ride was more expensive than we thought, or we'd fancy going out clubbing, one of us would say — we'd put it on some rich kids. We never did, naturally."

So far she hasn't told me anything about the Philippines, thought Beni. It must have been an exciting trip indeed — did she say it was a whole year?

"And then we came to this island with turtles. A really tiny island; a little village on one side, a few more shacks on the other. In the sea, right next to village, were the turtles. A beautiful beach, from which you only have to go a few meters into the sea, start snorkeling and then you see them. Huge turtles. They don't care about you, they don't care about the waves swaying them, they just go on about cutting off the seaweed with their beak-like mouths and chewing it, slowly. Floating and chewing. And the fish, lots of colorful fish, different kinds.

"We were snorkeling a lot in the Philippines, your mother

and I, but snorkeling on this island was exceptional. And there were not many people doing it either. Not that there were no tourists, there were a lot — for an island this size, anyway — but most of them were there to dive. Neither of us had tried diving before, but here we were starting to be curious. If there were so many different fishes right next to the beach, there must be much more down there.

"People kept talking about diving, about all those nudibranches more than anything else. You know what that is? A nudibranch? That's like a slug with lots of colors to it. It doesn't sound like the most exciting thing out there in the sea, but that's what people at the hostel kept talking about.

"Diving was an expensive affair back then. What they call a 'discovery dive' was already something like sixty dollars, and to begin diving for real you needed to get a license, which costs several times that. We wanted to do a discovery dive, just to see what it was all about, but sixty dollars was almost a week of travel, so we were hesitating.

"When we were not snorkeling, we were walking around the island. There was not that much space to explore above water. Like I said, it was a small island, with just one village. Every house in the village had its rooster. No, I don't mean, like,

chickens and rooster kind of thing. Of course they had chickens too. But the roosters were special. They had their special cages, one rooster per cage, or else the rooster would simply be tied by its leg to a tree. Fighting cocks they were. Cock-fighting was apparently illegal, but on this island it was every man's sport, judging by the number of roosters.

"It occurred to us that it'd be interesting to see it. Don't look at me like that. I know, it's cruel and everything. For us it felt intriguing because it was a local thing. I mean, a non-touristy thing. They were keeping away the cockfighting from the tourists, naturally, because it was illegal, like I said, and perhaps also because western tourists think of it as a cruel thing. Which it is. Anyway, at the hostel nobody was talking about cockfighting, so it seemed that much more exciting to us.

"You see, when traveling, you always have other tourists around you. Of course, you are a tourist yourself, so it's normal, but after a while you find yourself looking for some more 'local' experience. Quite ridiculous, I know, especially given that every single tourist does it. Everybody keeps bragging how they did this or that where they were the only non-local around. Whatever. It didn't take us long to fight the cockfighting place."

Beni noticed with surprise that Mara was repeating herself.

She must be getting nervous for whatever reason, because usually she talked very smoothly, and paced her words. Now she seemed to be rushing toward something that, at the same time, she didn't quite want to say. Maybe she was finally approaching the moment in her story that would reveal why she came to visit Beni in the first place.

Mara's visit had been a complete surprise. When she'd heard knocking on her door, at first she thought she wouldn't open. It must be a mistake; or at best a neighbor asking for some favor. The knocking was persistent though, so Beni decided it was easier to open and send the person away than to wait through the disturbance. At the door was Mara, her mother's friend. Typical Mara behavior.

"How did you get into the building?"

No reply.

"How did you know I would be home?"

"You were not in the lab."

"Ah. So you really wanted to see me? Why?"

No reply.

Beni realized she wasn't being polite; she'd asked Mara in and offered her to have a seat. She'd wondered whether Mara would take a place on the sofa only to stay there, silent. This was what she remembered Mara doing at her mom's house. They didn't talk much, Mara and Beni's mother. Typically, Mara would show up, or would already be there when Beni came from school, sitting somewhere quietly, sometimes smoking something, sometimes playing with her phone, but most often just looking at the wall or at the ceiling. Meanwhile, Beni's mom would be working. Often, Mara would join for dinner, and then she would reveal herself as being rather good at conversation. In fact, she had to be, for Beni's mom was not one to talk much, and in Mara's presence, Beni would be mostly silent as well.

Mara would talk about nothing of particular importance, yet she kept the others somewhat entertained. She mostly talked about her own life, her memories as well as everyday events. Beni could not really understand what Mara was coming for. She was coming to see her mom, that much was clear; however, apart from the dinner conversations whose subject matters were, after all, little more than small talk, they hardly talked, and hardly even looked at each other. In fact, often Mara would spend more time with Beni than with her mom.

Beni sometimes wondered what kind of relationship the two of them had, what kind of attraction they had for one another. Both were single women. Her mom never had a boyfriend, or a girlfriend for that matter, at least that Beni could observe. There must be something going on between the two, she thought sometimes. But there was never a hint of anything physical between them. Perhaps they were just very old friends that had nothing much to say to each other, yet enjoyed each other's company. Indeed, Mara visited quite often, and Mom never seemed annoyed to see her — Beni was observing quite closely — yet they were satisfied with as little as being in the same space. Was Mara trying to do this now with her? That was really not Beni's idea of a friendship. Besides, she had things to do, and she couldn't work with Mara sitting there trawling the room with her gaze.

"So, what's up? Do you need an ash tray?" Mara was lighting up some stinky herbal concoction rolled into a joint. She put the ashtray on her lap and kept silence. "Mara?"

"Your mom —" started Mara

"What?" Beni stood up. "Is she okay? No? Let me get dressed, I'll be quick."

"Wait. Where do you think you are going? No, she's okay. I mean, she is not that bad; she is having one of her migraines."

"So is she okay or is she not okay? Why did you come to

see me?"

"Now you are being difficult, Beni. Look, do you have anything to eat?"

"Right," said Beni. It was not really dinner time yet, but whatever, why not?

With Mara installed at the table in front of her plate, Beni felt more calm. Let her do her small talk, and after dinner she'd probably leave. That's how it usually went back at home — Mara would leave shortly after dinner. Then after she had left, what she came for in the first place would become irrelevant.

"Did your mother ever tell you about our travels? We used to travel quite a lot together," said Mara.

Now was Beni's turn to skip a reply — she knew Mara would continue anyway.

"Nobody paid attention to us when we showed up. It was a clearing between the group of shacks on the other side of the island and the hill; probably someone's backyard. An excited crowd, almost entirely male, gathered around a small ring where a pair of cocks were pitted. It was dark, but the pit was lit with portable electric lamps hung on poles. Very bright lamps, which made the place easy to find for us. Lots of booze, too. Those large beer bottles you see everywhere in the Philippines, of the

cheapest kind. And a couple of men taking the stakes. We were rather surprised by the amounts that were circulating. Five hundred peso notes, thousand peso notes in fistfuls. Thousand pesos was something like twenty dollars. In a country where you are used to things priced at ten or twenty pesos this was quite a shock. I tried to hand one of the guys a twenty to make a bet, but he ignored me. A few people started laughing and pointing fingers at us. One of the spectators showed me a five hundred bill, which must have been the minimum. I stepped back, and, frankly, at this point I wanted to leave. What was there to look at, anyway? But Amanda stopped me."

This is the first time that she refers to my mom by her name, thought Beni. Back home, they seldom addressed each other by name.

"'What if we could win enough for a discovery dive?'

'And what if we lose,' I replied.

'Then, well, let's say we could consider that we took that dive. We've seen a lot of fish, anyway. Good, colorful fish.'

"We could do without seeing more fish down there. So, it was decided. I stepped in and handed the stake guy five hundred pesos. Remembering the hippy couple, we never left any cash at the hostel, so we had it all with us. As soon as I handed him

the bill, I realized that I didn't even understand which rooster I put my money on.

"I only understood that I lost when he didn't hand me any money back after the fight. It was shameful. But the people looked at us friendlier now, and even with some respect. We were betting together with them. Next was Amanda's turn.

"We observed better the process now, figuring out how to place the bet. After Amanda put in her stake, we were looking at the fight with much more interest. She bet two thousand pesos. She must have thought, that's how much she'd need to win for a discovery dive.

"Now, we did figure out how to place a bet, but we didn't know how much we would win. Or how much she would win, in this case. You see, a winning bet on the favorite gives you less than a winning bet on, well, the other guy. Because the winners win whatever the losers have bet, so you win more if you bet on the side fewer people are betting on.

"Anyway, I guess Amanda didn't think about these sophistications – she thought if she put two thousand and her rooster won, then she would get her two thousand back plus two thousand that she won, and that would be enough for a discovery dive. You see? Simple.

"I'm not going to tell you about the fight. What's there to tell — two cocks fighting. There was blood, I can tell you that much. There was also a special guy whose only job was to tie razor blades to the birds' feet. I suppose he must have been a neutral party in the fight.

"She lost.

"Then it was my turn. I thought, I've already lost five hundred, and Amanda has lost two thousand, so let me bet fifteen hundred more, and if I lose then we get out of here. A cock fight is pretty short, I must tell you. I lost, and we went back to the hostel.

"It was probably a good idea to think about the loss as if it were spent, be it on a dive or on drinks. We tried to relativize it. Not such a big loss: one can easily spend that much on one dinner out back home. It could be much more, in fact, with wine and all. But it's not easy to think about a gambling loss like that. What I felt, and what I am sure Amanda felt, was that we'd been stupid. We lost money on a silly game that we didn't even understand, and that we obviously didn't enjoy.

"The whole affair took maybe half an hour, if not less, and there was no fun in that half hour. We didn't really get anything for our money. We felt cheated, but we only had ourselves to blame, our own stupidity.

"Now, you must be thinking, it is even more stupid to be grieving about eighty bucks or whatever it was. If you want to stop feeling stupid, you just need to change your attitude. Of course, you'd be right if you are thinking that.

"We were lying in our beds in the hostel, unable to sleep, unable to talk. It was late and very quiet, everybody else was asleep. They would be diving early. We must have had the same thought, Amanda and I, when we heard someone going upstairs past our door. Upstairs were the private rooms. There were only a few private rooms — three, if I remember correctly. Private rooms were at least ten times more expensive than a bed in the dorm. We didn't act on the spur of the moment, but we didn't spend a lot of time planning either.

"The next morning, when everyone left for their diving trips, we went upstairs. We knocked on each door, and then tried opening them. One door was unlocked. Amanda went in, and I went downstairs to watch for anyone coming. We didn't expect anybody to come back soon, as everyone had been diving, but it seemed prudent to leave one of us on the lookout, in case the cleaner came, for example.

"Anyway, it didn't help. I mean, I didn't manage to warn

Amanda on time, or she didn't hear me — I never found out which one it was. When I saw that old guy coming in, I burst into a coughing fit, as agreed, but Amanda didn't come out. The guy went up quickly. He must have forgotten something in his room. Or maybe he was not diving that day. It seemed like Amanda spent quite some time in the room already – I had been waiting maybe ten, fifteen minutes by the time he showed up. What was she doing there? I would never find out. He went upstairs and into his room. I could hear everything from my post downstairs, I could hear Amanda give a little cry."

"So she must have heard your coughing fit, then."

"Yes." Mara stopped in surprise. For a moment, she was considering the possibility. "She must have. She must have thought she had more time — perhaps too busy looking through his things. Or maybe she was too frightened to act. I don't know."

Mara paused and seemed hesitant to continue. Beni did not encourage her — she was not sure she wanted to hear the rest of the story, the rest of the story about her mother trying to steal money from a random guy's hotel room. Beni would have preferred not to know anything about this in the first place, but now that she heard most of the story, perhaps she would like to

hear the ending. Or maybe not. There was no way this could end well.

"Like I said, it was an older guy, in his fifties perhaps, Mara continued. This seemed very old to us. For a few minutes after Amanda's little cry I didn't hear anything. I went up to the room to listen. Then she said, 'This is all I took.' So, she must have found the cash and taken some, which she was handing back to him.

- "'Oh yeah?' he replied. 'Show me everything.'
- "'This. But I only took this from your bag.' She must have shown him all the cash she had on her.
  - "'Oh yeah?' he said again. 'How do I know that?'
- " 'Okay, take everything,' Amanda said. And then I heard some scuffle.
- " 'Not so quick! Or do you want me to call the police right now?'  $\,$

"I don't know what the police on that island looked like," Mara continued, "or whether there were indeed any police. Probably not. In any case, it would have been better for us if he did call.

- "'How do I know this is all you took?' he said again.
- "'Why don't you check your things?' Amanda was speaking

louder now.

"'Oh yeah?' He was stuck on this phrase. 'I will. I will check my things. Of course, I will check my things after a thief went through them! But what about the cash?'

Presumably, he didn't know how much cash he had. There was a pause. A long pause. Maybe he was checking his things.

"Then he said, 'I want to check your things now. Take your clothes off.' Another pause. 'Or do you want me to get the Pino police here?' Yes, he said 'Pea-Noh,' 'Pino police.' "

"And you?" Beni interrupted. Now Beni really did not want to hear the rest of the story. When she was spelling "Pino" Mara's expression had become downright malicious. Whereas before she was hesitant, worried, or annoyed (at whom?), now Mara seemed to be enjoying what she was doing, and Beni hated her for that. "And what did you do, Mara?" she asked. "Did you just stay there waiting, eavesdropping?"

"What do you think I could do?"

"I don't know. Something! Call the police, for example. The same 'Pea-Noh' police. Or the hostel staff. Or burst in there, in that room! Something!"

This seemed to put off Mara. "I guess the threat of getting the Philippine police involved did seem rather serious to me. And then, I didn't know what was coming. Maybe he was only going to check her things." Mara said hesitantly.

It was the first time Beni had seen Mara unsure of herself. Mara tried to regain her composure, building another one of her herbal joints. At least she was not enjoying herself anymore. By concentrating on the present situation, on Mara, on Mara's behavior and the ways she could finally get rid of her, Beni was avoiding thinking about the reality of what she'd just heard, of what she just learned about her mother.

"He gave back all of her money afterward," Mara continued suddenly. "All of it, including the two hundred Euro bill that she took from his bag."

"I really don't want to hear any more about this," said Beni. "And I actually would prefer you to leave now. I have work to do."

"She would never talk to me about what happened in that room," Mara continued. "And then we had to cut our trip short anyway." Mara stood up but she seemed really intent on saying what she wanted to say before leaving. "I insisted on cutting the trip short when I realized Amanda was almost a month late."

It took Beni a while to come to terms with the news of her own conception. Had she been a child or an adolescent, the main part of the news would have been that she was unwanted. This would imply not loved, and her thoughts would undoubtedly revolve around that, seeking to challenge this accusation, calling for attention from her mother by any means available to a child or an adolescent.

At her current age, which must have been close to that of her mother at the time of the dramatic event, her thoughts turned first to analyzing her mother's character and behavior in light of the new information. First, she started looking for the signs of PTSD in her mom. Her mother was in fact an odd character. Mostly rather quiet and withdrawn, she was leading a reclusive life. *Indeed, here is one sign*, Beni thought, *avoidance*.

It could be explained differently though. Amanda was selfemployed, she was making toys, as well as little sculptures and paintings, and selling them online. Thus, one could attribute the lack of socialization to the nature of her employment, even though it could have easily been the other way around: she could have chosen that occupation to accommodate her avoidant personality.

How she was able to survive by selling those toys and art

pieces had always been a wonder for Beni. Her mom did not appear to work all that much, nor was she selling a lot of her works. Beni could recall seeing the same objects collecting dust for years, while Amanda was spending long hours just looking out of the window, sitting comfortably in her armchair, legs wrapped in a plaid, with some pieces of cloth and her trade tools waiting patiently in her lap.

Still, she sent out packages from time to time, so there must have been some income. Besides, Beni's mother was never complaining about money, so all in all, it must have worked. What else? Would there be some triggers that would set off replays of the rape? Not that Beni could tell. She could not know what those triggers would be, either.

Traveling? Her mom still liked to travel. She took Beni on many a trip with her, all around South America. So much so, that when they moved to Bulawayo, it was difficult for Beni, who was fourteen at the time, to believe it was not just another trip. A longer trip, to a different continent, but a trip nonetheless. It took her perhaps two months of going to school to fully internalize that she would not be going back home. And then she realized it was not that much different. Or rather, that she was as much different here as there. Here she was somewhat too

white in her class, whereas back there she was a little bit too black. Her mom never taught Beni Guarani that most children knew back in Asuncion, and here she was correcting this mistake by learning Ndebele. It was not that much of an issue here, as at least half the children spoke other languages, and it was perfectly possible to survive with just English. Even the African savanna was not that much different from the Paraguayan chaco, the balancing rocks and an occasional stray elephant group being an awesome extra feature.

Beni took to exploring the surrounding area on long bicycle trips, just as she used to do back home. She came to like the country, and would not want to move, not even to go to university or, later, to do her postgrad.

It was not until university that she had finally become like the rest of the bunch. In the university everyone had to change their accent, and Beni's starting point was by far not the worst one. Indeed, some students were difficult to understand for anyone who did not come from the same corner of the country, not to mention many foreign students, a category to which Beni clearly did not belong anymore.

As she was accustomed to paying attention to accents, it was curious for Beni to observe how her peers were gradually becoming more and more uniform, changing not only how they sound but also their identity: it was slowly shifting from having come from a certain place to being a university graduate. And what about her mom? Amanda had always been reluctant to talk about her youth, and Beni had not been keen with interest. Now that she lived separately, she felt the opportunity was lost.



Let me tell you now that that story is about you. No, there is no dog to hate, and you may not be blind, but you have lost something very important for the sake of strengthening or forming an attachment you may not value all that much at present.

Do you love the place you grew up in? Not necessarily the country, think your hometown, a region or just a neighborhood—whichever feels more dear to you. Maybe it has the best paella or the best beer; you probably still cheer for the local football team, and you always will. You don't live there anymore (not if you are reading this), but maybe your family does, or at least you associate the place with your family and you love it for

that. From time to time you are a bit nostalgic when you see it mentioned in the news, and you at least prick your ears when you hear your local accent spoken in an airport, a train station or in a bar.

This is all great; but was it worth it? For you did sacrifice something very important to all these warm feelings. What you sacrificed was the ability to learn a language. To pick it up—from the environment, from overheard conversations, from your own babbling and that of the kids around you, or not from kids if there are none; from everywhere. To learn to speak a language perfectly, to be its carrier, to be one of those who define it and own it.

This ability you have lost by the age of twelve; bye. What for? To be bound to a group; to the group of people with whom you lived. For a group is only strong if its members are bound to it. If anyone can leave at any time, without paying much or anything — and to join any number of other groups with ease — what will make him stand up for the group? What will make him defend it? Fight for it? Die for it?

Tying you to a language does not make you fight for its carriers, but it marks you with an indelible mark. It is like a prison gang branding a new member with the gang tattoo. The main

purpose of this brand is to prevent you from joining competing groups. A competing prison gang won't take you with your tattoo — if you want to leave one gang, you might as well want to leave the new one later. Or worse, you secretly keep allegiance to your first gang; otherwise, why would they let you leave?

Indeed, another popular way of attaching members to a group is the fear of punishment. Traitors are despised, and if possible, killed. Joining a prison gang, however, is voluntary. Even though you may be pressured to make a choice, it is still yours. In other groups, the choice is made at childhood by the parents.

A somewhat grotesque example is shaping the baby's skull, used by various peoples across cultures and continents. The skull is shaped by squeezing it between stones roped around the head. Foot-binding, circumcision, scarring are other examples of binding children to a group. It does not have to be this extreme, however. You might have joined some groups yourself. A religion, a fraternity, a band, a team. You may not want to leave these groups simply because you enjoy them, or because of some code of honor imposed upon you. You might have even marked yourself as a member — for example, with a tattoo. In most cases, it is your choice.

But there is one group we have evolved to be bound to, and

it is the group of people we are born into. There was no choice involved — except for that of where to live, made by our parents — but nobody can choose not to pay the price, that is, to retain the ability to learn languages.

Not until now. I am giving it back to you with this app.

I am more interested in how, not why, thought Beni. This anti-dog rebel propaganda has not gotten me any closer to that so far. Besides, the reasoning seemed rather thin at places. Being bound to something was somehow assumed to imply affection, even being necessary for it. Then, a brand was supposed to confer status — whereas, in reality, it can be the exact opposite.

Beni recalled the pictures she saw somewhere of the elongated and otherwise deformed skulls in some Andean tribes. It must have been in the same museum where she'd seen the tiny Chinese shoes made for tiny deformed feet. These feet they were shaped throughout the girl's childhood, making her a cripple hardly able to walk. This was supposed to make her attractive within the higher castes.

In both cases, these were indeed the higher castes that were applying this elaborate and risky branding to their progeny, with no other apparent aim than to ensure the caste membership in an unambiguous and conspicuous way. Is it also something that

we do with a language? Do we use it for caste or class differentiation? Oh yes, we do it a lot; but this seemed orthogonal to the dog narrative. More importantly, the evolutionary explanation was not very clear either. How had we evolved to lose the ability to learn a language? Assume it was, in fact, useful for the group, but it was the individual that reproduces; if losing the ability to learn did not increase the individual's chances to reproduce, — why should it spread?

Beni had so many objections she could not quite concentrate on any single one. Yet, at the same time, a single idea central to the argument, started to make more and more sense. The simple question: Why? Why do we lose the ability to learn languages?

Instead of asking how babies learned one, and what we could do to regain this ability — though, of course, she must continue with those questions later, since this was, after all, a language-learning app — she started with this simple question, and suggested that losing the ability to learn a language might serve a purpose.

Even if everything else was bogus and the app didn't work, Beni had a feeling that the time she spent reading was not lost. What was the benefit of losing this ability? There is none for the individual — indeed, there is no obvious direct benefit for the individual to lose any cognitive ability — but there was an obvious benefit for the group.

This was a way to create, or rather, to define a group. Or else to enforce the tie to an existing one, as Chipa Guazu, the author of the app, put it — why not? Beni stood up abruptly and rushed out of the room, as she often did when the she felt too excited by her intellectual effort.



Mary did not like to look in the mirror. Perhaps she'd never liked to look in the mirror, but as of late, she thought she had a good reason not to — she was old. At least, this was what the mirror was telling her. And now it is right, she thought, because it is time. She had a tangible, impartial external confirmation of it: the letter. Mary did not feel old at all, especially not now that she was in the beginning of a huge project. The biggest project in her career, which she was both excited about and afraid of. She was spending days and nights at her computer

working on the project, hurrying every short break that she had to take, be it to go out to buy food, to sleep or even to go to the bathroom. There, in the bathroom, the mirror was waiting, ready to jump out of hiding with its message.

Recently, Mary started noticing a large wrinkle going down her upper lip, on the left side of her nose. There was no possibility of two different interpretations. You are old. You can keep repeating to yourself that fifty is not old. You still have at least twenty, maybe twenty-five years of productive life—maybe more. Only after that can you begin feeling actually old. No point telling yourself all that when you have the mirror. And now the letter. Now is the time, it says. Here is where it ends. The rest is of no consequence.

Mary had not opened the letter yet, but she knew what it had to say. Anyway, she had perhaps another month or two—not enough, of course. The time was so badly chosen that Mary decided simply to ignore the whole subject for now. There was no way she could finish her project in a month, or two or three—the deadline was in four months, and even that Mary was not sure to be able to make. The problem of a deadline was a familiar one though, and the solution was known: keep working. Mary was comfortable working on her project, aptly

named "Comfy Place," so she chose to ignore the problems she could not solve and concentrated on the one she could.

The four-month deadline was one she chose herself, rather foolishly as she could see now. In fact, when she was writing the proposal, Mary had not been very serious about it. She'd been on vacation in Scotland, and it had rained most of the time. Mary liked the weather, because it was a good excuse to stay inside, drink hot tea, look out the window, and write emails. It was at that time that a colleague forwarded her a call for proposals for a development in the area. It was a billion-dollar tourism development prospect in the Scottish isles. The idea was to create a tourist resort targeting people who would like to spend a lazy week or two, but who didn't like either the beach, the sun, nor the company and even presence of others. A place where one would feel enjoy to experience, but would not feel compelled to do anything — a comfy place, for short. Yet it should offer something one cannot have on their couch at home.

"Hey, I've heard you are in Scotland. This call is about northern Scotland so I thought you could have fun reading. Feel free to ignore", read her colleague's message.

And indeed, it was not just about Scotland, it was about her, Mary, today, now. Looking out the window. Looking at the rain, at the thick white fog creeping up the hill, slowly consuming the trees, then letting out some of them, almost unchanged, only perhaps darker now, then covering them up again, maybe forever. Then suddenly another patch clears, and shows the sky, the gradient of gray, without even a hint of blue, but the full gradient from dark gray, almost black near the ground, to the thick white of the clouds above.

I need to put lights here for when it gets dark, thought Mary, to show the trees and the grass, in random parts of the garden. Thinking about the project felt almost like cheating — she simply had to describe what she saw, what she would like to add, and then sell it the best she could. The investment target for this development seemed funny — one billion dollars? Really? Of course I can write about it!

The biggest project her architectural bureau had completed thus far was about twenty-five million dollars. Two and a half percent of this one, Mary calculated. The task seemed so unreal that it was exhilarating. Just the right to thing do on a vacation. If it gets rejected — when it gets rejected — I simply won't tell anyone. Indeed, a full project was not required for the pre-selection stage, only a pilot proposal, and this Mary could very well do on her own, without telling anyone, even her own

employees.

One should see both the sea and the hills from the same window, Mary thought. The sea is perfect for staying in — angry waves bashing the boulders on the shore — one could watch it forever, day and night, all that's missing are some lights outside. But then the sea is the easy mode, what about the rooms that are facing the other side? There are always rooms facing the other side. Windows going down to the ground, all the way, even underground — the floor should be some half-meter below ground, so one can see the soil, the grass and the rocks above it, and the rainwater running down in streams. That's for the foreground, and in the back the gardens, the forest behind, the hills.

Mary never expected the proposal to pass the pre-selection phase, so she let her imagination run free, and she had not thought much about what would happen if the proposal did get selected. She could not remember when and how she selected the date for the delivery of the full project should the proposal pass the pre-selection stage. And yet here she was — now it was a deadline. Mary's little company, consisting of herself and two employees, all working from their homes, had been given a four-million grant and ten months to complete the full project.

There were only two more competitors, unknown to her, which were given the same grants. Probably one of them would get it — a comfortable thought for Mary, as the idea of having to supervise the actual elephant-sized development was putting her in awe.

The Scottish isles vacation must have been the happiest in her life, Mary reflected, even though she spent most of the time in the hotel, working. This is something I must not tell Roger when I visit, she thought, and found that the decision to visit had already been formed in her head.

One cannot just keep the letter unopened, hoping that it would go away. Seeing Roger would help her to make the decision. It was a habit that she formed over twenty years of their marriage — talking to Roger about important decisions, to help herself make them. It was almost never something Roger said that would help her. In fact, if she thought about it, she could almost always predict what he would say. He always tried to comfort and reassure her, but what he was actually saying was rarely anything new or particularly clever.

Rather, he was simply an important attribute that catalyzed Mary's thoughts and decision making. Perhaps he used to be her addiction of sorts, Roger himself, and then, after they fell apart and eventually divorced became only its attribute. It was as if, when you are addicted to coffee, you need a certain cup for your daily morning dose, you won't have it from just any cup, even though you may use any one for your tea. The ritual of preparing your coffee also becomes important, when and how you do it — and of course the smell. The smell is already the trigger that awakens you before you even start drinking the coffee.

When you are addicted to cigarettes, it is the sensation of having something between your lips that becomes the most important attribute; or maybe the process of taking out the cigarette, of lighting it, of watching it burn. The Pavlovian association binds the addictive substance to all the attributes that accompany its intake — be it physical objects, like a coffee cup or a heroin spoon, motor actions, like opening a pack, or only psychological — talking to someone with your afternoon coffee or cigarette, or, on the contrary, sitting quietly and reading the news.

When you cut the substance use, the attributes trigger the same reactions from your body that the substance used to provoke; you start craving them as if they were the substance itself. You put a toothpick in your mouth if you were a smoker, you

begin drinking decaf if you were a coffee-drinker.

Have I ever been addicted to Roger? Mary asked herself. Perhaps she was — strangely enough, because, as she reflected, she was never in love with him. It is hard to draw a line between addiction and habit though, as it is between love and attachment. They eased into the relationship out of convenience, because they both wanted to have some relationship, and then, twenty years later, they slowly faded out of it.

It was difficult now to qualifiers find for all those years inbetween. But surely there were many moments of happiness. And, of course, many happy trips taken and vacations spent together. Then why was that lonesome and rainy vacation the happiest one? Mary could recall just one sunny day during that Scottish trip. She had already been working on the proposal for several days, when suddenly the weather became better and she decided to have a walk across the hills.

She was walking uphill along a straight, deserted rural road, looking at the moors around and above, and listening to the peculiar sound that was accompanying her along the way. A stream channeled in a concrete bed along the road was dragging down boulders with loud noises of constant, shameless labor. It must had been raining heavily somewhere up the hill, for the

stream to be so strong as to have unseated those stones. Yet here the air was completely clear, with not a single cloud in sight. Only the hills — brown, purple, greenish — were filling the horizon, drawn across the blue sky with poignant clarity.

Mary was glad to be out, breathing fresh air, after having spent days inside the poorly lit hotel room, working on her laptop. She liked her hotel room — it was fairly large, at least for a hotel room, and it had everything in it, even a small desk complete with a lamp and a chair so one could work, as well as a well-equipped kitchenette. Yet it was not without its deficiencies — the desk was too low and the chair was too hard.

Mary ended up working in the armchair, with the laptop perched on a large pillow that she held in her lap. She put the armchair in front of the window, to be able to enjoy the view. A very good, almost perfect setup, were it not for the armchair's arms that were too high, and eventually made Mary's shoulders and wrists hurt. Little details that she had not been paying attention to, but that she was happy to have gotten rid of presently. She was marching steadily in long strides, looking up and forward, scanning the hills, smelling the fresh air. She felt safe, calm and confident. She knew what she wanted to do today and the next days, how she wanted to do it, and why.

Now Mary could only reminisce on that happy vacation, as the usual feeling of anxiety was attaining its peak. And, for once, she had a good reason. Her life was supposed to be snapped in two, with everything up to now classified as good and worthy of preservation and the rest as redundant old age. The biggest project of her professional career — at least the promise, a possibility of the biggest project, and is not the expectation more exciting than the consummation? — was being left in the second half, broken, crumbled, discarded without any consideration.



At some point, when Beni was about half-way through the *Material and Methods* section of the paper, it all started to make sense. She got it. All the large and seemingly incongruous pieces — the dog story, the Wouldberg's TV learning, and the funky game app — have now become a whole and coherent idea. Beni was so full of the idea that she felt the urge to act, to jump, to move, to do some irrelevant actions like switching on the coffee

machine, anything that would fill her mind with something else, as if the idea were too much to contain, undiluted, in her head.

Beni stood and started to walk around. Another need was building up inside her, and it was to go share her understanding with someone. It was curious, Beni reflected, how, after having made some discoveries of her own, she has learned to appreciate more the ideas of others. Perhaps to appreciate is a euphemism: she learned to get high the on ideas of others, to get off them, almost or at least in the same way as if they were her own.

Once again, Beni recalled her first discovery, and the humiliation she had suffered at the hands of her best friend, Neguin. Over the years, she kept coming back to that experience, analyzing her feelings, trying to understand her own motives, looking for new explanations and reaching different conclusions. The shameful fact was that she lost, but what was a lot more shameful was that she submitted to the winner and kept coming back for more.

Neguin was a victim of the legend of the brilliant Persian girls from the Finker's lab. It was hard to say how the legend came about to exist, because in the beginning there was just one brilliant Persian girl in the lab, and it was Negar. Maybe it was because Negar was somewhat too brilliant. When people were

talking about her they wanted to dissipate that talent, spread it if not over the whole university then at least over the lab; especially so when Negar was at the beginning of her Ph.D. and had already obtained several seemingly unrelated results, each showing a remarkable independence of thought.

The demonym became somewhat more justified later, when a new brilliant Persian student, Ghazaleh, joined the lab. This was it for Neguin. Neguin had been always there — indeed she had been in the lab longer than any other student could remember, and she was struggling. Were it not for the "brilliant girls" legend, her lack of talent could be able to pass unnoticed, but as it was, it was rubbed into her face every time someone new came visiting. It was especially painful to watch her at conferences during social events and coffee breaks. Someone would approach her, wanting to find out what one of these brilliant Persian girls from the Finker's lab was working on currently. Every time, Neguin would try to tell them. She never lost hope - always believing that she could talk about her work as well as everybody else could talk about theirs, and that there was fundamentally no difference. Why, she was putting all the same words into it, she was speaking in well-formed sentences, with confidence and conviction. Yet, as soon as she started talking,

the expression on the face of her vis-a-vis would begin to change, from curiosity and interest to incredulity and surprise.

Soon, he would glance down at her badge, and try to re-

member — that's the right lab; was it indeed the name he saw on that paper? was it Neguin or was it something else? And that long Persian second name — perhaps it's worth trying to remember it next time; anyway, it must be wrong. The glance would move back up toward the face and its expression would be a new one — mostly that of boredom. Beni liked to watch that moment. How the person would try to extricate themselves from the conversation: trying to quickly finish the coffee or snack to get the excuse of having to fetch another one; glance at the watch to make their boredom evident; or cut in with some orthogonal question to confuse Neguin and, making use of the ensuing pause, excuse themselves quickly. But sometimes, especially when the person talking to her was a man, a different change would happen. When looking at the badge and realizing that this is a wrong person, the fellow would also notice that it is, in fact, an attractive young woman, and a one with whom there was no point talking about science. A smile would come back to his face, and an expression of interest, but a different one this time. The change was quick but Neguin would be sure

to notice. He would hurt Neguin in the sore spot, and instead of disappearing quickly he would be putting himself up for her revenge in the exact manner she was most comfortable to deal with. Beni knew what would happen, and she also knew how it would happen; in fact, she knew almost too much. She knew Neguin's biggest secret.

For a while, Beni was the closest Neguin had to a friend in the lab. Indeed, Neguin didn't socialize much with the others. It was not for social ineptness on her part, for she was one of the least socially awkward persons in Finker's group, but rather because she never felt completely at ease with colleagues. She could not help feeling different if not downright inferior, and Neguin did not like to feel inferior.

It was, perhaps, because of this that she tried to hang around younger students. With them, she could even pretend to be a mentor at first. This was how she met Beni. Beni had just arrived recently, and having an older person for a friend, someone who knew all the ins and outs, was just what she needed. They quickly started spending much time with each other. Too much, Beni thought sometimes, but she did not have anybody else on campus to go out with, and her options of making friends outside were pretty much nonexistent. Besides, Neguin was easy to

talk to, as she was always eager to chat about anything, including other colleagues and their research, as well as every campus intrigue and gossip true or imaginary. She would also be the one to talk about science beyond the immediate research they were doing, a topic others were rather shy to engage in.

On one occasion, while they were preparing a pair of mice brains to be merged into a Huang Li flower, Neguin handling the old mouse and Beni the young one, Beni suddenly blurted:

"And what about you, Neguin? Would you like this to be done to you some day?"

"What, you mean, this?"

"Well, yes. I mean this, merging."

"No, of course not." She smirked.

Neguin was so confident in her reply that Beni hesitated a little. A practicality that did not occur to her at first came to her mind, and she blushed a little thinking that perhaps she'd made a gaffe. Exactly how old was Neguin? She might be too old to be taken into Project One. She could be twenty-seven, and just too old, or she could be twenty-six and then she was on the threshold, which made her participation only hypothetically possible. It was extremely difficult to be accepted in the Project — were they even taking new subjects at all right now? — and

to get there quickly was pretty much impossible. But then, her question was hypothetical, too, and who knew what they would do with the age limits on the next stages of the Project.

"But why? Don't you want to have an infinite life?" Beni asked with a mocking expression, as if she already agreed with Neguin that this was not something one would seriously want, as if all this was some kind of a big joke, or, rather, an elaborate way of luring people into being lab mice in an exciting brain research experiment.

"Infinite life!" exclaimed Neguin, not acknowledging Beni's mocking tone, but rather reacting to her question as if it were something infinitely stupid. She put down the vial of BOZAR that she had just filled a tiny syringe from, stepped back and assumed a lecturing expression. She was going to explain something to a younger student. "Let's see," she said, "we know that we can transfer about sixty percent of the old subject's memory to the young subject; forty percent goes back from the young to the old, but this is not relevant."

Then why did you say it? thought Beni.

"Let's be generous," Neguin continued, "let's say we improve the technology and manage to transfer eighty percent of the memory from the old to the young. When the young ages,

and you repeat the process passing to the third generation, this third-generation young gets eighty percent of the second one's memory, which is sixty-four percent of the original old subject's memory, that is, the memory of the first generation. Keep repeating the process, and in twenty generations you will get just one percent of the original subject's memory. Put it this way: if you get into Project One now, you get cloned (Neguin kept emphasizing you), you get your brain merged with your clone's, everything goes well, the Project doesn't get shut, your clone gets cloned and merged and so on. Then in twenty generations, there will be no more than one percent of your memory still alive. How much is that? Let's see, surely it's enough for your distant clone to still remember your name. Maybe a few more things about you, enough to fill your CV. Well, let me give you this: in two hundred generations, even by most generous estimations of the capacity of human memory, there won't be enough of your memory preserved to store a single word. And to pass this way just one bit of your memory down one thousand generations, you would need to have more brain cells right now than there are atoms in the universe!"

Neguin finished her lecture triumphantly. Beni kept silent. She was confused. Why had Neguin put so much breath into explaining the trivial argument every high-school kid knew? Of course, she was right. Beni was the one who said *infinite life*, and, by all accounts, there is nothing *infinite* that merging can give you. As soon you start applying the concept of infinity to real life, you quickly turn any argument into nonsense. A finite physical brain cannot fit infinite memory. But did it matter? In practice, this argument was no more relevant than the heat death of the universe. Who cares what happened in two hundred or even twenty generations? The fact that you could meaningfully prolong your mental life beyond the death of your body was already more than enough to want to get into the Project.

What was really important, however, what was making one excited about the project, what had made her interested in brain research and eventually got her into doing her Ph.D. on this subject, was the continuity of memory that emerged with merging. How and to what extent could the memory be transferred was not as important as the fact that the abrupt death was replaced with some sort of continuous fading away, — over an indefinitely long period.

That didn't happen for Huang Li though. Working quietly on preparing the mouse's brain to be cut into the odd, flower-like structure, Beni thought it was rather ironic that the inventor of the *infinite* life of the brain had killed himself.

Huang Li an was outsider in brain research. Before he started tinkering with mouse brains, he'd worked most of his career on spinal cord traumatology in humans. It was rather natural then that his first papers on what would later become merging were getting rejected. And to be honest, they were not good papers. Densely written, showing poor familiarity with the literature, they mostly failed to convey what it was exactly that he was trying to do, and how he was doing it — apart from the general objective.

This he was stating only too clearly in the introduction: direct transfer of memory of past events from one brain to another. Indeed, despite the apparent complexity of his papers, what he was trying to do was very simple. Take two mice. Make sure one mouse knows something that the other one does not: for example, let one mouse learn to find its way in a certain maze. Open up the skulls of two mice. Stick the two brains together. Keep them stuck together — or merged, as he put it — for a while, while seeing to that neither mouse died. Separate them and stitch them up. See if the second mouse knew where to go in the maze the first mouse had mastered. It helped a lot that

Huang Li did not have to clone animals he worked with: he used linear mice, which were almost perfect copies of one another.

A large portion of his first paper was devoted to explaining why he thought this procedure should work, while the results in that paper were rather light and confusing. He argued, rather convincingly, with plenty of references — that the brain was extremely versatile, and if one part was damaged, then the other parts would often take on its functions. One example he cited was a patient who, during a routine check-up, was found to be missing almost a half her brain, and yet appeared perfectly healthy.

From this premise, Huang Li conjectured that memories should behave akin to rats or crickets: they try to invade any piece of brain they can get access to. So, if you connect two parts of a brain to each other, they would eventually share their memories. This conjecture was much ridiculed in the reviews, which had since been leaked and widely circulated. The criticism was to be expected.

Looking at the paper and the reviews side-by-side, one can see the paper spends more time on motivation than on the results, and the reviews did likewise. The results themselves were unconvincing, so their critique in the reviews was also short and sparing. In the first paper, there was no question about transferring sixty percent of the memories, or indeed about trying to measure how much of the subject's memory got transferred. Huang Li only tried to pass one Pavlovian reflex from one mouse to another, and the result barely reached statistical significance.

The most difficult part apparently was finding how to actually connect the two brains. Huang Li had not arrived immediately at the famous construction that would later become known as the "Huang Li flower." It is estimated that it took him twenty years, the last fifteen of which he was writing and publishing papers. For of course his papers did get published, all of them, but only in second- and third-rate venues, each after several rejections, gaining little to no attention.

This did not appear to discourage him much. Huang Li kept working on connecting more and more parts of the brains, eventually arriving at results that were nothing short of astonishing. His relationships with the scientific community were well established by that point – everybody knew him and showed him outward respect, but in their works pretended Huang Li did not exist. This seemed to work well for both sides. Right until the popular press caught on.

George Soros and Warren Buffet are going to live forever. El-

derly billionaires invest in infinite life research. — These were some of the first titles. The elderly billionaires hardly entertained any illusion of living forever, but they did provide some funding for Huang Li's research. This caused a big splash in the media and attracted a lot of attention to the author. The attention was mostly negative. Every blogger feeding on science news had to point out that Huang Li's research was not well cited and was not well published in the first place. And this was just the beginning.

What everybody was talking about the most was the ethics of merging brains of two different persons, an older one and a younger one. Poor young people's brains to carry the dirty memories of old billionaires — an easy ground for ethical outrage, helped by the fact that at that point it was anybody's guess how to get from merging linear mice, which are genetically almost identical to each other, to humans, which are totally not.

The research community was characteristically reluctant to react, but the press kept pestering everyone who knew Huang Li, until someone let it slip out: one wonders how Huang Li got these schemes past the ethics commission. When pressed, the colleague admitted the experiments were, in his opinion, not quite up to the commonly accepted ethical standards.

This was enough to trigger the hunt. The negative press against the hypothetical human merging project was so strong at that point, that something had to give. The inventor was the obvious target. His employer opened an investigation into ethical compliance. His tenure was put to the test. One can only wonder what was going on in his mind. He was famous, he was on the brink of getting big funding to pursue his research on a much larger scale. Perhaps, all he had to do was to wait for the media to get tired of him to be able to commence his new project. What we know is that this was too much for him handle.

Neguin's smug look indicated that she could provide ample detail about Huang Li's suicide had she not been so tired.

Maybe she's just drunk, Beni thought. They'd both had a little too much to drink, and listening to Neguin relaying scientific gossip was a lot of fun at such times. They were seated in the kitchen at Neguin's place. The party had ended and everyone had left. Beni offered to help with the dishes, and after they were done, Neguin suggested they had more drinks.

All the lights were on, and the table was clean with nothing but a bottle and two glasses on it. Neguin particularly liked talking about everything relating to getting published, and, above all, getting rejected. She could quote extensively from reviews: from the famous ones like the leaked Huang Li's reviews, but also those received by her colleagues in the lab and elsewhere. People liked talking about reviews they received, especially immediately after receiving them, and Neguin would carefully store these tales in her memory.

But it was not only scientific gossip that Neguin could supply Beni with. Beni was not very apt at following and deciphering people's relationships with each other, their needs and aspirations, and she was far too shy to question people directly. This would often make it seem like she didn't care about others, and so she would come off as cold. She didn't like that. Besides, Beni was genuinely interested in others and their life, so Neguin's penchant for gossip suited her very well. Presently, Neguin was done with science and was now talking about guys, about who liked whom.

"And what about Martin," Beni asked. Beni was not particularly interested in Martin. In fact, she had no special interest in any of the guys in the lab, but Martin was the only other first-year student apart from herself, so she was curious.

"I don't know," Neguin replied. "I think maybe he's gay?"
"Maybe he just doesn't like you," Beni retorted, perhaps a

bit brusquely, but at this stage of inebriation it was fine.

"Oh no. They are all interested in me. All of them," Neguin repeated, making a circle gesture with her hand, as if inviting Beni to take a look at a crowd of her admirers in front of them. The room, washed with a surgical white light, was empty of any life, but at this point it was easy for Beni's imagination to put any number of people on this canvas. What Neguin said was largely true — she was rather popular with the opposite sex — and there was at least one simple reason: she was attractive. But there must be something more, Beni thought.

"It's true," she said. "How do you do it?"

"Oh, that's simple. They think I'm easy. Show that you might be interested and available – that's all it takes to have their attention." Neguin hesitated.

"You don't really get involved with anyone at work, do you?"

"No, I'm not really interested. I don't care."

"That can add to it, too," Beni reflected. "Maybe I should try your tactic." Not at work though, she said to herself. But then where? Beni stopped, recalling other social environments she was exposed to. At present, there was pretty much none. She started thinking about the past. "You must be right. At school, some of the girls that were popular were doing just that. Appearing to be easy. In reality, they were often a lot less sexually active than one would think. Than I would think, at least."

"Yes, I was one of those girls," said Neguin, and paused.

Beni was expecting some confidences, but she was surprised with what came next. Bewildered, she found herself listening to Neguin telling her life since childhood, through adolescence and to the present moment. Neguin's voice was soft and slow, interspersed with long pauses of introspection, after which the course of the monologue would often change rather abruptly.

She told Beni about her first love, about her mom, her life at school, some seemingly random objects, people and circumstances that would never end. Beni had a hard time following the thread of her friend's thought, largely because she was tipsy herself. Yet, after some time, she noticed there was some focal point in Neguin's rambling, that she was cruising around but never quite getting to.

"After some time it became unbearable. Either they would become obsessed with me — those I could deal with — or they would start telling fake stories about me. Their sexual fantasies. About me. As if they were true. Sexual adventures kids tell each other about are mostly not supposed to be believed, but

it doesn't make it hurt less if you are the subject. And at some point it was too much. All fake. I didn't have anything with any of them. I couldn't. I wanted to feel ... normal. I wanted to feel wanted, as if I didn't have anything there.

"Of course they didn't know, and of course they were craving. I would take them to my room. I would go out with them in their cars. Alone. Went to their places. They had to tell stories. They couldn't help it. Imagine you are a boy, and you are telling your friends that you went to that chick's room and closed the door. And then what happened, they ask?

"If nothing much happened, then you have to invent things—or lose their respect. So that's what they did. They made up things. He can't just tell them that he didn't know what to do and that she was unwilling to help. Or that he tried and she rebuked him. Or that he tried and she overpowered him and kicked him out. For I could fight back very well. And once they invent something, they have to stick to it. Tell more and more details when asked about it the next day, and the next. And the listeners would repeat their own version, forgetting some details and making up new ones. For they had to make up new details. Someone asks you a question and you don't know the answer. Do you say "I don't know" or do you make up something?

"When it's easy to make up, you make it up. Yes, she did that. And she did this. And also that.

"I hate them. I didn't do anything. I couldn't let them into my pants, there was no way I could let them see. I'd break all my teeth fighting before I'd let anyone see. Even a doctor, it was hard. I walked out of two doctor's appointments. And to how many more I simply didn't show up to, I can't remember. I had to grow up before I managed to actually show it to a doctor. Before I could even learn what it was. And then... then it was just..."

Beni was looking at her friend who could not make her words come out, and she saw the teenage girl struggling with an intimate health issue. It is curious, Beni thought, that I don't feel any pity toward her. Indeed, she was trying to find any compassion that the situation was calling for, and the only reaction she was finding was a mild feeling of disgust.

It was not the nature of the problem that her friend was trying to confess that induced this feeling — much as Neguin tried to make the words come out, she did not manage to bring up any physiological detail — but rather the contrast between the young girl that was the subject of the confession and the drunk aging creature that was sitting in front of Beni.

Neguin was looking fixedly at some point at the floor, making it easy for Beni to stare as much she wanted at her friend's face. It had turned white. It was swollen and moist. The muscles were relaxed, making her mouth and her whole face droop. While Beni was blaming herself for being so detached and lacking empathy, she reflected that even these very thoughts were about herself and her own feelings, rather than about her friend and the troubles she was relating.

"And then I got it fixed!" Neguin exclaimed, as if waking up. "I just went to a doctor and had it fixed, as simple as that. I had to wait to have enough of my own money to do it, so it took some time. Even more so since I didn't know how much money I'd need. Turned out to be not that much. Not that much at all.

"And then, of course I wanted to have all the fun I could get out of it. I wanted—" Neguin stumbled. "I wanted to show it! To everyone!" She giggled at her own exaggeration. "Well, not everyone." She hesitated.

Beni looked at Neguin curiously. Her own sexual experience had been somewhat limited. What kind of wild adventures was her inebriated friend going to share?

Neguin was silent. Perhaps she was trying to make the best

pick out of the bright range of stories she must have had in her memory. Or had she let her mind wander into reminiscence?

"And? Did you have fun?" Beni finally asked.

"Yeah."

"Yeah?"

"Well, kind of."

"Kind of?!"

"They are all, just, you know... men. Boring. Always thinking about themselves."

Suddenly, Beni was overwhelmed with a sense of guilt. The sense of guilt for not having felt enough empathy for her friend, who was evidently still bearing the trauma from her first youth, who was still not able to enjoy sex fully because of it. She wanted to hug Neguin and say that it was going to be all right. But what was going to be all right?

Beni knew she wouldn't be able to offer any real help to Neguin, and she was not sure comforting was called for or appropriate in this situation. She didn't know how to feel, and so she was feeling guilty. Perhaps this was the kind of compassion she was capable of, she kept reflecting — compassion through guilt.

In any case, after this episode Beni had a closer tie to Neguin.

Had someone asked her who was her best friend, at least her best friend here and now, she would have named Neguin without hesitation. It was thus Neguin who she came looking for when she made her first little discovery. A first real result, even if small, but all of her own, Beni's. And it didn't come easy to her either.

Beni had been about eight months into her Ph.D., and the last six were filled with frustration. When she joined the lab, she was excited to be a part of the front-line research on merging. It didn't take her long to discover that this front-line had been heavily entrenched, and, what was even more exasperating, nobody seemed to be interested in doing any important advancements. The merging procedure had been fixed once and for all: take an old mouse and a young one, merge the brains in a Huang-Li flower, let it marinate in a neuro-stimulant solution for a few weeks, separate the mice, measure the memory transfer. The state-of-the art memory transfer rate had been about sixty percent from the source to the recipient and about forty percent in the opposite direction. It had been this way for the last decade with very little improvement.

Now most of the research in the field had been concentrated around two topics: the neuro-transmitting drugs to float the brains in, and the ways to measure the rate of memory transmission. Finker's lab had been active in both areas, with the latter one being practically a gold mine. For it is not so easy to measure how much memory has been transmitted from one subject to another.

Indeed, we don't know what was in the subjects' memory to begin with. One doesn't even know what is in one's own memory, let alone in the memory of a lab mouse. The only way to gauge how much was transferred was to put something in the subject's memory before the experiment. Something that we could measure. And then, after the merging experiment, try to see how much of that the other subject received. This was indeed what Huang Li was doing in his pioneering experiments. Teach one mouse to find its way in a maze, and then see whether the other mouse could do it after the merging. Better still, teach the old one ten mazes and see how many the young one would know. Or a hundred mazes. But was this all?

Of course not. For this is only one kind of memory, and one kind of learning. There is short memory and there is long memory. There is visual, spacial, auditory, olfactory, and tactile memory — among others. Then there are different kinds of learning. There is a whole range, from Pavlov's reflexes to

social learning. Then there is also learning in different kinds of situations. In short, there is enough material to write hundreds of papers, graduate dozens of Ph.D. students and absorb millions in funding. And then what you get is always roughly sixty percent one way and forty percent the other. Give or take three percent here and there. What next?

The genius of Finker was to combine this research with the study of neurostimulant soup. The standard, and perhaps optimal, composition of the soup had been figured out some time ago, but there was no single stimulant that was clearly better than all the others. They were just different. Some gave you better memory transmission on some kinds of memory, but a little bit worse on others. Plus three percent here, but minus two percent there and minus two percent somewhere else. Then you improve the solution a little bit, and gain two percent somewhere else, but suddenly lose two percent more at some other spot. The possibilities were practically endless, and the research was neither easy nor boring.

In fact, digging deep into it, it was easy to get excited with all the biochemical intricacies and interdependencies of the great enigma that is the brain, and how its workings are affected by what you throw at it. The more you understand about it, the less predictable the results become, and so much more interesting it gets to experiment with. Above all, the more one learned about the subject, the more interesting it was to talk to others about it. For there were very few people who could really get it, and while talking to them one felt like a member of some sophisticated elite group.

For the newcomer, however, this part did not exist. And, while it was practically impossible to understand the details at first sight, it was rather easy to grasp the overall picture. The overall picture was that of stagnation. Despite that, when Beni joined the lab, she was eager to start working and to learn from others. She would read papers, absorb the terminology, begin understanding the minute but crucial details. Gradually, she would gain the ability to speak the language of the field. At some point the newcomer would be able to contribute something — a small idea, an observation made while discussing their current research with others. This would be the moment of initiation, the moment the joint work would start.

Yet, the first impression remained, and Beni felt unsatisfied. She wanted to find some real problem to work on, something actually interesting and perhaps as importantly, something of her own. This was not an easy task. How does one find a problem to work on?

Sure, every paper has some sort of "to do" section in it, but the questions one finds there are usually too minute or too boring for the authors themselves to work, or too difficult, or already solved and coming up in their next paper. Then there are also big open questions of the field in general. These are too difficult for everybody, so, for a student, there's no point trying. The only way to hit on an idea is to wait — read, study, let the science brew in your head and hope that one day something comes out. And if nothing comes out then you are not fit to do science. This thought had been keeping Beni anxious for months.

Until she's got an idea. The idea was very simple. So simple that it seemed stupid. Someone should have thought about it before. Obviously, someone thought about it before. Why didn't they publish it then? Beni already knew the literature enough to say with some confidence that it wasn't known, but she still spent some anxiety-filled hours searching for it. Nothing.

What if, Beni thought, there is something new in the merged animals? Something that neither of them had before the operation? Not new memories of course, but some change that happened to them, something that distinguished them from other animals, those that have never been merged.

The idea hadn't come to her out of nothing. In fact, Beni had noticed something a bit odd in the behavior of some post-op mice: they seemed to be somewhat reckless. More prone to take risks, to jump at things, to do things quite random. It even occurred to Beni that they exhibited a wider range of behaviors than the rest of the mice. Some of them, but not all.

Beni tried to check the hypothesis that the post-merged mice were more prone to take risks. The result was rather exasperating: there appeared to be a difference, but it was not statistically significant. Which meant, as Beni knew, there was no difference. When in doubt, look at the data. Fortunately, there was enough of that. There were behavioral observation data collected for other experiments, and Beni could make use of that. She then came up with another hypothesis: post-op mice, old as well as new, were more prone to be either more risk-taking or more risk-averse. They were just less likely to stay as they were before the operation. She checked that hypothesis, and found that, indeed, the evidence was overwhelming.

She checked and re-checked, ran around the room and checked again. It was true. There was a significant difference. Beni was

fully conscious that what she'd just discovered — for she had indeed found something new — was not a discovery of the century, nor was it a major advancement in the field. It was but an interesting observation; a solid, albeit small, result.

Yet, she felt disproportionately happy. Later she would come back to reflect on those moments, and concluded that they were among the happiest of her life, if not the happiest, at least as far as she could remember.

Apart from all the exhilaration, Beni also felt an overwhelming desire to share, to tell somebody about her finding. She wanted to run out on the street and shout out loud about her post-op mice. Better still, tell someone who might be able to understand. Neguin was one of the first people Beni thought to share the result with, and the first one she found.

"Look what I have discovered," erupted Beni, blushing as she was putting the words "I" and "discovered" together.

Neguin was busy typing something on her laptop, and at first she wanted to tease Beni a little by asking her to wait. But Beni rushed into a confused explanation of her results with such fervor that Neguin gave up on that impulse and turned all her attention to her friend. As Beni was discoursing, Neguin was looking at her fixedly, with an expression that Beni would have found weird had she not been fully absorbed in her own emotions.

"What do you think?" she finally stopped to ask. She could distinctly see a multitude of dust particles in the ray of light that was illuminating her friend's face. There was dust everywhere in the room — on the window, the books, the printouts, the desk, Neguin's laptop. Her clothes must be dusty, too, Beni thought, but it can't be on her face, it really cannot.

"And you are saying there is already enough data to say that the difference is significant?" asked Neguin.

"Yes!" Beni exclaimed, and she embarked on an explanation of how she first tried to check another hypothesis. She finally stopped, looking at Neguin, searching for a reaction on her face — was this it? Was this indeed a result, a real result? — She knew herself it was, but right now she wanted someone else to confirm it.

And a confirmation she got.

"I think we should put Finker on the paper," her friend said finally.

Neguin's eyes were immobile, as she kept staring at Beni. Beni's face turned from hot to cold, starting to sweat, her mouth slightly open.

"You know, of course, he hasn't done anything for this directly, but he has provided the research environment, so to say," Neguin added after a long pause.

Beni was dumbfounded. It occurred to her that Neguin looked somewhat reptilian. It was a strange idea, as her features were regular, forming a face that might have been pretty, even beautiful; if there was one thing imperfect about it, it was her chin, that was a bit short. Together with that stare with which Neguin was fixing her, her undersized chin had suddenly formed the face of a snake. A snake to whom Beni brought her find, chirping happily and clapping her wings. In response, Neguin had just coiled around it, presently looking at how Beni would react. How would she react when her first result, her only result, was being taken away from her?

If someone had asked Beni before what she thought about including collaborators on a paper, she would probably be generous about it. That one should put one's thesis supervisor on every paper, even if the supervisor did not contribute anything directly, goes without saying. This is simply how things are done, and since everybody knows about this rule, it is not important. As for others, anyone who might have contributed should be offered to be on the list of authors. Anyone with

whom you discussed your research could have contributed. Ideally, when offered the co-authorship, a person should decline if they think they did not contribute anything, or if they think their contribution was not sufficiently important.

In reality, it is rather uncommon for people to decline. Anyway, who cares? Put there everyone who was hanging around when you were cutting up the brains. As long as your name is on your own paper, what does it matter?

She felt a bit differently now that she had her first result. It was hard to be generous about something when it was the only thing you had. Perhaps more importantly, it was hard to share something when you were not at all sure about ever being able to obtain more. Would Beni be able to obtain more results? How could she be sure — she had found this one by chance, after months of frustration. Beni would not give up that easily. Why did Neguin think she could do it — just like that? How did she get the idea that it was at all possible? What was her weapon?

"So, we'd better put Finker on it," Beni heard Neguin's voice coming back again.

"We?" she asked. "Did you just say we, Neguin?" Neguin's expression visibly hardened. She already knew what to reply,

she had enough time to think.

"Have you already started your scientific ethic classes?" she said condescendingly. "Everyone with whom you discussed your research is a potential co-author."

"Discussed? I have only told you about it right now! Hell, I've just came upon this myself, you were not even around!"

"I see. Well, you better think about it first. Think whether you want to begin your Ph.D. with a scandal about authorship attribution. Think whether you want Finker to know about it."



"It's okay," said Roger.

He was performing his function, and indeed Mary could already feel the calming effect. In fact, the effect began taking place even before he uttered the phrase. Already entering Roger's house, following his broad back through the large, somber rooms filled with the smells of wood, leather, dust, and perhaps somewhat stuffy as a result of insufficient ventilation, Mary started feeling her anxiety stepping back. Roger had

shown Mary in and quickly proceeded to assume his habitual position in the sofa. The large leather sofa was where he was spending his days, for Roger did not work and rarely went out.

Half-seated, half-reclining among a bunch of carefully arranged cushions, Roger had the appearance of both a Buddha and a rabbi. He had a smooth, full white beard and a large head of gray hair, which was only slightly thinner on the top. From Mary's position, one could guess there to be a tonsure hiding behind, but it was also easy to imagine a skull cap that would complement those wise, understanding eyes of an elder scholar used to listen to the problems of others.

At the same time, the gentle smiling face, soft hands, a corpulent figure with a large, round belly, were giving away an old habit of leisure and insouciance. A comforting sight, overall. But Mary's predicament wouldn't be resolved with as little as a smile and a reassurance.

"What is it? Tell me," Roger asked after a pause.

"I received the letter," Mary replied. "From the Project."

"What project?" Your project?"

"No, not my project." Mary was getting slightly annoyed. "The Project. Project One."

"And?" Roger sat up in his sofa, now looking more awake.

"What? Are they going to do it?"

"Yes."

"When?"

"They gave me three months. Three months to... finish. To finish everything. You don't understand, Roger. I've got my project, the one I'm working on. I can't just drop it right now. I have other people working on it, too. They are very excited about it. We can't just —"

"And how much time do you need?"

"What do you mean, how much time? It's only the first stage. I mean, it's the second stage. What if it gets selected? I won't even be there to do it! I can die there, Roger. On that operating table. Or if I don't die, it won't even be me that comes out. It'll be some... monster!"

"Wait, how much time do you need for your project? I mean, your second stage."

"The deadline is in four months."

"Well. If they gave you three months, then you can probably ask for one more. They need you too, Mary. They are also invested in you, not only you in them. Or maybe another couple of weeks? Anyway, if you can do your thing in four months, then you can do it in three as well. I know you."

"Oh you know me, right? I can't even do it four months! And what if we get selected? What then? Who's gonna do it then?"

"The two of you!" Roger was beaming with a broad smile, finally completing his Buddha image.

"What?"

"Well, look. If you die, then you don't care about the project, right?"

Mary was silent.

"And if not," he continued, "I mean, if the operation is successful... Then there will be two of you — you and the younger one, right?"

Roger did not pay much attention when his ex-wife stood up and left the room, and when he heard the door bang outside. Perhaps I should have been more empathetic, was the only thought he gave it. He was rather excited with his swift and witty judgment — and besides, he felt he was right.

More importantly, the situation gave him some food for thought, and he was eager to devour it. The subject, Mary, was no longer needed for that, and he did not mind her leaving. So, this was actually happening. Mary was going to be merged with a young woman — her clone, but a clone that had a whole

life of her own, had grown up to be twenty-five or some such age.

Indeed, all of Mary's professional knowledge and expertise, all her ideas about her project, would be copied onto that other woman's mind. The two of them could continue the work together. Mary could hire her new younger self in her little company — if the other woman wanted, of course. What is she doing herself, he wondered. Is she an architect as well? Why would she be? She can be anything. A nurse. A waitress. A stripper.

Then it also occurred to him that this young woman would know everything about him. It made him blush. All the twenty years of their life together, with all its intimacies. With their son, too, who was almost her age now. Well, not quite. Sam was only eighteen. Still, how could it feel for a twenty-five-year-old woman to have a grown-up son? And a fat, old, ex-husband. The thought was quite disconcerting. He was agitated and he already knew he would not be able to sleep that night.

Mary's short visit was a big event for Roger, as his life had been poor in external stimuli. Apart from daily walks that he made a habit of taking, he was mostly spending his days reading and thinking his own thoughts, alone. Memories played a large part in those broodings, as new impressions were scarce.

Yet, Roger was not an unhappy person. On the contrary, he was reasonably happy with the life he led, as he considered his life goals accomplished. He was rather proud of his work — his pinnacle achievement was a fully automated enterprise that required zero effort to maintain on his part. The fact that he had to do nothing was, therefore, an achievement, and he felt compelled to consume it to the fullest — doing nothing.

The job that he automated was to countersign loan contracts. The enterprise had its foundations in the stellar reputation that Roger managed to establish during the early years of the cryptocurrencies boom. He started running a small-time bitcoin casino, which was not particularly different from a bunch of others available at the time, but that was reliable, and people liked it.

At some point, he had an idea to allow users to invest in the bankroll. This would allow the casino to accept larger bets, and at the same time would allow those who did not want to gamble to earn a small interest.

The idea turned out to be hugely successful. In the early days of cryptocurrencies, the space was full of people with a large appetite for risk. Indeed, investing money in bitcoin was an extremely risky and, at the time, purely speculative affair. Those who did invest in bitcoin had pretty much nothing to do with it, apart from waiting for its price to grow. They would jump on any idea. Investing in a casino bankroll was an idea simple and appealing to anyone — for once, the odds were in your favor, because you were the house.

Thus, Roger's casino, which was not much more than a simple website, started rapidly attracting bitcoin investments. In just a few months, he became the custodian of over sixty million dollars' worth of bitcoin. These funds were under his responsibility alone; there was no insurance and no means of legal recourse for the investors in case something went wrong. In fact, the whole enterprise was barely legal: Roger did not quite know whether he was breaking any laws running it.

At this point, it had dawned on him that to have so much money under his guard was very dangerous. True, his customers and investors only knew him by his forum handle, but it could only take an amateur internet sleuth to find out where he lived. He and Mary, who had recently become pregnant. While the online casino had been bringing in a steady flow of income, more than sufficient to provide for his young family's needs, the risk he was taking by running it became too much for Roger to handle.

Thus he took the only decision that seemed sensible to him – to shut down the site and pay out the investors their due. Which was what he did.

The other solution, which would be to abscond with the investors' money and go live a happy life somewhere in the Pacific islands, did not really occur to him. The possibility must have crossed his mind at some point, but he had never considered it something he could actually do.

It turned out that what was natural and logical for him to do, did not appear to be so for the community. Scams, thefts and hacks were so common in the nascent industry that lacked any regulation that people came to expect them, the more so the more money was at stake. The simple act of not having stolen from the fortune that was under his control earned Roger an enormous amount of trust. It was this trust that he capitalized on for his next venture, which would bring Roger to his virtual retirement before he turned forty.

Roger now had a long-term habit of coming back to the memories of those days, and retelling them to himself. He thought about his ventures, congratulating himself on the ingenuity of their simplicity, marveling at the unlikeness of their success, which did not cease to surprise him. He would often imagine telling stories about those times, explaining how and why these things could happen, the technical details underlying the implementation of his projects. Other, similar or related projects, that existed at that time and had failed — or those that succeeded as well.

He would also come back to earlier years of his life, his sentimental adventures, the stories of his friendships, travels, sometimes embellishing them with imagined details, and sometimes making up events and adventures that he could have had. The stories that he kept retelling in his mind seemed almost perfect, yet he seldom told them to anyone, and when he did it was usually to the people in his closest social circle. Roger used to tell his stories to Mary, when their relationship was not long past its zenith, as well as to their son Sam. To Sam he would spare the more sentimental ones, telling him more about his travels, for Roger used to be much more mobile in his younger days. Both Mary and Sam used to like it.

Their reactions flattered Roger; Mary used to tell him that maybe he should write those stories up sometime. Yet Roger did not like the way his accounts turned out when told — they seemed so much better in his head. When told, they would often seem too long at places and too rushed at others.

In fact, while he never rushed his narrative, some parts would often slip out. Sometimes these would even be critical parts, that were necessary for understanding the whole plot. It was perhaps because in his own mind all the events and details were so well polished and familiar that he would sometimes forget that it was not so for his listeners. Thus, it was ultimately not very rewarding to tell anybody about his life, and since his separation from Mary Roger kept them almost entirely to himself.

But as of late, he also started to tell Sam about his past business ventures. Sam was finally grown up enough to understand them, and he was taking a keen interest in the subject. Talking about his business ideas was much easier for Roger. It did not matter whether he told things well or not, the important part was to get his point across, to make the listener understand the ideas. These were, in fact, fairly simple and not always original, but it did not matter. The fact that Roger had brought them to work, and that he made money out of them, was what gave the ideas and his accounts of them their justification, and what rendered them interesting.

"So how do these contracts actually work?"

"There are three signatures. The lender, the borrower, and

the arbitrator, myself. The funds locked in a contract under these three signatures are collateral. So, the borrower sends the funds to the contract, and they become locked. The lender sees this and gives the borrower his cash. Now if everything is fine, and the loan is repaid, the two of them agree to return the collateral to the lender. They use their two signatures to unlock the funds and transfer them to the lender's account. I don't have to touch anything. If, on the other hand, something goes wrong — the lender did not return the loan, for example then they have to ask me, the arbitrator. Now here is the most interesting part: I cannot do anything with the funds myself. I only have one signature, and at least two are needed to unlock the funds. However, if I decide that the funds should be sent to one or the other of the arguing parties, then, presumably, that party should agree to send the funds to themselves, and together with me they can do it."

"And you are saying that this never happened?"

"Not even once. Well, they know that it should really be a serious dispute to bother me. I only start working if there is a court order. From a Honduran court, of course. Because that's where the company is registered."

"And I guess there are fees to consider, too."

"Yes. The arbitrage fee is five percent."

"That's a lot. And the normal fee?"

"Well, if everything is going fine then they only pay me one percent of one percent."

"Wait, one percent of one percent? Seriously?"

"Well, yes. But per year. So I have my steady income, you know."

"Holy shoot! How big are those contracts then? I mean, if just one percent of one percent is... enough?"

"Pretty big they are indeed," smiled Roger. "And the best part is, I don't have to worry about being robbed. Because I'm not in custody of those funds. I can't steal them, so there's no point attacking me!"

"That's smart indeed." Sam was getting visibly agitated. He raised his hand to touch his hair, which until recently had been bushy and unkempt, but presently was cropped to just a few rebellious millimeters. His boney nose and deep-set eyes gave a serious expression to his face, but when excited, he would slightly open his plump mouth — his mother's, Roger thought, which instantly made his expression childish. It was difficult to tell whether his agitation was caused by the huge amounts of money that he was evaluating in his head (to have an income

of a hundred grand a year he'd need to have a billion in those contracts, Sam could be thinking) or by the beer that he was finishing. Sam and Roger had a habit of sharing a couple of beers when Sam was coming to visit, and at his age Sam was rather fast to react to the alcohol. "And so you are saying that it is fully automated?"

"Yes. I have a script that checks the contracts and signs them if they comply with the terms. For withdrawals, like I said, they do not even need me at all."

"But what if they are, like... criminals, or something like that?"

"I don't have to work with them. They are supposed to agree to my terms if they send the funds to my contract. And my terms say: no criminal money. So if they do show up for arbitration, and I find the terms were breached, I'm not going to do anything. Let their funds rot, that's it. Anyway, as I said, there was still no arbitrage request, ever. At first I thought I'd need at least one arbitrage successfully handled, to serve as an advertisement of sorts. But it turned out it was not even necessary. The best advertisement is — no problems for years. And it's been fifteen years that this works."

"Wow. That's a long time."

Very long indeed, if you are eighteen, — thought Roger, but did not say it out loud. It was a long time for him too, only in his life this time had been much more compressed, due to inactivity and lack of memorable events. Sam's growing up was the biggest source of change during this period. As of late, Roger had an increasingly hard time catching up with it. This was not only because since the divorce from Mary, Roger was seeing their son much less, but also because Sam was drifting more and more apart from his parents since he entered college.

The interlaced manifestations of his adult, childish and adolescent sides made it hard for Roger to select the right tone. That latter, adolescent, part was especially peculiar and intriguing, because Roger was finding it hard to relate to, to recognize his own adolescence in that of Sam. Looking at his son's face now, Roger recalled the last time he saw Sam blush so hard that he was almost worried.

Sam had been giving an account of the four-days trip he just took with Greg and his friends. Greg was Mary's nephew, four years older than Sam. Mary and her sister tried to make their kids spend time together, and, while the age difference was too big for this to work when they were younger, recently they'd started spending more time together, as both liked nature. Greg and his group of friends had effectively adopted Sam, taking him for their trips to the mountains every so often. For his part, Sam was keen to associate with the more mature group, and started to adopt their ways: their gestures, intonations, some of the words from their vocabulary. Each generation of adolescents comes up with their own words that they use to distinguish themselves from the adults, or, rather, from the previous generations. Some of these stay on with them until the adulthood, and spread throughout society to become a part of the wider language, while others die out within a few years, or become localized to a town, a neighborhood, or a school.

Sam's generation had its jargon, which was largely the same as that of Greg's, since indeed there was not that much age difference between them. Yet Greg's group of friends had some words that were totally new to Sam, and he could not quite say where they were coming from, or how general was their usage; perhaps they belonged to this small group and this group alone.

Sam never asked, but didn't dare to use those words with them. Doing so would be proclaiming himself a member of the group, and it was not his prerogative to do so. It is always a current member of the group that should take the formal step of welcoming a new one. Yet there was no formal group, and the the older guys' attitudes toward Sam did not lack anything in comradery that he could put his finger on to say that he was not quite one of them. Perhaps it was all in his head: he was conscious of being younger than the rest of the pack and this made him sensitive to any other trait that would single him out.

The last night of their trip, they had camped near a small mountain town. It was their first approach to civilization after four days in the mountains, and they had to celebrate it. The only establishment that they found open did not give them a warm welcome: when they entered, the old man who was the only patron stopped talking to the barman, and both gave the group a somewhat unwelcoming look. It did not matter though — they all were thirsty. They got their beers and retreated to a table in the corner, next to the window. It was still daylight, the end of the afternoon, and they could observe the empty, dusty streets outside and a leafy square in the distance.

There was not a single person in sight, and the view was completely still. The friends were tired and did not even need to talk. They were enjoying their drinks for the first time after a long journey, admiring the bleak view in its tranquility. Not before long, however, they noticed some commotion in the square. It was hard to see what it was, exactly, but it was a

group of *nenas*. An obligatory topic for a conversation. Apparently, the young girls went there to hang out. They were drinking something, most likely some soda.

"Why don't we invite them to join us," Sam ventured.

"The *nenas* are probably underage; they couldn't even come to the bar."

They were using the common slang for "girl" rather than their inner-circle one, so Sam felt more at ease. He also felt he should be the ambassador, since, as far as they could see from the distance, and judging more by the clothes than anything else, the girls were closer to his age. He proposed a plan of approaching them and asking where they could buy some beers. Then they could take it from there. This seemed a safer option than inviting them into the bar, since it would also work in case they were underage.

If the *nenas* noticed that they came out of the bar and tell them that they could have simply stayed, then they could always allege that it was too expensive to keep drinking there. The plan seemed well thought-out, and thus the envoy was dispatched. Sam started talking to the girls, who were indeed exactly his age, and soon the rest of the group joined.

After a while, the guys went to a grocery store to buy their

drinks, but agreed to meet the girls later in front of the Ema's house. Ema was a plump girl that seemed to be the leader of the group, or at least the most outspoken one. It turned out that hanging out in front of Ema's house was one of her friends' customary pastimes. They would not be invited in, not with the guys at least, as this would suggest too much intimacy with the people they had just met. Outside the house there was a makeshift bench and a fallen tree trunk used for the same purpose. That was where they spent the next several hours chatting and drinking innumerable beers well into the night. Sam was eager to tell his dad about this part, presenting it as an account of local village habits and customs, even though nothing much happened. Perhaps had the encounter turned sexual, he would rather keep it to himself. As it were, they just walked the nenas to their respective homes, one by one.

All except Ema, who was already at home and on that account had allowed herself to get completely drunk. The rest of the young ladies stayed more sober, and wisely bid their suitors farewell. Perhaps they could see one another again sometime, if they came back to these parts. And that was the end of it.

Sam was feeling that the story he was telling his dad was anticlimactic, and he tried to embellish it with some ethnographic or anthropological detail. Yet what was making it interesting for him was that it was he who'd made the whole adventure happen. It was he who talked to the *nenas* first, acting like the scout if not quite as the leader of the group. The next day, they woke up late and missed the appointed time to meet their friend who had to pick them up at the end of the track. Indeed, after the first village, they still had some eight hours of tracking down, and they barely made it before dark.

"We were so happy to see Dan's kass still waiting for us!" exclaimed Sam.

"Happy to see what?"

Roger was familiar enough with the new generation's slang: as usual, the words most used — those standing for money, car, woman, house — had made it outside their original group of users, but this one he hadn't heard before. Roger could surmise that Sam must have been referring to his friend's car. But the word also resembled "ass," so Roger thought it could have been to see Dan's ass, which would mean simply to see Dan in this context, with the word ass employed only to add extra importance to the phrase. But it was not ass, it was a different word.

Sam did not reply, however, and Roger noticed that his olive-

brown face was acquiring a distinctly red undertone, progressing from a normal blush toward the shades Roger found almost scary. His son was unable to utter any reply. What happened was that he'd used one of their words, one of those words Sam never dared to use with Greg and his group — a secret, forbidden word of the group — only it was, of course, not a secret and only forbidden to him and by himself. Yet now, it escaped from his mouth, betraying the desire to belong Sam had never quite formulated to himself and that was causing so much confusion presently.

It must have been the car, thought Roger, and offered Sam more beer. He wondered what was so special about the word, or what kind of secret it betrayed. When Roger himself had been a kid, they used to speak the tupa language with his friends. This mock-language was obtained by inserting tu and pa syllables in the middle of each word. Li-tu-ke so-pa. The idea was to have a secret language that adults would not understand. Sam was clearly far too old for that, though. In fact, Roger could recall Sam using some variant of the tupa language with his school friends when he was nine or ten, though the words in it were much longer: apparently, the code syllables were inserted before each vowel. That was about the time when his marriage with

Mary started its decline. Or was it earlier? The happiest period must have been between Sam's three and five, but it was difficult to pinpoint exactly when the happiest part began and where it ended.



When Beni finally decided to consult Finker about the matter, it turned out he was already informed. By Neguin. For a moment Beni was in shock — was it possible Neguin had told the story in reverse, making her, Neguin, the author, and Beni the encroacher?

No, it can't be that bad. It just can't, she thought. People don't do it. — She tried to chase away the thought.

Beni did not want to talk about Neguin and the authorship issue straight away. She wanted to talk about her results first, to see what Finker thought about them. She started telling him about the result, how she hit upon the idea and how she verified it. While she was talking, she was resting her gaze on various objects in Finker's office, asking herself how long they could have been there. Those papers on his table were probably a mix of young and old, from a few weeks to a couple of years; the dust on the window must have been there since summer; some of those books on the upper shelf of the steel cabinet could have been sitting there for as much as ten years. The military-style steel cabinet itself was ageless. Beni imagined the whole university being built in record-breaking time out of steel containers hastily evacuated here from the other side of the planet, after some ethics violation scandal having to do with monkey brains. It was not exactly how it happened (or was it?), but the steel cabinet would fit the narrative perfectly: zero regard for aesthetic, all about efficient transport and assembly. And then there was Finker himself. Those vertical folds on his long, weathered face covered with large pores must have seen it all. Seen it and dealt with it.

All in all, Beni's account of her findings must have been rather confusing: instead of clearly formulating the problem, its motivation, and finally presenting the solution, like one did in a research presentation or in a paper, her story was a jumbled tale as much about herself, her thought process and the development of her research, as about her results. It didn't help that, soon after she started, a glacial thought came from behind and put

its icy hand on Beni's head: What if it is all wrong?

No, she thought, I have verified everything several times. What about the interpretation though? The icy hand kept caressing her gently, now getting beneath her hair, massaging her scalp. Yes, there was some statistically significant difference between something and something else; but did it really imply what she was saying?

And then, as if the critical part of her thought process has been stimulated by the stressful situation, it produced a rather daunting objection: what if the behaviors she was measuring didn't have anything to do with risk-taking or risk aversion, but were a by-product of something else?

Finker kept interrupting Beni with various questions, first clueless but then increasingly more to the point.

"Yes, the interpretation does not seem quite waterproof. But still, I agree that the result is nice. It is an interesting observation. You just need to find a good way of presenting it. It also seems it would benefit from some more experiments, to confirm the findings." He paused. "Maybe Neguin can help you with experiments. She's got quite a hand at it."

Here it comes, Beni thought. "Yes, I also wanted to talk to you about her."

"I know, I know. You see..." Finker paused.

She'd told him, Beni realized. She was trying to collect her thoughts and formulate an attack.

"I understand," he continued. "Neguin has been with us for already quite a while. And how to put it..." He paused again. "She needs to defend" — he said finally, with a disarming and understanding smile.

That smile seemed to invite Beni to jump over to the other side of the table and to join him, a mature scientist, in the difficult task of advising grad students. Grad students, most of which were older than herself.

And it worked. Her anxiety had finally receded, giving place to the feeling of relief. Finker was smart. He liked her result. He said it was nice. Obviously, he must be smart! Even though he agreed with Beni that the interpretation was somewhat dubious, he still found that there was a result, and it was an interesting observation. So shrewd, old ass!

And so, with this Neguin situation, he was able to see clearly who was who. Of course, as he said, Neguin had been there for quite a while. Finker knew her well, and he understood what happened, who stole from whom, despite what Neguin could have come up with to say to him. Perhaps, he had been expecting something like this to happen for some time.

Doing some more experiments, even with Neguin in tow, did not seem such a big price to pay for the first real, professional confirmation of her achievement. And then, it could even be interesting. She might discover something new in the process.

That was how Beni felt when she was leaving Finker's office. But as she was walking back home, her thoughts started to change their direction. She was beginning to blame herself for how she'd talked to her advisor and for not having said what she should have said. That bitch has to defend! What does this have to do with me? How come I am responsible for her now?

And he found my interpretation questionable. Was that how he said it? Or even worse, dubious. Not quite waterproof. — What a ridiculous expression!

The hell does he know about it? It only occurred to me to question the interpretation there, in his office. Had I not told Finker about it, he would not have thought about it. Anyway, he understands nothing outside the area in which he has been working for the last thirty years. Idiot. He probably never had an original idea of his own. Or maybe he had *one*, thirty years ago. One he stole from someone else, just like Neguin is trying to do now.

Beni was getting more and more angry, because she was feeling that she was losing her result. No longer than yesterday she was happy because she had a solid, if small, discovery of her own. Her first. Yes, someone was trying to steal it from her — but that only attested to the result's quality. If you have parasites it means your blood is good.

But now... Now, the conclusion had to be rethought. More importantly, she needed to do new experiments. That meant that the whole thing could fail. Worse, it meant that right now she didn't have much more than an idea. She didn't have a result. Who knew what the new experiments might show and how long all this would take. Months, at least. And I am already getting old.

She noticed a large brown apple on the footpath, and kicked it violently. The apple responded by giving her a sharp pain in the toe, probably breaking the nail. Beni was starting to feel bitter, disillusioned and depressed.

These sentiments became dominant throughout most of the following two years. Beni was telling herself that she had no reason to be unhappy or depressed. She had a good position as a doctorate student in a highly regarded lab. Unlike most of her peers, she was working on a problem of her own and not

on a task given to her by her boss. She could truly feel being a scientist.

But Beni did not find such thoughts convincing. Yes, she had an idea. Once. It did not really work. Now she had to keep working simply to salvage it. Will she have other, stronger, more interesting ideas? Maybe sometime. Maybe not.

Her social life was also far from satisfying. It was not for inaptness on her part: unlike some other people in the lab that could be characterized as borderline autistic, Beni could manage social interactions with dexterity. She just did not find them sufficiently engaging. She found that alcohol helped somewhat, and soon enough, she could no longer imagine any interaction with others outside of work without drinking. She was drinking with moderation, but also with some regularity.

Then it occurred to her that interactions with others can be made more interesting if one does not simply have a drink or two but adds some other substances to the mix. Doing so, Beni could feel elevated above any situation — she was not just being there, she was also experimenting with something else at the same time. Something quite simple: mixing drugs with alcohol, but something of her own.

That was why it was important not to tell anyone about it:

taking someone else with her, she would make the whole experience a part of the social interaction, negating the appeal of the experiment. In the lab, Beni had access to a range of substances that were used as sedatives for mice during operations. These were mostly dissociatives, but also some GABA receptor agonists and even opioids. There were other substances as well that she could try. There was BOZAR of course, not to mention all those other stimulants, the famous cocktails that were used to help neurotransmission during the merging operation. Beni had often fantasized about trying out some of those substances on herself. Both the well-studied ones, like BOZAR, but also those that were a part of the active research in the lab — indeed one of its main topics.

True, nobody had tried any of those on people yet, but having seen how they work on mice, having discussed them so much with others, one couldn't help feeling too familiar with the drugs to think they could do any damage. Yet these were just fantasies so far; for the moment Beni was content with the simplest substances, boring ones perhaps, but whose use on humans had been very well documented.

Moreover, she would only take threshold doses — just enough to elicit a mild sensation of something different when mixed with alcohol. Even this little was enough to add a whole extra dimension to an otherwise boring night out or a party. Thus, she was not skipping on these events, and could always afford to be outwardly jovial and self-confident, if only a little bit aloof and sometimes distraught.

People liked to invite her. Presently, she was at John's house party. It was a success: the place was overcrowded, and full of noise. If it wasn't for the noise, Beni would be completely at ease. She knew almost everyone that was there, and therefore, did not feel obliged to talk to people much.

Waiting for the hit, Beni was nursing her second drink — which would probably be her last — and observing people. Martin picked up a pack of vegan cheese and started reading the small print. Apparently, he knew what he was looking for, for it did not take him long to find it. Triumphantly, he exclaimed, -"Ah!" He turned toward Ghazaleh, who was standing next him.

"Ah! This is funny! It says made by vegans with love. Why do you think they need to say this?"

"With love?" Ghazaleh was surprised but rather willing to talk.

"No, I mean, made by vegans. Why does vegan food has to be made by vegans?"

"I doesn't, really. Just has to be, vegan, you know."

"Right! Yet here it is. Like, halal food has to be produced by Muslims, and Kosher food by Jewish people. Dietary restriction is one of the ways to define a group, which is why people follow them so willingly. The stricter the requirements, the more people are willing to submit to them, because they are in a desperate need for a group identity. But if a group defines itself by the food it eats, it cannot allow others to be in control of its production."

"They don't eat only plant-based food just for the sake of a restriction. There are reasons for this, too."

"I know, sure, they want to save the planet, and of course there's some philosophy to it as well. All I'm saying is that it is secondary; the real reason is to have a group identity. And here is proof right here on this package! If all you want is no harm to animals, then why should you care who has produced this food?"

Ghazaleh was visibly getting bored with this discourse, but Martin had evidently lost the connection and was just enjoying his own speech. Is he trying to hit on her, Beni wondered.

In reality, she never saw Martin to actually hit on anyone. Sometimes his interest was evident, though. Like now, for example, he was standing very close to Ghazaleh. True, it was a crowded and noisy room, but still he was too close. Also, it seemed like he went to look for that cheese package specifically because it was next to her. He evidently knew what he was looking for.

Anyway, Beni knew that this would not lead to anything. Ghazaleh would not demonstrate any interest, and Martin would not take any action without prior encouragement.

A calm, mellow sensation was spreading around her stomach. The drugs you ingest take time to produce their effect; you need to be patient and wait for it. She would feel good maybe for an hour or so, and the drink had to last a bit longer. Beni looked at her watch — in an hour and half would be a good time to leave.

Her calculations were becoming almost perfect. Perfect to the point of getting boring. She finished her drink in one big gulp. Presently, Martin was getting increasingly more agitated while delivering his discourse. He was violently waving his hands and almost standing on tiptoe. While this type of behavior was common for him, right now it was close to its extreme.

Beni looked around the room, trying to find how many people reacted to alcohol with a similar agitation. There were quite a few. The agitation was not displayed the same way in all the people present, but the proportion of people displaying this same reaction was significant. Beni herself was not moving. It occurred to her that it was almost blissfully pleasant not to move at all. Her arm holding the empty glass was frozen in a somewhat unnatural position halfway between her face and the table. Unnatural, maybe, but perfect. All her limbs felt blissfully in place — all they needed was not to be disturbed by anything, not even by a thought.

A thought about the position could upset it; it was better to think about something else, something abstract, or about nothing at all. To be perfectly catatonic one needs to think about nothing at all. Was it what happened with the mice?

Some of the post-op mice had the increased frequency of agitated behavior, like Martin, while others, of the catatonic reaction. Maybe that's just that. Nothing to do with risk; or even with merging. This could be simply an effect of the brain damage received during the operation. Like alcohol, which is also inflicting brain damage, if only temporarily, she thought. Far from becoming upset — after all, she just realized that her research may have been totally misdirected — Beni was rather content. Perhaps she had been much too depressed about her

research previously, so that there was no more room for the downward sentiments. Or maybe she was just being high.

In any case, she did not get any more unhappy, but on the contrary, she had a cautious sensation of being inspired. There was a hypothesis to check, or at least to think about. Already, she had been thinking about a new direction of experimental research that had been opening up. And if it lead her away from merging, then so be it. The area was becoming rather stagnant anyway.



People talk too much. Researchers, in particular, talk, and talk, and talk. Entering the lab, Beni thought that if, passing through the corridor right now, she looked into every room then she would find at least half of the researchers talking to each other. Why do they do it?

Most of those discussions, no matter how outwardly passionate, would bring about zero results, as Beni could confirm reading the papers by some of her colleagues. Perhaps, the sim-

ple reason was that for most of the people everything had to be a social activity, and science was no exception. They felt they had to do it together, and so they came together and talked. If a researcher was talking to a researcher about research, it must be research that they were doing; this simple conclusion was validated continuously by the act itself, keeping the participants happy.

"I think I finally get how that app works," said Beni.

"Which app?" asked Martin.

"You know which app! The language learning app." Beni was somewhat taken aback. She wanted to share what she understood about the app, and he did not even remember what it was about. Or was he pretending? Hiding his interest, teasing her?

For Beni, talking about anything related to research had always been a one-sided activity: either you explained something, or someone explained something to you. She liked explaining things to others: not only did it satisfy her natural desire to share her understanding, but trying to formulate ideas clearly also helped her to understand them better herself.

"Sure," he said. That one. "So does it really work?"

"I don't know whether it really works."

"Oh, okay."

"I mean, I didn't try it. I just think I understand the science behind it. I read the papers. Anyway, do you want me to tell you about it? It'll take some time."

When Beni mentioned having read the papers, Martin became more attentive. Sure he wanted to know how it worked. He wouldn't want to try the app right now — he'd been too busy with his work for that, and so he kept his interest in the subject simmer, not getting as far as reading about the actual research behind it. But if someone were to explain it to him? Of course, he'd be happy to have a half hour distraction.

"I'm very interested. But I think I understand most of it anyway. What I don't get is the actual app part. What does the damn thing do to your brain?"

"Wait, let me explain it the way I understand it, okay?"

"But will you tell me how the actual app works? Did you try it?"

"Yes I will, and no, I didn't. I mean, I did try to run it, just to see what it looks like, but I didn't do the whole training thing. Can I proceed now? Right. Imagine you are sitting on a table. A very large table. On the table, there is a steel chip. And, under the table, there is a monkey, with a magnet."

"A monkey, interesting."

"You want the monkey to move the chip to a certain point on the table, which is your goal. The monkey is willing to cooperate, because you can give it rewards. You tap on the table, and the monkey knows that that's a reward, some kind of brownie point."

"Or a banana falls out."

"No, that's too much. A couple of bananas is enough for a monkey to fill up and lose interest. Just a symbolic point."

"Are you actually explaining to me how shaping works? I think I've heard about it already, you know."

"There's no reason to be sarcastic. Yes, it is shaping, but there's more. I'll be trying to explain how the learning mechanism works, A few pages have been cut out based on a recommendation of the Editor, who thinks this dialogue is too heavy for the casual reader.

"Hold on, I've got something." Martin's phone started emitting weird noises, resembling a large animal snoring.

"Why did I put an alarm on? Oh, shoot! I've got a meeting with Finker now. I better hurry or he'll get angry at me."

Beni was dumbfounded. She felt like she'd asked a question and received a fart in reply. She was all worked up explaining learning mechanisms to Martin. He had been following her all the way, and just when she was about to finish, — he was suddenly done with her. Lost all interest. Cut it short, and for what? To avoid annoying that cabbage-brained Finker! Finker, who would probably make him wait half an hour while he finished another meeting! *I'm done with this idiot*, thought Beni.



This must be how one prepared to quit drugs cold turkey. Beni never had to fight any serious addiction, even though she flirted with substance abuse for quite some time. Still, she was confident that this was how one must be going about it: stocking up supplies for a week and locking oneself up. She had also stocked up on video materials for learning Hungarian. For her first language, she decided on Hungarian. First of all, because she did not know a single word in this language. More importantly though, it was supposed to be so difficult that it was pretty much impossible to learn it to a level anywhere close to how a native speaks it.

At least that was what Andras had said. An old professor from Budapest who visited the lab recently, Andras had witnessed a dozen or so grad students and young postodes trying to learn his language. Their success level differed, as did undoubtedly their motivation, but he had not seen a single one manage to learn Hungarian even to the level that most learn to speak their main foreign language, English.

"I've heard it has eighteen different declensions," Beni asked him. "German has three, Latin, seven, and Hungarian — eighteen?"

"Yes. But there are so many exceptions that you are better off learning how to use each word separately."

That sounds exactly the kind of language I'd learn after I mess up my brain with the app, Beni thought. Sure, there are more useful languages to try. Mandarin, for example, or Arabic, or Russian. I could leave those for later, though. If

the app works as it is supposed to, I would be able to learn new languages at the rate of two per month, or something of that order. No point starting with half-measures then: gotta see whether it works or not.

Beni also downloaded over two hundred hours of videos in Hungarian: movies, talk shows, educational programs — almost everything goes. The instructions recommended to avoid cartoons, and to favor materials that showed people's faces and their lips when they speak. Apart from that, the only major recommendation was to try to talk while watching. Pretending to be inside the video was not at all necessary — whatever babbling one could come up with would be good enough. Beni felt rather silly making all these preparations — they would only be necessary if the app worked at all.

During the test run, she played a bizarre-looking game, where a funky character was jumping over hills and ravines, always not quite the way one would expect it to jump. After an hour or so of playing, Beni got her learning age estimated to be twenty-two. That's quite a compliment, she thought, as she was a few years older. I can still learn. However, the target for learning languages was just five. This target learning age one was supposed to reach after two to three days of playing the game.

Already after a few hours of playing, Beni started to feel sick. It was difficult to say whether this was a side effect of the change of the learning processes in her brain, or, which she thought more likely, of staring at her phone and playing the same game for so long. She felt nauseous and her ears were ringing.

At some point, she got so angry with the game that she wanted to destroy her phone. Only the violence of her own sentiment had detained Beni, as she thought that, perhaps, the bout of anger was also a side effect, and so there must have been also something going on in her brain. Thus, when on the morning of the second day she had to throw up as soon as she started the app, she felt reassured.

Clearly, something was changing. Now it has definitely hit me, she thought, making another parallel with taking drugs. First, after ingesting an unknown substance you are unsure whether it's going to do anything at all. Then, oftentimes, you are slightly sick. At this point you know that at least there is some effect. And then it really hits you. At some point you may think that you took too much, but it is already too late. There is no way out except at the other end of the trip.

Roger and Mary met through their parents. Roger was thirty-four and Mary three years younger. Relationships and family had never been life-defining goals for Mary. In fact, she did not have any goals that she could call life-defining; but she had been rather well-motivated, and her motivations were mostly of professional nature.

She liked to keep her sentimental life in the background. It was important to her as such, but it would never go to the forefront. It would never occur to Mary, for example, to change places to follow her partner, even though she had changed places several times following her career. Yet, if asked whether at one point she would like to have family and kids, she would always say yes. She was expecting it to happen naturally, however. To meet someone who would be the obvious choice. Mary was thinking that if she were to put herself a goal of finding someone to make a family with, she would make it. She would have solved this problem like she was solving all the rest of the problems she had to solve.

Yet she was thinking that this would be somehow cheating —

a serious relationship should begin with strong feelings, not with a formal objective in mind. Would she need to fake the feelings that her partner would be expecting? Not necessarily, it turned out. Roger was not expecting to receive more than he was able to give, and he was not a person of strong emotions. When their courtship came to the point of sharing their sentimental past, Roger told Mary about what he called was his greatest love up to that point. A love at first sight, that only lasted thirty seconds. His thirty-second love, as he put it.

He was twenty-five at that time, living in Switzerland. In Switzerland one can reach any small village by a yellow postal bus. Sometimes if you want to reach the starting point of a mountain trail, you need to take more than one postal bus, changing in some bigger village on the way to a smaller one. This was the way Roger was taking on that day.

"When the bus was pulling to a stop, I noticed a girl waiting. A typical Mediterranean face, long curly hair, slack clothes and a small backpack. As I was getting off the bus, she brushed against me somewhat impolitely, hurrying to get on. For a brief moment, our faces were next to each other. Her hair even touched my ear before she disappeared inside the bus. I was standing at the bus stop dumbfounded.

"One often reads in romantic stories how time stops when you are love-stricken, but I thought it was an exaggeration. I know now it is not. It must be some kind of catatonic reaction, by which the excessive excitation results in freezing. I don't know exactly how long I was standing there, but when I unfroze, the bus was gone.

"I proceeded on with my hike as if in a dream, surrounded by the world that had lost its relevance, considering my options. They were not many. The thin trail was going along and up a steep slope of a hill that was covered in dry grass, with no trees in sight. The grass was slippery on either side, so I could only follow the trail. A thin drizzle started, even though the sun was shining bright. How could I possibly find the girl? She might be living in that town where I saw her, but most likely she was only changing buses, like I did. Going to visit a relative somewhere. Where did she live?

"I was working and living in the biggest city in the region, so it was quite likely that she lived there as well. But then what?

"As I walked slowly along the trail, deep in my thoughts, I must have surprised a groundhog. In confusion, instead of running away from me, it darted toward me, along the same narrow trail that I was on. Suddenly, the creature was stuck between

my feet. I could feel with my ankles how it was struggling to get through. Bemused and bewildered, I did not move.

"It was supposed to be a life-changing event. There was supposed to be a before and an after. I was, perhaps, supposed to do the impossible and find the girl. Then conquer her heart. Yet I was hiking a silly mountain, in the rain, with a poor innocent groundhog that must have been about to have a heart attack between my legs. Reluctantly, I moved my foot, letting it go.

"Needless to say, I never found the girl. Not that I didn't try. I went back to that village several times, just to wander aimlessly along the streets, looking for her. I was trying to figure out the most likely places where she could live (in my city?), what she could do (she could be a student), and where she would be hanging out — I took to hanging out in those places. I gave up in about a month."

Weird, thought Mary. This story is weird. Is it even true? The way he told it, it sounded like something Roger had turned over a lot of times inside his head, embellishing it. Or maybe inventing? Yet, why would he invent it? If he wanted to invent a story, he could have made up something more interesting. Or at least more normal. For he must be conscious of the impression it was making — weird. The girl in the story was only an image:

there was no person behind it.

Had he come to know her — assuming she existed — they may not have found anything to talk about. He might not even have liked her — not to mention that she might not have found him attractive in any way. He avoided all the complications by that catatonic reaction, as he himself put it. How convenient. A perfectly isolated romantic experience that was purely his own, unspoiled by the particularities of the other person. Now he can put it in a jar and label it: Love at first sight; or even better: I loved.

Mary's, previous loves were much more real. They were actual relationships. They had other emotions in them: not only love, craving, anticipation, but also anxiety, exasperation, boredom. And then, of course, they had a physical side too: brushes, touches, caresses, smells, tastes, sex, orgasms. Had he told this story before, Mary could have broken up their courtship. She could have concluded that Roger was a poor lover. Yet she already knew that was not the case. She also knew Roger had relationships before, so he must have not been too weird.

Perhaps, he was simply cooking himself too much in his own stew. The latter quality, for Mary, was an indication of an important trait: Roger was self-sufficient. Mary had been so used to living on her own that she was afraid of sharing her space with someone else. Roger had the same preoccupation, but it turned out both were worrying too much about this. They were comfortable sitting each one in his own corner of the apartment, mostly silent, being a part of the house decoration for one another — an living one, but not much more dynamic than a fish in its bowl. Only seldom did they interact, having sex or an occasional chat. Even to eat they did not require company; they were comfortable eating at the same table but lost in their own thoughts. Perhaps, I am not less weird than Roger, Mary used to think sometimes.

Indeed, Mary had her own bag of weird to present to Roger. In a way, it was much bigger, because it was more real. Unlike Roger's stories, which were mostly about something that was happening inside his head, hers took place in the real world outside. And it was not yet over; indeed, it was only starting.

To her relief, when she finally brought herself to tell Roger about merging, he was not freaked out. Mary thought he might be somewhat envious: it would be her that would get a chance at infinite life, and he would be left behind. However, Roger had found the news rather flattering: the memories of him would be passed directly from his wife to her clone, and then later to the next one, who knew for how long down the path to eternity.

Usually, one needed to do something really remarkable to be remembered by future generations: a great discovery, a great work of art, or at least an outstanding atrocity. Even then, one may very well fail to be noticed. And if one does get remembered, it is some distorted version of oneself, a legend created by the society about him and not true memories of the person that get preserved. Instead, what would be remembered about Roger was perhaps as much as any living person could leave in the mind of another. Day after day, the routine of his life, his habits, gestures, intonations would be impressed in the brain of his spouse. Only to be transferred, directly, not distorted beyond recognition by the process of being told or written and then misunderstood, but directly from one brain to another, to that of a different person. This was as much as any man could possibly get.

Project One, at its first stage — and the first stage was to last at least the first fifty years of its operation — was only accepting women as subjects of merging. The reasons for this were both scientific and ethical. The process of cloning began by taking an egg and replacing its nucleus with that of a cell of the person to be cloned. The egg then starts dividing normally, once it is

placed in the uterus of the surrogate mother. Thus, the process involves up to three people: the subject to be cloned, the egg donor, and the surrogate mother.

The surrogate mother does not contribute any genetic material, but the other two persons do. This is because not all the genetic information is contained in the nucleus: some of it is inside the mitochondrial DNA, which is in the egg but not in the nucleus. A male, therefore, cannot be cloned as exactly as a woman, because he needs a donor egg. A woman, on the other hand, can be her own egg donor, so two of the three participants, those that contribute genetic material, can be the same person. Thus, in the genetic sense, a woman can be replicated almost exactly.

Making an exact clone of a subject ensures maximal tissue compatibility between the two brains being merged. Technically, perfect compatibility and therefore perfect clones were not required: the mice on which merging had been studied were not perfect clones either. But making perfect clones minimizes the risk, and also reduces the ethical issues.

Ethical issues were indeed the biggest hurdle for the project to get started. It took over a decade from when the first funding was pledged by the elderly billionaires — all of them male —

until the public opinion had come to accept the fact that if there was a technical possibility to have a shot at having infinite life, then, sooner or later, it would be exploited. When it happened, it was better not to lose the outcome of such an experiment in the obscurity of clandestine labs. Excluding males from the first stage of the project, incidentally, insured that the initial funding fulfills the pledge of its donors to serve purely philanthropic goals.

It all came about very fast. Only a few weeks ago Mary would have considered herself as likely to become one of the Project One's guinea pigs as to travel in time. She had not heard of the Luxembourg airlines either. It was quite logical that Luxembourg should have its flag airline — most countries do. But then, for example, Liechtenstein was too small to have one, and Luxembourg was small too. Maybe there was even more money in Liechtenstein than in Luxembourg, and yet the former did not have an airline while the latter did. *However*, she thought, Luxembourg is in the European Union, and Liechtenstein is too small for that. Or maybe it's not too small, it's just too good of friends with Switzerland. Apparently, whether a country does or does not have an airline cannot be explained by the size of the country alone.

These were Mary's thoughts while she was waiting for a flight connection in the smallest of London's airports, London City, to board a small airplane that would take her to Luxembourg. Indeed, it was difficult for her to think about what had actually had to happen – what would be done to her.

She was used to traveling, but so far it was normal traveling. She would travel for work, or she would travel for vacations. Now she was on a trip to have an egg of hers removed and to be cloned. Luxembourg was the first, and so far the only, country to pass the legislation to allow human cloning, and so it became home for Project One. The country did not, however, allow the project to hire surrogate mothers. So Mary's egg would have to go to some other country (which one? India? Ireland? She did not remember; anyway she was not supposed to ever meet the surrogate mother of her future clone) for gestation and eventually for the birth of her clone. That part of traveling would happen already without her. Or rather, it would be a part of her that would be taking a trip, and then become something similar to her.

She was finding it all quite surreal, starting with her own enrollment into the Project. Normally, in order to become a subject for Project One, one would need a combination of luck, money and connections. Or rather, these three in the opposite order. The project was funded through private, closed funds, and the process by which it was recruiting its subjects was not open to the public.

In Mary's case, she got in thanks to Shilly, her Peruvian hairless bitch. Unlike the visually similar Mexican hairless dogs, which are quite common, the Peruvian ones are rather hard to come by. A layman would not tell the difference between the two breeds — even a Mexican dog's owner probably wouldn't — but if you have a Peruvian one you would surely tell which one is which.

"Hola, perra peruana!" exclaimed Ana when they first met.

Although Mary did not speak any Spanish, she knew that Ana was addressing Shilly, her dog, because Ana had a magnificent Peruvian male by her side. Ana's expansive personality had engulfed Mary from that first day. It turned out that Ana had recently moved to the city and was looking to make friends. Her Latin-American openness was somewhat too much for most people used to colder approaches, but it had attracted Mary. The two of them had quickly formed a habit of walking their dogs at the same hours, and then started to spend more and more time together.

Mary was generally of a shy nature and happy to be on her own most of the time. However, having met Ana, who was quick to take charge of all their interaction, Mary had discovered that her socialization needs had been significantly under-served. Ana was the one who would always suggest Mary doing things together. Simple things, like going for a walk with their dogs, or watching a movie or a series at her place.

Their relationship took an even more intimate turn when Ana had proposed to breed their dogs. Mary was hesitant at first: she was the owner of the female dog, so it would be for her to do most of the work. Yet Ana quickly convinced her Shilly would be happy. She needed to experience motherhood in life at least once — why not give it to her now? And besides, they could make quite a lot of cash selling the pups. None of them was short on money at that time — Ana, in particular, was pretty well-off. Yet they could make enough money for a good vacation, so why not do it?

After having spent all morning in the clinic, talking to the doctors and filling out various forms, Mary was asked to come back in three hours. These she would spend exploring Luxembourg City. In every new place she visited, there were two things that she would always make a part of her exploration. One was

to find some vantage point to observe the city from above. The other was to see its main body of water. The former could be a cathedral tower or a hill, and the latter could be a river, a lake or a seashore. Having seen both would give Mary the impression of having visited the place.

Presently, she was facing a huge ravine traversing the city center. According to the map, at the bottom of the ravine there was supposed to be a river, called Petruss. This should be the main river in the city, and indeed in the country. Curiously, it could not be seen from above.

Mary descended the ravine slowly, and finally found herself in the bottom, in a large green park. There were many people there, doing their promenade or walking their kids and their dogs. But there was no river to be seen. Incredulous, Mary decided to cross to the other side of the ravine.

Suddenly, she saw it. In the middle of the park there was what looked like a narrow canal, less than a meter wide, and inside, there it was — the Petruss River. Mary walked down to it and jumped over. No, she could actually just step over it. There and back, and again to the other side. Then for a moment, she stood with one leg on each side of the river, facing its flow. Mary reflected that it was perhaps the first city that

she visited — the first capital, at least — where she could let its biggest river, all of it, flow between her legs.

At this moment she recalled Ana holding her dog's penis, helping the confused canine insert it into Shilly. Giving Shilly the joys of motherhood was not as simple as bringing the two dogs together and letting them do their thing. While the mutual attraction was evidently there, both dogs lacked experience and were not able to progress from the desire to the mechanical action. Both Ana and Mary knew rather well what should happen and how it should happen — at least they knew how it would happen in humans. It did not occur to Mary that she would need to put that knowledge to practice on her dog.

Ana, however, was much more resolute, and so she did not hesitate to take matters into her own hands. This was not the last time Ana would surprise Mary. Mary thought that, although they had not known each other for a long time, she already knew Ana rather well. Indeed, it seemed to Mary that Ana had told her all her life within a week after their first encounter. She was happy to chat about her family, her childhood, where she grew up, her boyfriends, past and present — Ana had hardly any secrets. Yet, sometime toward the end of the first month of Shilly's pregnancy, she told her friend that she would

need to leave for a few days — without any further explanations.

"Could you please take care of Gordo for a few days?" she asked, referring to her dog.

"Of course," Mary answered, ready to listen to what Ana would be doing and where. In fact, she was so used to Ana telling her everything that she did not quite know how to ask, or whether she should ask at all.

The next time they saw each other, after Ana's return, Mary found her friend in tears.

"It did not work, Mary!" she said as if Mary already knew everything. "They told me to come back in two months to try again, but I just can't do it anymore, Mary. No way. It know it will not work. I know it."

"What was it though?"

"You should go instead of me."

"Go where?"

"Go there, to that stupid clinic in Luxembourg. Maybe it will work for you. Maybe your eggs are good."

Ana's way of explaining things was not the most straightforward, but in the end she did manage to convey the information. Her spontaneous idea of sending her friend instead turned out to be not entirely senseless either. Ana's father was a close

friend of one of the leading researchers in Project One, and he managed to get his daughter into the first batch of Project's subjects. He was one of its investors, too. Not one of the philanthropic billionaires — in fact, he was neither a billionaire nor a philanthropist, but he believed the project could be a huge commercial success sometime in a distant future.

This future would not come in his lifetime, but perhaps sometime in his children's lifetime, and he was doting on his children, especially on his only daughter, Ana. It was a huge disappointment that she could not be cloned, both for Ana and for her father. There was little they could do in terms of consolation. Making someone who knew Ana well accepted into the Project instead of herself was at least something. Mary was not genetically related to Ana, and she did not know Ana's father. Thus for the latter, the act, and the investment, was becoming something entirely selfless.

Yet Ana was getting at least something more than the gratification of being helpful to someone: the memories of herself would live on in her friend's clones. And the memories of their dogs, as well. Finally, it fell over on Ana to take care of the puppies. Those memories in particular would not live on, then, reflected Mary.

And how would Ana behave afterwards? Would she try to spend more time with her? Would she become clingy, in order to get the most of herself impressed onto Mary's brain? That would be creepy, she thought; of course Ana would not think of that. After all, for Ana the whole project was somewhat of a weird adventure — and that was the only reasonable way of looking at it. And yet. Would they be able to remain friends?

As Mary was climbing up the opposite side of ravine, she was thinking that her relationship with Ana was probably the least of her present concerns. More immediately, she had signed the form to pay a large chunk of her future salary into a fund whose purpose was to entice her forthcoming clone to follow on into the Project. For it was, of course, up to the person, as yet unborn, whether she would submit herself for merging or not. The infinite-life promise was quite enticing, but having your brain merged with that of an old person, when you are as young as twenty-five or thereabouts, is a high price to pay. Would she do it herself if she were the second generation and not the first?

The answer was not obvious. More practically, there was a serious risk of getting a permanent disability as a result of the operation. The fund she just subscribed to was also the insurance for generation two. Mary did not quite follow all the details of how this was supposed to work, but the idea was that it was financially attractive for the clone to take part in the project — at Mary's expense. How would it work for generation three, four, and so on? She wondered.

Anyway, for now, it appeared she should not spend too much traveling around Luxembourg. Surprisingly, the small country had a lot more attractions than the tiny river in its capital. Just visiting all its castles would probably take a month or so, judging from the huge list in the tourist guide that Mary was studying. Presently, she was trying to hide from the grave thoughts in the familiar task of planning her travels.



If this is Mara again, I'm gonna say I'm busy and not let her in. Just like that.

It was over two years since Mara's visit, but when Beni heard the interphone ringing — at least this time it was not knocking on the door — she only thought about Mara. So much so that she was surprised to hear a male voice speaking.

"Thank you" he said, and it was not even to her. Someone else had opened the front door and he came up rather unceremoniously. Two of them, in fact; two official-looking gentlemen. They could have been policemen. Or not quite. Maybe some other government agency. Or they could be Jehovah witnesses. No, they were not that either. Rather, something in between policemen and Jehovah witnesses, she decided.

"Miss Mrijira?" asked one of them, making a surprisingly good job out of pronouncing Beni's second name.

"I am not interested," she wanted to reply, asking herself why'd she opened the door in the first place. But since she already had, she thought she could go just one more step farther, and replied, "Yes." instead.

This seemed to make both of them happy, as if they finally found something they'd been looking for.

"May we come in?"

"Who are you?" she asked.

"We just wanted to ask a couple of questions," said one.

"To confirm," added the other.

"Who are you?" asked Beni again.

"We just wanted to confirm that you renounce your partici-

pation in the Project," said the first one.

"You'd be the first one to decline!" added the second one excitedly.

"Which project?" asked Beni. The pair seemed to be surprised at this question, and they looked at each other for a moment.

"May we come in?" asked the first one.

Beni was looking at the pair standing uncomfortably by the table in her tiny room, and she was trying to understand why she thought they looked similar to each other. One was wearing a beard; the other was clean-shaven. One was dressed in jeans and a jumper; the other was wearing a tight suit and a white shirt. One was chubby; the other thin. They were quite dissimilar, yet somehow, Beni couldn't get rid of the impression that they were almost twins. As if it were possible to be *almost* twins, she thought.

"Please help us understand the situation," said the chubby one. "This is rather unusual for us. We have to note all the details, so that the head office can decide what to do. By the terms of the contract, your mother had to notify you about..." He hesitated.

"The circumstances of your birth," said the thin one.

The chubby one did not look quite content with the intervention.

"Did she do that?"

"Yes, she did." Beni was bewildered. "There was a contract for that?"

The pair looked at each other again.

"So, she did?"

"Yes, well, she sent a friend to tell me. I guess that counts."

"Yes, that counts."

"Well, so, you didn't report to the Project headquarters and you are not replying to our phone calls, so we figured you don't want to participate."

"Which is totally fine," the thin one interjected. This was, apparently, a part of his role that he knew well but never had a chance to play.

"But we need your signature," the chubby one concluded, content to have come to the point.

"Which project?" Asked Beni.

Of course, she understood what it was they were talking about, but she couldn't believe it. Being a part of Project One had been one of her recurrent day-dreams — the most secret one, the one she would never confess to anyone, even to her

mom, let alone to anyone in the lab.

But she had always dreamed about being the first generation. The old mouse. The one cloned at about this age. The one that must wait until her clone grew up, before being merged a quarter of a century later. She never thought that she could be already the second generation. That she first would be merged and then would have to be cloned again — or do they clone again the first generation, the original? She thought, that was not what they were doing with the mice anyway, they were linear mice, already cloned, but what did it matter?

"Project One," said the thin one.

"You said your mother explained to you," said the chubby.

Beni was not listening, struggling with her own train of thought that was going in the same direction. So, her mother sent Mara to explain that she, her mother, was not her mother, or rather, that she was her surrogate mother. Paid to mother her. Subjected to a contract. Paid to raise her. That's why she never cared about having a real job. Only those silly toys, and some disparate gigs, unfinished ideas. And Mara thought it'd be fun to come up with a rape story instead. Because she was a crazy bitch, like that. But that didn't really matter.

"Okay, I get it," she exclaimed. "I don't want to decline!

I'm in! Just not right now!"

"You had three months."

"Why didn't you report to the headquarters?" The chubby and the thin one were speaking at once now.

"Because I didn't know," Beni exclaimed. "Nobody ever told me!"

"But you want to be merged?"

"Do you know what merging means?" The pair was incredulous.

"Of course, I know what it means! I just wrote a thesis on merging." Beni was exasperated. "And I have to submit it. Now! I have —" Beni stopped. She couldn't say, "I have just fallen in love for the first time since middle school."

"This is really not a good moment for me right now," she managed to say finally.

"We are not sure it is possible now," said the chubby one after a pause.

"Evidently, there was a breach of the contract terms. We have to review the situation."

"The head office has to review the situation," corrected to the thin one.

"And I think we are already late for that."

As usual, when Beni had to make an important decision, she was letting the thought process about it run in the background while she was thinking intensely about something utterly unimportant. Presently, she had to decide what to do with every aspect of her life, how to wrap it all up before the operation—and she was thinking about khachapuris and about her mother's life as a paid mother.

Amanda, who was not her mother after all, had been receiving a salary, a steady, assured income, for doing nothing more than mothering Beni. Well, that must have been quite a task in itself, but still it was much less than a typical mother does. A typical mother also has some sort of job. What would she, Beni, do, if she did not have to work? If she had a salary for doing nothing, to put things simple.

She was thinking of her job, as a Ph.D. student now and her potential career in academia, as something she was doing more for fun than for money. You either enjoy doing science or you don't do it at all. And yet, if you take the pecuniary aspect out of it, would she still be doing it? Or would she be doing something entirely different? I could go to Georgia and dedicate my life to eating khachapuris, she thought.

This was actually not such a crazy idea. Take Adzharian

khachapuri, for example. It looked like a broad, shallow bread boat filled to the brim with hot cottage cheese, served with a raw egg and a piece of butter on top of it. Before eating, you have to stir it to mix the egg and the butter with the cheese. This process alone is pure bliss. The anticipation of the joys promised by the steaming hot cheese and freshly baked bread base, seeing it and smelling it, but not eating it yet — isn't it the best life can offer? And if so, why not dedicate one's life entirely to what is the best in it?

Of course, there is the question of boredom. Doing the same thing all over again, especially eating the same thing all the time, one quickly gets jaded. But then, it does not have to be the exact same thing. What is a khachapuri? It is bread and cheese. Very simple — only two foundational ingredients, but this simplicity engenders art, and indeed is necessary for it. An art can only strive if the medium it uses is restrictive.

Restrictive, yet provides for an infinity of possible combinations. For what does one mean by *bread*, and what does one mean by *cheese*? The possibilities are endless. The Adzharian khachapuri has a thick base somewhat similar to that of the pizza from southern Italy; in contrast, the Imeretian khachapuri is made of a puff pastry. Its cheese is hard and yellow, whereas

that of the Adzharian khachapuri is cottage cheese. A Mingrelian khachapuri, in its overwhelming exuberance, can have up to seven different kinds of cheese inside and on its top.

Then, there is the presentation: where the Adzharian khachapuri is a boat, the Imeretian is a closed envelope. Of course, these are just the most common regional varieties — the real diversity of the khachapuri cuisine cannot be reduced to the few administrative regions the country is divided into. On the contrary, it is truly endless: it is not only every region that has its own take on the dish, it is every town, every village, every grandmother that has her own recipe. Perhaps, when I get old I could write a book about it, Beni thought.

No, that would be pure vanity. The true devotion must be devoid of any hope of compensation, it must come through the utmost submission. As a monk that spends his life studying a single line of the scripture and its endless interpretations, and yet does not pretend to comprehend all of the meaning of this line — for it is a word of God, and he is but a human; likewise, I should spend my life traveling throughout Georgia eating different khachapuris, and khachapuris only, not venturing into studies of other parts of the cuisine of the country, nor of course of its wines, and, above all, not trying to get any fame out of

it. What I, as a simple individual, can understand, is but a trifle vis-à-vis the complexity produced by a whole ancient people even in just one of the facets of its culture: khachapuri.

Still, a monk can write up his thoughts to share with fellow scholars, even if he does not sign it with his name. Perhaps it could help the future explorers of khachapuris if I make my findings available to them. With my thesis being already written up, the main thing I have to do now is to get it submitted, and to defend it as soon as possible, ideally before the operation. For this I must finally talk to Finker.

Finker did not know yet that Beni had finished writing up her thesis, so, together with the news that she was going to become a lab mouse, this was going to be quite a surprise. Beni was confident that he would let her defend, and she was also rather sure about her work. She knew it was all right, because it was not really her first thesis. She'd helped Neguin a lot with hers, which included writing the most critical parts of the text. Why she did this she was not quite sure. After the conversation with Mara, Beni had spent a lot of time thinking and rethinking her life and her place in the world and science. One question that was sticking out, spoiling the otherwise ordinate picture of herself and her life that Beni tried to construct, was why did she bow to Neguin? Why did I write her thesis for this bitch, she thought.

The main reason Beni was giving herself was that she wanted to finally get rid of Neguin. The only way to do it was for Neguin to graduate, and this was indeed what everyone wanted her to do. Since almost all Neguin's work was joint work with Beni, naturally she had to consult her colleague about how to present it. The text Neguin was coming up with, when not copied from the papers they co-authored, seemed so horrible to Beni that she simply could not allow it to represent her work. This was the best way she could come up with to explain the affair to herself.

After Neguin submitted her thesis, Beni was pretty much left to her own devices: she had the complete trust of Finker to work on whatever topic she wanted and to use whatever resources she could lay her hands on. According to her own assessment, she was not making the best of her time and her liberty: she was being lazy, as well as depressed and disillusioned. It took an external event, Mara's visit, for her take a fresh look at her work and realize it was not that bad — in fact, it was good enough for a thesis.

Finker spent all of three minutes reading, admittedly rather intensely, the first pages of the manuscript that Beni brought to him. She thought it would be better to bring a printout, since this gave a certain impression of finality.

"Looks good. I will definitely read it through and send you comments, but, under the circumstances, I think you should go ahead and submit it."

Finker was much more eager to talk about Beni's forthcoming operation than about her thesis. It was as if it were already a done thing, or a foregone conclusion that she would defend. Of course, Beni thought, for him it is not so important — he must have graduated a dozen students by this time.

For her, it was supposed to be a tremendously important step though. She was supposed to be in awe of facing the examiners at the defense, or of reading their reports. In reality, Beni was far from considering the degree some kind of a sacred portal into the world of science. Still, at least Finker who was supposed to be guarding the portal should have shown a bit more decorum. "I think you shouldn't be concerned with being kicked out of the Project. They need you as much as you need them. People are much more expensive than mice, so to speak. They are not going to kick you out simply because you were not told about your role on time." Finker proceeded to chat about the people he knew at Project One, how they were pals and had been drinking beers at conferences decades ago. Beni was only half-listening. "Oh, and you know that they don't use BOZAR, right?"

"Wait, what? What do they use then?"

"Some ancient ketamine-based concoction —"

"Ketamine?! They use a dissociative for the merging operation?"

"Yeah, that doesn't really make sense, does it? But that was one of the standard sedatives used in medicine when Project One was started. Have you ever seen a mouse on ketamine?" Finker continued.

"I have, indeed."

Beni did not say that she'd actually tried ketamine herself. Of course, she'd never tried taking a sedating dose, since she was just doing it for fun. She did not like it at all though. Definitely, it was not something she would like to be knocked out with. BOZAR was the standard sedative used in the merging

experiments on mice the world over. That was one of the few things nobody was trying to change. First of all, the general consensus was that it was good enough. Second, the research community had to agree on some parameters of the experiments to be fixed, so that the results on changing other parameters could be compared to one another. The sedative agent was one of those parameters that were tacitly agreed-upon.

"Scary, isn't it? I mean, the animals look frightened half the way to death when they are on it. The funny thing is, they stay reactive! They react to light and to sound as well. They appear to be catatonic, rather than sedated. It's hard to imagine what they are going through, inside their head." The little smile on Finker's face looked decidedly sadistic.

Why is he telling me all this, Beni thought. Yes, the animals do look frightened when sedated with ketamine, but he is not helping me at all by telling me this. Is this envy? Obviously, he's envious — the old rascal is going to die, like the rest of them.

"Well, perhaps a couple of weeks of being scared halfway to death is worth it for an infinite life," Beni replied. She wanted to sound smug and ironic, but the merging operation appeared to her a lot more scary than the Ph.D. defense.

People are housed in one's head by the social circle they belong to, along with the events, rules and values associated with it. Once something important happens in one room, it may be difficult to share it with the inhabitants of another. When Beni was eight, she had been living in just two worlds, corresponding to the two social circles she belonged to at the time: home and school. Expectedly, starting school had been a shock, and becoming accepted in the class had been difficult at first.

As Beni was struggling to integrate, she was recommended to join the Brownies, where the process is formalized. When she had obtained her first Brownie badge, she was overwhelmed with joy. It was her first experience of a community achievement, and it had come at a time when becoming recognized as a rightful member was particularly important for her. Her excitement was so great that she did not quite know how to share it with her mom. The values that were so prominent and obvious in one of her worlds were not at all sure to find an adequate reflection in her other world, home. Should she simply show it, or should

she first explain what it is? Where should she start?

Eventually, when Beni did tell about her achievement, her mother's reaction was so underwhelming that Beni kept the memory of its inadequacy all the way to adulthood. What was more, she would always be reluctant to mix her social circles. Indeed, it is a daunting task. What is naturally important in one circle has to be explained in another. When you explain the importance of something you submit it for the other person's evaluation. Doing this, you are killing the possibility that it becomes important for them, for one can only assimilate a system of values from a submissive position. To introduce someone new to a community, you have to bring them in, hoping that the group accepts the new person and the newcomer accepts the group's values. Normally, Beni wouldn't bother.

There is one, innermost, the most special social circle, which one has to breach from time to time, and it is the one consisting of just one's self. As is perhaps common for a scientist, Beni spent a lot of time pursuing her own train of thought, which sometime led her to do one or another experiment, and occasionally led to something she could call a discovery or a revelation. This would not necessarily be a discovery in a scientific sense, and not necessarily even something new, but it would be

something new to her, something that would change her views or opinions.

In such cases, the urge to share the news with someone is hard to resist. When the subject matter is indeed scientific, then, naturally, Beni would have an audience to share it with — in the lab. She already learned to be careful with whom she shared her scientific ideas and how, but in general, she remained quite generous about them despite the prior negative experience. Seldom would her ideas seem to Beni like something too precious to talk about.

When her inner life produced something new and exciting that had nothing to do with science, she often would not know who she could talk to about it and how. From which point should she start to explain? Should she wait for a pretext, or for an appropriate situation? Which situations are appropriate? And, most importantly – what reaction should she expect? Could she be judged for some of her thoughts and conclusions? For, to be clear about it, some things Beni was spending time thinking about were peculiar, and would be considered weird by many. Thus, often she would decide to keep the new ideas to herself, repressing the desire to share them.

Such were, for example, the results of her forays into sub-

stance abuse. The language-learning app was not a drug though, and there was nothing to be ashamed of. The result of having tried it out was just too important for Beni to keep it to herself. She already knew who she would tell about it first — to Martin — she was only unsure how.

She was somewhat cross with him after the conversation that he left so ungracefully, but he was the only person that was really interested in the app and who had already understood, at least partially, how it was supposed to work. Besides, he probably did not notice that he'd offended her last time, and this made the offense somehow smaller, maybe even negligible.

First of all, however, she needed some external confirmation that she could speak Hungarian. What she could see herself was that she could understand it, but could she be understood? To check that she would need to find some Hungarians she did not know — not from the lab, not friends, just some people whose opinion would not matter — and see if she could communicate with them.

"And where did you find them?" she imagined Martin asking her.

She would probably find him in the common room, where he often came to idle and find someone to chat with. As usual, when he was excited, he would use a lot of parasite words, and Beni knew all his favorites: "I suppose that should not be so difficult. I mean, I guess one can find people of any nationality in this city if one looks well enough. But still. I don't remember seeing any Hungarian restaurant or shop around."

"I just went to the airport and joined the check-in line for Budapest," she would say. But how would she bring up the subject? When there is something important that you want to talk about, it is often difficult to bring it up in casual conversation.

This time, however, it was much easier than she feared. As she expected, when she came in, Martin was already in the common room, chatting with someone else about reviews. Work. Reviews. Deadlines. Beni almost forgot about all of that, and she suddenly felt guilty about it — a feeling that she forcefully suppressed, reminding herself that she was done with her thesis.

When he saw her, Martin had quickly finished his other conversation in order to talk to her.

"Hey I wanted to ask you something about that app," he said.

Beni almost blushed from having the topic that was burning her addressed so directly. "Sure, what about it?"

"It's not so much about the app itself, actually. I just don't

see how the evolutionary premise is justified. You are supposed to lose the ability to learn languages, in order to tie you to the group of its bearers. This helps the group. But it hurts you!"

"Obviously, yes. That's why you want to be set free, hence the app."

"Yes, but how could this evolve? If you are born with a trait that hurts you, let's call it the dumb gene, the gene that makes you lose the ability to learn; if you are born with the dumb gene, then you are less likely to leave offspring, or to survive for that matter."

"All right, let's assume that having the dumb gene makes you lose something that hurts your chances to reproduce, although that is not an obviously correct assumption. I mean, of course the dumb gene is something that we, you and I, don't want to have. But that it actually hurts our chances to reproduce is not a given." Beni's voice faltered a little over her own use of the word our — had she just been flirty?

"Still, let's assume it for the sake of the argument," she continued. "So, by having the dumb gene you lose something as an individual; but at the same time, you gain something as a member of a group. The group is a lot stronger, so the group is more likely to survive — and to reproduce. If what you gain

with the group is larger than what you lose, then in sum you gain, and so you are not less likely to survive or leave offspring."

"Hold on, let's say that the group does get a lot stronger. But what about those members that don't have the dumb gene? They can have the pie and eat it too: they gain with the group, but they don't lose as bearers of the dumb gene. So, relative to the dumb-gene people, they have higher chances to reproduce. So, the relative number of the dumb-gene people should decrease."

"Hurting the group. Correct. This is the general argument against the evolution of genes responsible for altruistic behavior."

"And so?"

"There are two ways to go from here. The first is to consider evolution of the groups. They grow, fight for resources, and the winning groups split in two. This way they reproduce, like bacteria. That's the simplest model. The more dumb-gene carriers a group has, the bigger its chances to win a fight with another group. When groups do not fight, they grow. Surely, while they grow, the proportion of dumb genes decreases, because those members that don't have them, as you said, can have the pie and eat it too. However, when a group splits, it does so at

random, and thus one of the two child groups would have more dumb genes than the other. The one that has more dumb genes has more chances to survive another fight — perhaps even with its newly formed brother group. So, overall, for some values of the parameters, the relative number of dumb genes increases or stabilizes at a non-zero frequency. The main parameters are how often the groups fight and how often they split, their size —"

"Yeah, I see. With some parameters it might work. But does it apply to our case?"

"Not really. Well, it works for small groups that fight and split often. Maybe for some ancestral populations it would have been like this."

"How do you explain it then?"

"We have to go back to the premise. Does losing the ability to learn a language really hurt your chances to reproduce on an individual level? Surely, it is cool to be a polyglot. But think about it this way. Reproduction is largely a social activity – your chances for success are very much influenced, if not completely controlled, by the group."

"What does it mean in our case?"

"What I mean is this. If you are a really fast learner, you do not belong." Beni paused.

Martin was looking at her intensely, as if searching in her eves for a sign of something, of some change. "Hold on —"

"So how could this really evolve?" Beni hastened to continue.

"No, wait —"

Beni was suddenly afraid of speaking about her own experience, preferring to hide in the security of an abstract discussion. "It could have perhaps evolved in the opposite way —"

"Hold on!" Martin repeated. Not finding words, he grabbed Beni's hand, physically begging her to stop talking so that he could say something, to ask her something he was unable to formulate yet.

"— the languages," Beni was going on, "could have developed out of learning abilities that die naturally past childhood."

"In which case the app wouldn't work!" Martin had almost composed himself, still unsure, scrutinizing Beni's face.

"But it does."

And thus, she said it. Both kept silence for a few moments.

"So you did it!"

"Yeah."

"And? It worked? It did?! Seriously? You have to tell me everything about it!"

And so, I will, Beni thought. She had the conversation prepared, she had already the dialogue played out in her head, about the airport and the Hungarians, but she suddenly felt unable to talk about it. She felt tired, confused, and at the same time, scared.

"Over a drink!" Martin ventured, perhaps noticing her confusion and, somewhat unusually for him, suggesting to do something outside the lab and thus, offering Beni unexpected salvation.

"Yes, surely. I do want to tell you about it, but it's quite a tale and definitely requires a drink."

There is not that much to tell, after all, Beni thought. It seemed somehow much less important to her now, as she was walking fast, covering block after block in a single direction but without purpose. Yes, it worked. Kind of. There were two teenage girls in the check-in line, chatting to each other. I could understand almost everything, but not hundred percent. But then, they are teens; teens always speak their own version of a language — even their parents don't understand everything.

"Did you try talking to them?"

"Yes. I actually chatted with them for a while."

"No wav!"

"They did tell me I speak weird though."

"With an accent?"

"I tried to press them about this point but it remained unclear. They said I speak like someone who should have visited a speech therapist when a kid. A lot, they said. And giggled. They giggled a great deal when talking to me."

Replaying in her head the conversation that she thought she would have with Martin, Beni was trying to reassemble her picture of the world and of herself back into one piece. During the last several years, Beni's romantic life was of secondary importance to her. She used to think that love was somewhat akin to orgasms: you have to work on it if you want to get it. You have to cultivate your feelings, nurture them. It is a long and delicate process, but with enough concentration, you can achieve love.

In the past, Beni managed to do it once, or may be twice — at least on one occasion for sure. She had a rather long relationship that started with mutual attraction, developed into an attachment, and then, gradually, through much doubt and searching, with some episodes of carefully measured deprivation, evolved into something Beni was quite certain was love. At least, it was love to her.

Other people might experience this cocktail of emotions dif-

ferently: perhaps it can be more sudden, or more intense, or the proportion of the ingredients may vary. There is probably love at first sight, and sudden passion. Each body reacts differently. Some people can get high on codeine, others cannot. One gets to experience what one's body can give. Beni had her adventures every once in a while, but the next love project she decided to postpone until such time as it seemed important. Should such a time come, Beni was rather sure she would succeed in this endeavor, but, in the meantime, other projects were more important to her.

And then this happened. Two hours ago, Beni was not in love — not with anybody, at all. And now she certainly was. And with Martin, of all people. She was trying to analyze why and how it happened.

Beni had crossed the city and found herself at the entrance of the Railway Museum. She liked to come here from time to time, to wander among the trains. Sometimes she would climb into a coach and imagine being one of the travelers. Here you are, sitting at the table by the window in the private coach of the old colonizer, a glass of whiskey in front of you to help you to relax in this small shaky private space, moving through the night. You can only see his reading light in the window, and

your own reflected image. It is difficult to relax in this heat, but it is the best hour. The sun is down, but it is still somewhere there, lurking, as is this whole continent just outside, which you can only imagine hostile, fearing what tomorrow might bring.

Or she would climb into the wagon marked FOR PIG TRANS-PORT ONLY. Here you are, pushing your nose into the space between the boards, trying to fight off the others that are pressing on from behind and on the sides. You are catching the smells flying by that make you shiver, fearing what tomorrow might bring. Beni felt more in her element in the eye surgery wagon — a moving lab where she could imagine herself operating, only here she would have people instead of mice. Now the museum was already closed. What else could she do?

Another solitary pastime of hers was to cycle far away from the city, perhaps as far as Matopos Hills. She would drop the bicycle and walk the random web of animal trails toward one of the weird rock structures that, from a distance, seemed carefully balanced by a playing child. Getting closer, one can see that they are very solid, and appear to be rather the result of a slow destruction than a purposeful construction. Beni felt comfortable thinking of her favorite runaways, but she did not want any of that now. She did not want to be alone anymore.

That's it! Maybe it's just this simple. No new concepts to digest, no problems to resolve. Neglecting her romantic life for a while must have resulted in the need quietly building up. That was the foundation. Next, all her emotions were on edge after her language-learning experiment, sharpened by her own excited attention to what was going on with her brain and her feelings.

These, her personal feelings, she brought up for discussion with someone, someone with whom she had no personal relationship so far. This person had responded adequately, by showing a keen interest in what she was saying. He was interested in the intellectual discussion that Beni initiated, flattering her intelligence. What was more, he seemed to understand her very well: they had an intense conversation during which they were always on the same page, Martin even running ahead at some point.

That sensation of understanding each other, of sharing the same ideas, of speaking the same language, created a strong sense of being of the same kind — intellectuals? Researchers? Doesn't matter. Perhaps there was no group to define, or rather, there were several different groups, but they, the two of them, Beni and Martin, at that moment were the innermost one.

And at that very moment, Martin demonstrated an interest not only in what she was saying, but also in herself, in her personal experience, and thus — perhaps — in her person. Not in a straightforward, or physical way, although he did touch her hand and this must have played a role, but in a way that left a lot of place for doubt. There was just enough to give a possibility, a hint of a promise, a spark that set off a romantic reaction on her side, and therefore — Beni was shy to allow this glimpse of a thought — therefore, might be also on his.

Was he in fact interested in her? She wondered. He was certainly not in love with her. Yet, how could he understand her so well if he wasn't? Beni was not sure. She was confused. She did not know what to do with her new love, whether she needed it now, or how she should proceed. The one thing she was sure about was that it was there. She felt she wanted to challenge this fact somehow. Maybe get drunk and see if her love survived the inebriation? Or maybe overthink it, until she started doubting it, and then kill it with doubt? Like someone who gets braces installed and wants to touch them with the tongue all the time, as if to check that they are still there despite the absolute certainty of this fact, Beni wanted to touch, poke, and challenge her new emotional state.

It was getting dark as Beni was making her way toward the center. She went into a convenience store and bought a small bottle of random cheap alcohol that she put into her coat pocket. Once out, she poured all the remaining change into the cardboard box of a beggar. The outside world seemed so unimportant and distant that she wanted to check that there was no glass wall separating it from her, that she was not looking into an aquarium.

"Can you do me a favor, ma'am?"

I suppose I just did one, thought Beni, but did not say anything. She was looking back at the middle-aged woman who was still sitting on the pavement, looking at her.

"I came out of the hospital last week," the woman said. "I still have the scar. You want to see?"

"No," Beni replied, and turned away.

"Wait! Wait, please, ma'am! Would you be so kind as to buy a vodka for me? I have the money, here!" She was holding a bunch of change in her hand, most of which must have been what Beni just gave her.

As Beni was not replying anything, looking at the woman incredulously, the latter continued. "Vodka. The same one you have." She was pointing at the blue cap sticking out of Beni's coat pocket.

The errand and the contact with reality completed, Beni

was now walking even faster, longing for the confinement of her room where she could pursue freely every one of the multitude of thoughts that were roiling in her head.

She continued walking with the same pace inside her apartment, even though the apartment was so small that it was hard not to bump into any furniture. A five-step circuit in the bedroom and another seven-step circuit in the main room, past the dilapidated sofa and the kitchenette corner in the opposite end—all in all, the eight-shaped trajectory took Beni some twenty seconds.

Yet this space was enough, too much even — too much of a distraction with all those physical objects, together with the sounds coming through the open window, sounds of the wind that came from afar, bringing the smells of the trees and dry grass and perhaps even of elephants in Hwange. Beni was gesticulating, moving her hands, now bringing them to her face, now waving them or stopping to touch or inspect something around her, unable to concentrate on any single argument, to pursue any thought or even to dream out some hypothetical scenario involving herself and her sweetheart. She felt happy, and for the first time in years, it had nothing to do with science.

The next morning she ascertained its presence the first thing when she woke up, maybe not even quite awake, hungover. It was there. She was thinking about her new emotional state as of something big, stable, but at the same time not completely solid — like a bucket, or perhaps a barrel, a vat full of water. She could touch it, push it to see if it moved (almost, but no, it didn't), hug it, stand on tiptoe and peek down inside it, see how deep it was (very deep).

But while the feeling was there, its prospects, considered soberly in the morning, looked dim. Recalling the conversation she had with Martin yesterday, Beni was starting to feel ridiculous. The mutual understanding was an illusion. First of all, what was there to understand? What was the idea that she was insinuating and that she thought Martin was taking right out of her mouth? Let's see.

Your social environment dictates, or at least influences to a great extent, the standards of attractiveness. If you belong, you are attractive. If you are failing, or struggling to belong, good luck getting laid. This is correct. If you are too smart, or too fast a learner, you do not belong. Maybe true. Let us accept this for now, for the sake of the argument.

But what we are trying to find is how the language-learning

ability gets suppressed in the course of evolution. This is a very special learning ability, not just being smart or being a fast learner in general. So, if you are fast at learning languages you do not belong to the group? This, specifically, makes you unattractive? If you learn French tomorrow you won't get laid anymore? Obviously not. This is not how it works.

Yet, was is it this that you were trying to communicate to Martin, was it this that he grasped so quickly, was it this inanity that your love soared on? Beni was ridiculing herself.

Forget Martin for now, let's first see how it actually works. Let's get back to the beginning. A group is stronger than an individual. A large group is stronger than a small group. But a group is only strong if it stands united, if its members actually stand up for each other and for the group. Suppose then that there appeared, in the course of evolution, a desire in an individual for a group identity. A desire to belong. How it appeared is not important: it could have, for example, developed from empathy to family members, which serves the same purpose on a smaller scale, or from something else.

What is important is that we know it exists. Groups exist, and they exist as a realization of the desire to create a group identity. Consider these groups as entities separate from the individuals that form them. It is a very simple, primitive entity. It does not have its own genetic code. It does not have a cell membrane. It is simpler, in this sense, than a bacterium, even than a virus. Something akin to the first forms of life that inhabited the planet before even single-cell organisms appeared, those large organic molecules that could self-replicate sometimes, if the conditions were right.

Like those, our groups can reproduce; they can also merge and morph, and they can die. For a group to die, it is not necessary that all its members die. They can simply abandon the group or stop self-identifying with it. One day, you may have a flu and self-identify with all the people that have the flu. You might make some posts on social networks defending the common interests of the group. The next day, you may feel better and forget about the group. If people abandon a group at whim, or worse, if they abandon it as soon as they sense any threat, then that group will be a short-lived one.

Those groups that survived must have withstood attacks. Indeed, we see this and something even stronger: groups thrive on persecution. It appears that group identity can hardly survive without it. If there is nobody to fight a group, it will split up, and the two parts will oppose each other. This is how re-

production works. If people stand for their group, it conquers and subsumes others, it grows, and eventually becomes so big that it no longer satisfies the desire to have a group identity. If everyone you ever hear of bears the same flag, it loses its meaning. Differences have to be found or created, the group splits, and the desire for identity is satisfied again.

So, the struggle, the fight between the groups is key to their reproduction and to their survival.

This brings us back to the original question: why would a person not switch groups to always stay in the one that is the strongest right now, where she needs to fight the least, one that gives the most benefits and the lowest risks? Nothing, in principle; but if they do so, if everyone abandons a group, then it dies. The groups we see now have survived, so they should have developed a mechanism to bind individuals, to force them to stay. They must also have developed mechanisms to survive across generations. People die, and groups survive.

Difficult-to-learn languages, languages that only a child is able to learn, solve both problems. They bind individuals to a group, and they pass the group identity to the next generation. How could this have evolved? If people can invent new words, new signals for communication, then different populations would naturally have different communication systems. Thus, the language is a natural feature to choose for group identity. Those languages that were becoming more complex to learn as adults if chosen to define a group would be more likely to survive — as a group, because they bind their members better.

One can imagine, for example, a city-state being conquered by an invader that speaks a different language and its population enslaved. If the newly oppressed population can quickly learn the language of the oppressor, and speak it as well as the oppressor thereby leaving their group, then the group dies. The people may live, they may be happy or not, they may make some other groups or manage to join existing ones, but the language-based group they had has died. On the other hand, if they are unable to leave, they may grind their teeth and stick to the group, waiting for a moment to rise.

Beni was imagining the poor bastards struggling to learn the language of their masters. Of course, the language on its own is usually not enough to create a group identity. There's also culture. And lots of other fluff. All that fluff must have evolved the same way though, and I can think about it some other time.

Beni felt she understood group evolution a bit better now, and this gave her some confidence to think about her predicament. What was one's own little infatuation measured on the scale of evolution? No more than a little step toward creating the generation N+1. Even less so. Whatever.

Of course, Martin was not in love with her. It would probably not even occur to him to consider her an object of romantic attraction — at least not under the circumstances. She was somewhat of a freak for having made an experiment on herself. If she was of interest to him right now, it was in that quality — he was curious to find out what the result of the experiment was.

But this should be easy to change. A young guy, no doubt sublimating all his sexual and romantic desires in science, passing all day in the lab or on his laptop, should be no more difficult to enamor with a young attractive girl (yeah, that's me!) than it is to teach a mouse to press on a lever when the light goes on. It is enough to give him a hint of interest, show that you are, perhaps, available, reward an exploratory move that he will surely make, ignore another, withdraw, give another hint, a sudden big reward, withdraw... Give me five coffee breaks and it is done, Beni thought smugly. Only let's not start right now.

Why not do nothing about it just yet? Why not get used to the new emotional state while going on with my life as if nothing happened, yet all the time knowing that something big has changed, that my love is there, waiting. It is there in the form of a vague but unwavering promise of something big and bright — of happiness, perhaps. Yet working on it, making it into a plan, concretizing the promise would also scale it down — from happiness, to a date, a kiss, an intercourse. Not yet.

Beni had something else to do. A perfect project to hide in, and at the same time, to challenge and shake her new emotional state. What language should I learn next, after Hungarian? That'd shake the bucket, she thought.

Absent-mindedly, Beni tapped this question into a search engine, in Hungarian:

Milyen nyelvet kell megtanulnom legközelebb, a magyar után?

To her great surprise, a page that came on top was housed on the same site where she found all the instructions for using the app and most of the background research papers. The page title consisted of the exact question that she typed, and just one more word for the answer: MOXOS.

## DURING THE OPERATION

You will be sedated for the entire duration of the merging process, which takes between twenty and twenty-five days. This is somewhat like a medically induced coma, but not quite, as you will be partially conscious at this time. You may hear medical and research staff entering the room to attend to you, which should not worry you. The medication you will be administered shall generally keep you tranquil and relaxed. However, you might be worried or even scared simply because of how unusual the situation is. All the medical apparatus around your head might also make you nervous, especially if you are prone to claustrophobia. To help you cope with this, we shall again make use of memory anchors.

This is something similar to what you have been doing in the pre-operation sessions to help you separate your memories from those of your merging partner. However, here we shall use just one anchor and we shall use it slightly differently.

Pick out a single memory that gives you the highest sensation of comfort and security. You may find it difficult to find the single best one at first. So, make a list of several memories. Write them down. Read them once a day during the course of a week, and see which memory makes you most comfortable and

relaxed. From one week before the operation, start evoking this memory at least daily, in a situation when you feel most safe and comfortable. For example, at home, sitting on your sofa in front of the TV, or in a hot tub, or in your armchair with a cup of hot tea. During the operation, should you become worried or uncomfortable at any moment, remember to evoke this same memory, and you shall see how quickly it brings you back to safety.

Mary was finding it hard to concentrate on reading the instructions. They were making her too nervous. Her heart was beating faster and she began jumping from one page to the next. She would let her mind wander in order to be able to come back to reading afterwards. It did not work though; she was getting distracted too much and could not retain anything she was reading.

Instead of continuing with the instructions, Mary tried to read up on merging from whatever sources she could find on the Internet. The latest news was showing the police dispersing the crowds of teenage fans of Victor T. that were demanding to get merged with him. After the first suicide of one of the fans, a fourteen-year-old girl, the protests were not tolerated any more.

The more Mary had been reading on merging, the more she

saw how little sense their demands were making, and how remote were the current research results from doing anything like they were asking. Merging a half-dead male brain with a teenage brain of an unrelated female was just nonsense. Mary felt comfortable to be sure about at least something about merging, and she could be sure about this.

Why do I have to do this? she thought. Being honest with herself, she saw that the main reason she had for going ahead was to avoid regretting not doing it in case she chickened out. How would she feel when, at some still remote but inevitable point, she got confronted with the diagnosis. Whatever it was. Alzheimer's. That's perhaps not the worst, at least she would not be fully conscious of it.

Soon, I am going to die. And I could have... Well, this moment is going to come anyway. She was going to die no matter what. The only consolation shall be that a part of her memories up to now, up to this point, shall live on. Suddenly, it occurred to her that instead of working on her project, she should be trying to make sure most of her personal memories up to the present time were alive. Alive and kicking, to get transferred. No, this was too much.

## AFTER THE OPERATION

You will spend between three and four weeks in the ward under observation —

Yeah, okay, three weeks here, three weeks there, when are you going to finally let me live my life after all of this?

You shall often feel confused about which part of your life belongs to you, and which to your merging partner. If you think you have to resolve this question, you can make use of the memory anchors that you have set up before the operation. Try to remember a date, historical or personal event associated with the memory that comes to you —

However, it is not important to be able to separate your memories from that of your partner. Do it only as it makes you feel better. We do not recommend seeking out your partner and discussing with her your joint memories. Even more so, please do not contact family members and friends of your partner. This recommendation comes from the surveys of the previous subjects of merging. Try to spend as much effort as possible to create a life separate from your merging partner. This will help restore the sense of privacy which you may experience to be strongly lacking after the operation.

Privacy. How am going to get it back? What if she logs in

to my social media accounts? My bank accounts? There must be some provisions about that. Or should I quickly change all of my passwords? *Calm down*, Mary thought. If she is anything like me — and why shouldn't she be, having my genes? — she should be a good person.



Beni decided to take BOZAR with her to the operation room mainly for two reasons: first, she was scared; and second, she was pissed off. She was scared because she knew what being sedated on ketamine was like. Recreational users of ketamine call it a K-hole. Some liked it, some hated it. Beni tried sub-sedative doses of ketamine and did not like it at all. And spending three weeks in a K-hole? No, thanks.

More importantly, she'd seen animals sedated on ketamine, and she saw how scared they looked. They were not really asleep; in fact, they were not asleep at all. Rather, they were scared into some sort of catatonic stupor. Of course, the substance used to sedate merging subjects had some other ingredients in it, including tranquilizers, and so it was perhaps not that horrible. It was still horrible nonetheless, especially for her. What she knew about the substance and its effects made her scared even before being administered it, which would undoubtedly affect her three-week K-hole trip.

Thus, she thought she perhaps could at least take this negative psychological edge off by taking a little bit of BOZAR. Or maybe not even taking it, simply having it with her, having the possibility of sneakily taking a pill just before being taken to the operation room. Having this little bit of control over the situation could be sufficient to make her stay calm. Beni tried talking about this with the doctor who would be leading the operation. The conversation did not turn out to be productive.

"So why do you not use BOZAR for sedation?" she asked him bluntly.

"BOZAR? I see you have been reading up on the merging, haven't you? That's nice."

"I'm doing a Ph.D. on it."

"Oh, you are doing a Ph.D., I see. Indeed, I think I saw it in your file. With whom?"

"Finker."

"I see. And what are your subjects, if I may ask?"

"What do you mean?"

"Finker's lab is working on animal models, I believe."

"Yes, of course. Mice."

"Mice," he repeated, with the same expression that he used to say *You are doing a Ph.D.*" Beni envisaged a drawing of his face being used in an encyclopedia to illustrate the article *Disdain*.

"Well, of course. The same model Huang Li has used in his pioneering studies."

"And so, you are asking me why we are not using an untested, experimental substance in our project?"

"What do you mean, untested? It has been the standard sedating agent for over a decade!"

"On what subjects, again?"

"Mice!" If he repeats after me again, with that same expression, I am going to punch him in the face, Beni thought.

For a while, there was no answer.

"Well, you see," he said finally, "Here, we work on people."

Beni was not proud of her reaction to this reply. Storming out of the room after shouting out something hardly comprehensible only exposed her immaturity, she thought later on. Besides, after what she'd done, it would be hard to come back

and continue the conversation. Thus, she practically killed the possibility to make them change the sedating agent. She still felt, however, that she was largely right in what she said before banging the door, even though that snob obviously would never be able to understand it:

"Mice are also people!"

## PART III

He, too, is serving the parasite. A skald without his Edda. A priest without a church. A rabbi without his Talmud. A lawyer without his law. His were only the basics, the first principles. He should be singing about the ancestors, the heroes, the gods, adding his own little part to the existing legend.

But he does not have that, and so his tale is about his own life. He is mythologizing its events, adding his little part to the epos that does not yet exist.

Still, it is the same desire that he is trying to realize telling me this story — to be a bard, one of the key carriers. For what is an epos, what is a cultural tradition? A way of defining a group. The group of the people who know these legends, who share the tradition. An epos should be long, and difficult, if not impossible, to assimilate in its entirety. It should take a lot of time — a life, perhaps — to learn but a small part.

Otherwise, if one can learn one epos, one can learn two or three, acquiring a membership to communities at one's will. No, a life should not be enough to assimilate a single cultural corpus. Most members of the group should only know a little bit of the epos. The basics, and then perhaps some random parts from here and from there. Yet, there also should be carriers of larger chunks, who are able to relate them to others, and thus ensure not only the transmission, but the mere existence of the cultural corpus as a whole. What is more, besides relating the chunks they know, they may also add new bits. Add interpretations, explanations of the most enigmatic parts, or even new legends, ensuring that the corpus keeps getting larger and more entangled.

"You don't have any friends, do you?" asked Beni. It was funny for her to watch this large, gray-haired man that was visibly used to affluence and comfort blush and fidget like an adolescent.

"No. No, indeed, I don't."

"Why? Did you ever have any?"

"I did before. Well, you know the story, right?" Roger's

voice quivered, as he was unsure whether Beni should actually know the story. He was used to saying that awkward but effective short phrase, "I killed my best friend," with a wry and somewhat apologetic smile that was promising an explanation to the curious listener. "Since then, I don't have any friends," he would add.

Indeed, she heard this story many times before. Usually, he would tell it in the comfort of a social situation that he was dominating or was about to dominate. But now the situation was rather uneasy for him, and it was not only because he was unsure whether Beni knew the story. He was looking at a younger version of his ex-wife. And the younger version was looking at him, with all the imperfections and deficiencies of his aging body.

She, who now had a new, bustling, perfectly beautiful body of her own, had the same knowledge of him, and of their intimate life together as had his ex. It was her, but thirty years younger. And there was more to that.

He does not know her as well as she knows him. He does know that young body of hers — that he remembers, and the thought of it could almost make him blush, but she had had a life of her own, some twenty-five years of it, of which he is completely ignorant. Yet, perhaps there is a straw to hold on to. She does not know everything Mary knows. Surely, not all of the memories get transferred, only — what, some sixty percent? What about the best friend story? This she must remember though. The story was a one he told many times to their common friends and to his in-laws. It was a good party story, to be told when everyone was a little bit tipsy and would doubt whether it should be taken seriously.

Was it even true, did it really happen? they would think. In any case, it created a comfortable shield from too much socializing. It made people think Roger a little bit peculiar, which was just what he needed. For Roger, indeed, did not have friends. Personally, he was perfectly comfortable with this situation, but when he was put into a circle of someone else's friends, especially those of his wife — she had both a bunch of friends and a large extended family, he sometime felt ill at ease.

"Tell me, I want to hear." Beni was finally showing some mercy for Roger.

When telling his stories, he was in his element, he felt confident. Perhaps, she was done torturing him, and was presently giving him the opportunity to compose himself and become Roger the wise, the understanding, the advising. Or maybe

just a Roger one could talk to, which was what she came to visit him for.

"I was living in Switzerland at that time. You know I lived in French Switzerland for a while, right?"

"A-ha. Never mind what I remember or don't remember.

Just tell me."

"And, well, I had a friend." Roger was still struggling to put his story on track.

"Guillermo was a very nice guy. He was more than a nice guy — he was a perfectly well-behaved guy. Not just in the sense of well-mannered or polite, although he was that as well, but more generally: he was always doing the right thing. If someone at a party broke a glass, he would be the one to rush forward and clean the mess, whether he was the host or not.

"In any group, he was always looking out for everyone: if someone was bored he would be there to entertain; if someone felt excluded he would be the one to engage; if someone was mocked or attacked, he would invariably take on the attacker. Of course, people noticed it and joked about it, but he did not mind, and would usually laugh off any joke about himself in a rather disarming way that was characteristic of him.

"I used to wonder about the origins of his character, and

came to the conclusion that he must have been brought up by a grandmother. Only a grandmother would want to teach her grandson to be perfect: the parents would rather try to prepare him for the real world. The parents also would have given him less attention than a grandmother would – and that excess of confidence could be explained by an abundant and reliable supply of love and attention in childhood.

"Once, when we went for a picnic and a swim by the Geneva Lake, Guillermo made a remark that we must first swim and then eat, not the other way around. Why? someone asked. Because otherwise you might throw up, he said. That precaution, that appeared to be the most natural thing for him, seemed to me a very granny thing to say, and this was how I chanced upon my hypothesis. I never asked him to confirm it though, but I gave him the nickname: Nieto, the grandson. It also suited his somewhat child-like features: a small plump nose, protruding cheeks, smooth skin and round eyes that gave his face a hint of the expression of the sacred lamb. He had a Spanish name so I gave him a Spanish nickname as well. I could not speak the language at the time, but I had an Ecuadorian girlfriend, and I must have felt that gave me some rights to use Spanish words.

"Nieto was an unlikely person to become my best friend,

because I do not like people who are too nice. We became friends over a common hobby — hiking. I was a keen hiker since I moved to Switzerland. I had not lived close to the mountains before, so I did not realize how much I would like it. At first I was going to the mountains alone, then, at some point, after I had been telling about my adventures to friends and colleagues, they would often join me.

"Gradually, though, it became just me and Nieto doing at least a hike a week, with others joining only rarely. It turned out that we had a rather similar fitness level, and much the same rhythm — I would want a break when he would want a break, and we'd be ready to go on at the same time. I would be usually the one to come up with the route for the day — I liked to go to a new place almost every time, and Nieto would be the one to study the map and make up a plan.

"'It seems a bit too much for a single day,' he would say sometimes.

"'Nah, we can do it,' I would reply without much consideration.

"'Okay, I'd take food for two days just in case."

"And he would take supplies for the second day for both of us, because he knew that I would not bother. In fact, hiking in Switzerland does not require serious planning or preparation. You are never too far from a hut or a refuge, so if you planned too much for one day you will find at least a place to sleep in, and likely one to have a hot meal and a beer as well. Still, it is of course more prudent to be prepared.

"We did not talk much during our trips. This was one of the reasons I liked hiking with Nieto: we did not have to talk. It's now difficult for me to say whether we understood each other well without words, or whether both of us simply enjoyed silence and felt confident enough to keep it in each other's company. Perhaps it was the latter, though we often gave the impression of the former.

"Indeed, people used to laugh at us, saying that we looked almost like a couple at times, communicating without words. Guillermo was an easy target for jokes in this respect, as he did not have a girlfriend. He was not pressed to find one, either. 'It will happen when it happens,' he used to say. He would not be a one to have a partner just to have regular sex with. He was waiting for true love. Now that idea may have been somewhat outdated even for his grandmother, though perhaps not for the books that, as I imagined, he could have found in her library.

"'When you finally meet her, are you going to propose to

her the same day?' a tipsy friend would ask him.

"'Yeah sure,' he'd laugh in reply. "'I have a ring ready in my pocket all the time. A silicone one.'

"At least Guillermo was not a prude. The jokes about us would never go too far, anyway, as, at least, I did have a girl-friend at that time. Now, you must think, that's the source of conflict. A woman, jealousy — an obvious motive; but you'd be wrong.

"As for me, I was not waiting for the love of a life-time. I met Maria on my language course. I started learning French from zero while living in Switzerland. It was not really necessary for me at the time — the work was all in English, and one can survive in Switzerland not knowing any other language. The Swiss are embarrassingly good at it — embarrassingly, because often it is a fourth or even a fifth language for them.

"Anyhow, for me, French was to become only my second language, and so it was for Maria, who came to Switzerland from Ecuador as an au-pair. She only spoke Spanish. Learning a language from zero, in a mixed group that did not have any language in common, was an interesting challenge. Adding a relationship on top was making this challenge not only interesting, but hilarious. Besides, Maria was gorgeous, so it was easy

for me to become interested.

"What was it that she found attractive in me? Honestly, it was probably more my status than my looks. Working in a big tech company in Switzerland was perceived as really cool at the time, and indeed the salaries supported this image very well.

"We were learning to count from one to ten in the class. As an exercise, we were asked to tell each other our phone numbers. Of course, giving the real phone number was not required, but Maria made me understand that the digits she was trying to communicate did constitute a means of contact. Having a girlfriend one cannot talk to, or, rather, with whom one cannot communicate verbally, turned out to be surprisingly easy. True, we had difficulties transferring actual information between one another. But then, we did not need to transfer all that much. The first dates were set up by text messages, using rudimentary French and automatic translation. Besides, not being able to converse was a great excuse to try the non-verbal, hands-on approach, thus going through the platonic dating stage in less than an hour.

"I remember our first date rather well. I chose a quiet and simple café, as one would usually do on such occasions. As I was waiting for Maria to show up, I realized my mistake: a

quiet place is good if you want to talk, but we wouldn't be able to talk. Disconcerted, I tried to order a drink while I was waiting for her — in French, naturally — and it turned a disaster: "un vin blanc et de l'eau" — a jumble of nasal vowels that I could not get my waiter to understand, and then "eau" — water — that I made sound more like "œufs," eggs. I ended up placing my order in English.

"Maria arrived at the same time as my order. She simply asked for a *vino blanco*, in Spanish, and the waiter understood her instantly. So annoying, all those polyglots. This was not starting well, I thought. I laughed and tried to say something about the wine.

"Que?" she replied.

"I remember looking at my glass of wine, a short sturdy leg and a small round cup with dew droplets forming on its outer surface. The misty glass with the yellowish liquid behind had a magnetic quality to it. I realized I could let my gaze stay fixed on it indefinitely, not saying or doing anything. This would ruin the date; action was required.

"I took Maria by the waist, pulled her toward me, and kissed her on the mouth. I still remember that surprised look on her face, a look at zero distance. Indeed, Maria was so surprised that she did not close her eyes. Surprise, reticence, but not refusal — yes, but now? So soon? — Then slowly accepting, and more surprise, and then a more confident acceptance. 'At least this guy knows how to kiss,' she must have thought."

As if I didn't know how he kisses, thought Beni. The self-advertising he's putting in the story may be a bit too direct, but it's not bad at all. Of course, this is another purpose of telling a story in the first place. A story is a love song. Designed to enchant, to seduce. Which goal is more important – maintenance of a cultural corpus or a mating ritual? Or rather, which one came first?

Obviously, the mating ritual. Love songs are present in a myriad of animal species, most of which do not have anything resembling a society. Yet, this does not make the other purpose of story-telling less important. Storytelling, an oral epos, must have evolved from love songs. Evolution is stingy, it always uses scraps of something already existing to develop something new. Here, taking sweet-talk and song-singing and turning it into a group-bonding and group-defining tool.

Now the group is competing with the individual for this tool. The individual just wants to reproduce, as much and as efficiently as possible, while the group wants the individual to serve the group. For this it must control the choice of a mating partner, giving an advantage to those who serve, and punishing or simply depriving of reproduction those who do not serve the group. So, it must not have been a coincidence that a group-bonding tool evolved from a mating ritual: it was a necessity. An instrument of attractiveness must be harnessed and made to serve the group. A song-singer, a storyteller must be attractive only inasmuch as his songs are useful for maintaining and transmitting a cultural corpus. Otherwise, he should be shamed, punished, banned. Yes, you can sing, and you can even dance; if these are hymns that you are singing, if you are praising God with your songs and with your dances. Those of you who are really good at it deserve to be rewarded with the admiration of the opposite sex.

The Prophet said, "Have you got anything to offer?"

The man said, "No, by Allah, O Allah's Apostle!"

The Prophet said to him, "Go to your family and see if you have something."

The man went and returned, saying, "No, by Allah, I have not found anything."

Allah's Apostle said, "Go again and look for something, even if it is an iron ring."

He went again and returned, saying, "No, by Allah, O Allah's Apostle! I could not find even an iron ring, but this is my izar." He had no rida. He added, "I give half of it to her."

Allah's Apostle said, "What will she do with your izar? If you wear it, she will be naked, and if she wears it, you will be naked."

So that man sat down for a long while and then got up to depart. When Allah's Apostle saw him going, he ordered that he be called back. When he came, the Prophet said, "How much of the Quran do you know?" he said.

"I know such Sura and such Sura," counting them.

The Prophet said, "Do you know them by heart?"

He replied, "Yes."

The Prophet said, "Go, I marry her to you for that much of the Quran which you have."

"Before long, Maria was spending almost all her free time with me or at my place. I began to think that, soon enough, she would be expecting something more from me, which I was not ready to even start thinking about. In fact, despite our difficulties in communication, she was becoming a bit too much for me.

"The language barrier did not prevent Maria from talking.

She was talking to me all the time. She was emitting long monologues in Spanish, sometimes sweet or dreamy, more often angry, but always passionate — from which I could not understand a word. I quickly realized, though, that I was not at all always the subject. She just needed someone to talk to about what was on her mind. About her life in Switzerland, about her employer, but, more often, about things that were happening back home, in Ecuador and in her family.

"At least that was my interpretation. It was amusing to try to surmise the subjects of her monologues, but I did not have any way to find out whether my guesses were correct. Since I could not reply directly to any argument or proposition along her perorations, it had occurred to me to try and influence them indirectly. I would reward what I liked with attention, following her with my eyes, or gently nodding sometimes. I would also try to punish what I did not like by withdrawing my attention: taking out my phone, or even leaving the room.

"While I liked the idea of influencing or even manipulating the enigmatic monologues, I did not have any interesting goal to pursue, and thus my policy of emitting rewards and punishments had been erratic and inconsistent. At first, when I was thinking myself an object or a subject of her oral texts, I tried rewarding the sweet or calm ones and punishing the angry ones. Soon I realized my error though, and I also started noticing some bewildered looks Maria was giving me. What could it have been? I could have been inadvertently rewarding some subjects in favor of others – perhaps family talk over politics. Maybe I was showing interest when she was talking about children, or about beauty products.

"If Maria had resorted to talking to me in a language I did not understand, it was not for a lack of desire to make me understand her, only for a lack of patience and, finally, of options. Since the beginning, she tried to insert some French words or phrases that I was supposed to understand, and, with time, the French parts of her monologues grew. She was speaking in simple phrases, repeating herself several times, deliberately using no grammar, all to make me understand her. She would be able to speak much better if it wasn't for me, for Maria was making a rapid progress in French and I was rather slow.

"I was telling myself that she had the advantage of speaking another romance language, but it was not only that. She was making more effort; maybe she had also a talent for languages which I lacked. Or maybe I was simply lazy or not sufficiently motivated. In fact, my motivation was somewhat screwed: right from the start of the relationship I was thinking that it would end when we would begin understanding each other. The exciting challenge would disappear. The perfect language barrier was what was making the relationship special. What would remain without it?

"There would be nothing more than good sex – not enough to keep together two people that would have found out they are completely foreign to each other. Might we perhaps discover some new affinities when we can finally talk? I was too much of a skeptic at the time to hope for that. Physical attraction, when still unconsumed, often magnifies the spiritual one, if one exists, creating the romantic feeling of understanding each other from the first word. Would it work if all that was physical was already well-explored and lost its luster? I would not think so.

"The key ingredient, I would think, had to be the sublimation: the impossibility of an immediate physical contact creates the necessity of fulfilling the urge some other way, and so the illusion of spiritual closeness comes to the rescue. In our case, sex was what we started with, and it was there every time we saw each other, which was almost every day, and then often several times a day. The sex was great. Despite our differences in stature — Maria was much smaller — we found out that our

bodies were perfectly adapted to each other. We had quickly learned to understand each other very well in bed, and would spend hours playing around and giving each other pleasure. I would often interrupt Maria's monologues with caresses – given perhaps an unexpected, large and random reward of attention — rewarding I did not know what, often times what I did not want to reward but rather what I wanted to interrupt instead — an angry tirade or a bout of anxiety.

"Maria would usually be reticent at first if my advances came unexpected, but she would always warm up quickly and completely forget whatever it was that was keeping her preoccupied, angry or anxious just prior. As time went by, while the novelty of the sexual relationship wore off, its intensity did not decrease. Paradoxically, we had fewer orgasms but more sex, often postponing the culmination until the next session or even the next day.

"As we gradually began to have more meaningful conversations in a pidgin French, my anxiety with respect to our relationship grew. It must have communicated to Maria, or perhaps she had a similar preoccupation of her own. I thought she must have been expecting a development, the next stage, while I was expecting the end. We used sex more and more to quench the bouts of anxiety and to end quarrels. Yet I could not get rid of the constant feeling that the culmination was somewhere around the corner."



Now Sam just wanted them to leave. He woke up early; it was only ten and everybody was still asleep. He put the kettle on. He wanted to make some tea; maybe it will help with his headache and the awful feeling in his stomach. How late can they sleep? Till the afternoon, probably. Maybe late afternoon or evening. Then maybe they will even want to continue to party. Partying one night is great, Sam thought, but continuing the next day is really too much.

Above all, he was tired of the responsibility for his guests that he assumed. He recalled the scene he stopped to observe on the way to the kitchen. His friends in the living room, sleeping. The girls, Lilly and Bope, on the sofa, and the guys, Busani and Rudy, on the improvised mattress that he arranged on the floor using blankets collected from all over the apartment. The other

two were in their rooms.

Sam vaguely recalled feeling somewhat proud of his drunken efficiency last night, or rather this morning, despite all that happened. He had even placed two buckets near the sofa and the makeshift mattress. Rudy was vomiting on the way back, and Sam wanted to avoid this kind of accident in his apartment. Perhaps I should have put only one bucket, for Rudy, he thought. The girls might be offended by the other one, as they were not vomiting yesterday.

Lilly was lying with her face down, hugging a pillow, one knee drawn up to the waist height. The short skirt, which seemed rather revealing yesterday, was even more revealing now. Perhaps more than she would have liked it to, at least at this time of day. A lot more, in fact.

Sam kept looking for a few moments, and then felt ashamed and covered his friend with a bed sheet, before proceeding to the kitchen. Slowly he began drinking his tea. It occurred to him to go back and check whether the buckets had been used, and the thought made him feel sick. Stupid. How could I have been so stupid?

Alcohol never gave Sam the mercy of oblivion, and he remembered all the previous night clearly. Maybe I should go out

and leave them all here. Let them sort out their waking up, the cleaning up and all that crap. The sun outside was too annoyingly bright though, and Sam did not have anywhere to go. I should probably retreat to my room and try to sleep again, or just hang onto the phone. It is hard to relax when you have people all over your place — between you and the kitchen, between you and the bathroom, between you and the exit.

It was Sam's first year in the university, and the first year that he was living independently. Overall, Sam was not unhappy. If he had any complaint about his present life, it was that he found it somewhat underwhelming. Student life was supposed to be wild and crazy, full of adventure and debauchery. Adventure was not really happening though, and debauchery required too much deliberation and organization.

Sam's friends were a studious bunch, always afraid of missing an assignment or flunking a test. It was hard to do something spontaneously with them, at least with more than one person at the same time.

Finally, with the mid-term exam over, they'd been able to organize an outing. Sam had invited his flatmates to join, in order to be able to dispose of the apartment at any time during the night. They were a little reluctant at first, but it was easy

to convince them when he said that he'd invite girls over. They started with a little pre-party. Following the plan, they got more than a little drunk, as the booze is expensive when you go out. Lilly was his friend from the psychology class. They got to know each other through a group project that they did together. Lilly was perhaps a little bit on the chubby side, but only slightly so. Nobody would say that you were going out with a chubby, not unless they were really mean. Anyway, Sam was only friends with Lilly. He wanted to change that, but of course, after what happened this would no longer be possible. So stupid.

There will be other girls, Sam thought. Between his phone and his books he could never be too unhappy. There were two piles of books on the desk beside him. Sam would bring those on his regular missions to the university library. He liked those trips. Few people were browsing the shelves, and Sam could spend a long time going from one lane to another, completely on his own.

Mostly, he would grab books according to some random criterion that would occur to him, which could involve the year of the issue or the color of the volume. Then he would read a page or two from the middle to try and see whether the book would be interesting. The result would typically be a pile of a dozen or so books that he would bring to his room, to be put into a new single pile next to the bed. Some of these books would turn out to be very boring — those would go directly to the second pile, where also the finished books would go later on. When the first pile would have not more than one or two books in it, Sam would start thinking about the next library mission.

Besides reading, another of his favorite escape routes would be one of the fringe online communities that he frequented. Presently, he was browsing through a drug users' online forum. The heroin section was his favorite. Sam had never tried heroin, nor did he want to, but he liked to read the discussions about it. The questions of purification, storage, administration, as well as the various, often bizarre, ways the substance interacts with and takes over other aspects of its users' daily life, were fascinating.

Browsing through such forums — the junkies, hikikomoris, and some others — gave Sam a mildly thrilling sensation of staying on the border of, or rather, floating above, a precipice. A single move would be enough to fall, but he chose not to. He could, in fact, post messages and participate in the discussions, but did so only rarely, remaining what others called a lurker: reading everything but almost never posting. Besides, when he did participate or say something, the experience would usually

not be rewarding, as he would feel his own remarks out of place.

Bope could always be found by Lilly's side. Now, Bope was decidedly chubby, but it seemed to somehow fit well with her character. Her movements were always slow, and she did not talk much. If you talked to Bope, she would pose on you the gaze of her large, gray eyes, and this gaze would linger on you for some time after you finished whatever it was that you were saying to her. She would not reply immediately. She took her time to think things out, but, when she did emit her judgment, it would usually turn out to have been worth waiting for.

Lilly was supposed to have invited more girls to the party, but in the end it was just she and Bope. Some of the guys must have been disappointed, but Sam didn't care, and, in any case, there were plenty of other girls in the disco. While dancing, Sam finally managed to make enough physical contact with Lilly to suggest that they were out of the friend zone. Of course, they were both drunk, which would be a good excuse for either of them to retreat back to where they were in case of any regrets. But right now, they were definitely exploring new territories, and the question was only how far he would be able to get with her tonight. It was exhilarating. Up until Lilly suddenly disappeared.

He went to fetch another drink, and when he came back she was no longer there. Bope was nowhere to be found either. Sam was doing circle after circle around the dark, crowded, shaking and pulsating room, over to the toilets, up to the next floor — maybe she's there, back to where he saw the rest of his friends, somewhat dispersed now as well, some of them dancing with other girls, others on their own, then back to the bar and to the toilets again. No sign of Lilly.

Sam got another drink and tried to think. Maybe she got too drunk and decided to leave, forgetting about all of us. Or maybe it was Bope who has got too drunk and Lilly had to accompany her out. Anyway, it was quite odd on their part not to tell anyone. Was it something that he did that made her leave so suddenly?

Sam felt perplexed, but he also felt somewhat relieved: he'd made the advance that he'd wanted to do for a long time, and it worked. Would a further advance work tonight? If they went all the way, would he perform well? That was not obvious. And now, they could just leave it all untill the next time.

Sitting alone at the bar, brooding over his drink, Sam noticed a girl dressed in a white top sending him signals. He could not see her face in the dark, but her body looked pretty good. Skipping the talk, as the dance floor license allows, he took off with the white top pretty much from where he left with Lilly. Before the end of the first composition they were already making out. There were presently fewer people in the club, and the pair found themselves drifting all over the floor in random directions, both of them drunk and busy with their hands and their bodies.

At some point Sam had the sensation of a blissful union with the music, the dance and his partner next to him. He closed his eyes, abandoning himself to a voluptuous kiss. That was a mistake. Immediately the universe started spinning before him. Sam clung to the white top, seeking balance, but already he was falling on her. Putting one leg before the other, he broke off in some sort of a run forward, with the girl still trapped between his arms. Only by some miraculous effort of the small brain was he able to steady himself. He finally released the white top and ran for the toilet.

The first thing Sam saw when he exited the bathroom were Bope's eyes fixing him from the far corner of the bar, across the dance floor. Slowly, he made his way toward them, as if she were pulling him by a string attached to something that was rambling in his wounded stomach — if not a hook then some large object that it would be too painful for him to eject.

"Hey, where have you been? We lost you," he said, hiding behind the plural we, sensing the disaster.

"Lost us? We were here. Never moved."

Lilly was sitting right there behind her friend. How was it possible not to have noticed them? Sam still could not understand this. Or was it a lie? Had they really been there all the time, or had they left and then come back? Maybe they were doing something they did not want to talk about. Maybe they were in the bathroom.

No. We've never moved, she said. Bope doesn't lie. Why would she lie? You are lying to yourself every day more than Bope had lied in her whole life, thought Sam. It was finished now. They saw everything. Whatever advances he had made, would be, at the very best, written off to inebriation. Much as he thought about it, he did not see any way back.

Presently, Sam was in his bed, looking in his phone but still unable to stop thinking about the last night. Suddenly, the image of Lilly in bed flashed back, as she saw her this morning. The bed and himself beside, staring at her, shamefully, asking himself where was that white string from, if her slip was blue. Then he got it. There was no way for him to make up, he had ruined it completely.

## Twinaraji:

> Ncheji: snipped a load of one-happy-family crap your arguments are so stupid that I don't even know why I am replying to you. Honestly, I would have dismissed you as a mono had you not shown to be pretty fluent in moxos.

Maybe it's your native language LOL

Or maybe there's more than one person using your account? LISTEN KIDDY LET THE MOM'S PHONE ALONE, OK?

Anyway, let me spell it out once and for all, so that other monos that come here with the same wet dreams can be directed to this post. The desire for a group identity cannot be satisfied without having any enemies. A group does not exist alone, it needs other, opposing, enemy groups to even define itself. If there are no other groups around, the group will initiate a splitting process.

Adolescents will do it. Adolescents are doing it all the time. They will oppose the mother-group, the society they are living in, and attempt to create new groups.

This is how group reproduction works. You cannot do anythin

This is how group reproduction works. You cannot do anything about it, as you cannot do anything about adolescents' desire to have sex. People reproduce by having sex. Groups

reproduce asexually, by forming an opposing group within the mother group. The opposing groups get squashed, or they split off from the mother group or they kill the mother group and happily fight each other. That's the species we belong to, just deal with it. If you don't believe me, go read Chipa.

The heat and the heavy, merciless sun outside were in a sharp contrast with the air-conditioned comfort of Roger's house. When Beni went out, it was midday. She was confused with a multitude of conflicting emotions and tried to chase away all thoughts and concentrate on walking. Walking usually had a calming effect on her. Presently, it was not that easy, as there was hardly any shadow to be found. Beni was feeling her clothes against her skin, which was starting to sweat, as she tried to concentrate on simply making one step after another, looking at the dusty and uneven tiles of the pavement. Overall, she liked the time spent with Roger. They talked a great deal. They understood each other well. Or rather, Beni had a general impression of having

had a fulfilling conversation, even though it was probably a series of monologues rather than a conversation. The feeling of mutual understanding must have been more of an association. In any case, she felt a warm, glowing, even cozy feeling, that was at the same time somehow full of excitement and expectation. A strange mix of emotions she couldn't quite decode.

Suddenly, Beni felt very weak and had to prop herself against the wall. Her heart was beating fast, her legs trembled, and she couldn't hold herself straight. She had to sit down on the pavement, bewildered. She felt convulsions and spasms, but not of pain. The weakness she first took for a heat stroke was sexual arousal. She felt close to an orgasm, but not quite reaching it. She wanted to move, make a few more steps but couldn't. What was it?

The reaction was rather out of place. True, she liked Roger. She used to like him. She was married to him for over twenty years. In theory, Beni thought, my sentiments could be rekindled. The circumstances were right. The situation was sufficiently exciting and, at the same, she felt sufficiently safe and comfortable. The person was already known to be a right person. The conversation was sufficiently stimulating intellectually to be an adequate trigger. The attributes are there, this is how

I fall in love, thought Beni. But I am not in love. I do not feel anything romantic. I feel sexual arousal, which comes out of place, with some forty minutes delay after the supposed stimulus. And I don't feel any physical attraction to Roger at all. Thinking of intimacy with him seems repulsive, almost incestual! What the hell? Beni was about to get angry.

Some patients reported experiencing emotional reactions that they thought were inappropriate or out of place. In some cases, the patients thought these emotions could correspond to a situation in the recent past; in other cases, they seemed completely random. If you happen to experience out-of-place emotions, please report them to your doctor. Screw this. Situations in recent past — my ass!

Beni realized that she had not thought about her love more than two days. After the operation, she was unsure whether she was still in love, but she was still able to evoke some warm and fuzzy feelings when she thought about Martin, and she thought about him often. Now, she couldn't even remember when was the last time she'd thought about him. Two days ago? Three? Did he even matter to her anymore?

The image of the bucket that was always there for her to touch and look at, now seemed ridiculous. She thought of a bucket one puts beside one's bed when really sick.

Beni stood and started walking fast down the street forgetting about the heat, while waves upon waves of anger were overwhelming her. What am I now? A receptacle for someone else's memories? A stupid bucket full of an old woman's past experiences, to be emptied into the next bucket in twenty-six years. Meanwhile, what about this body of mine? Can I even enjoy it? Can I have fun with it? No! It gives some weird, random, unpredictable reactions.

Beni was full of a strong desire to live, to use her body and her emotions. One can't simply go out and find love. But one can go out and have fun. Drink, dance, get laid, get high. All of these together!

No, that was not interesting. Something more real. Some real emotions, not just getting wasted and getting laid. Unfortunately, this requires meaningful interactions with other people, which is difficult enough already under normal circumstances and seems quite impossible to procure on-demand. Especially when you are straight after an operation that makes you a freak in the eyes of everyone who knows you.

Shapa30: Disregard the haters. One Happy Family we shall become, and even the haters will join. Together we shall develop a Plan, and together we shall make it happen. Monos are welcome too, just keep quiet for now, please: read and educate yourselves. Prepare yourself for the Transition.

So, let us begin. First, let us see why Education is the key to our Success. Group identities are based on Beliefs. Beliefs need to be silly, ridiculous, grotesque. It should be obvious that the only reason to hold them is to belong to the group. The more unbelievable a Belief is the better, because it invites people from outside the group to ridicule the members based on something that is key to their group Identity. It is as if they were saying: yes, WE believe in this. Now try to ridicule US and see what happens. Flashy, gaudy elements of dress, tattoos or body modifications serve the same purpose: they are not only a brand, but they also invite ridicule, they entice attacks on the group as such, defining or reinforcing the group Identity. But let's not get away from the key point: Education. Education entails critical thinking, which is a Bane of Beliefs and thus a Vaccine

against group membership.

Don't we want, however, to build One Big Group for All?

Yes, we do! And for that, we would need our own cultural corpus, but a one that would not be based on beliefs.

It shall lack this one feature of a group identity corpus, but it shall be stronger in others. In particular, it should be large and complex. Quoting Chipa, it should be so large and complex that a lifetime would not be enough to study it. So, where do we get a one like this? Very simple! We get all the culture and knowledge amassed by all the civilizations together. Let's study and treasure this incredibly enormous corpus. To a great extent this is what we, as a civilization, are already doing. Preserve and study. All you need is to be curious and motivated to educate yourself.

Mary was sitting in a bar, looking down her half-finished pint of beer. It was broad daylight outside, but inside, it was somber and cool, and the bar was almost empty. Mary agitated her glass slightly and looked at the multitude of little bubbles that rushed to the top. She liked her beer with bubbles. Or without bubbles. It didn't really matter. Neither did it matter if the beer was cold or not so cold. There were many uncertainties in Mary's life at this moment. In fact, it was all one big question.

Mary had recently come back, and, while she was officially convalescent, she felt reasonably well and could get back to work anytime she wanted. She did not yet tell anyone that she was back, enjoying the freedom of being neither here nor there. How did they mange the project without her? Instead of rushing to verify and to get back the reins in her hands, she preferred to take a break and reflect. A break from what, really? Yet another, bigger uncertainty was her supposedly infinite life.

Now that the operation was over, she was informed that the experiment on her was currently suspended, due to some drugs her clone had taken. *That bitch!* Mary thought, rather calmly. Right now she did not feel anger nor anxiety; it was as if the unknown that was her future, the importance of the news that was waiting for her already, of the decisions she would need to take, as well as of those decisions that did not depend on her but would determine the future of something that encompassed her and was yet much bigger, the importance of all this was so

overwhelming that it was too much to worry about.

Mary looked around her and at the few other patrons of the establishment. There was one bulky fellow of indefinite age sitting at the bar with his back to her, another one with a head of gray, disheveled hair at the far side of the bar, and a group chatting quietly, with occasional bouts of controlled laughter, sitting at a table far away in the corner. The grayhead was definitely a regular. This was probably his third pint of the day, and he was taking his time with it.

I am also taking my time with mine, thought Mary, but I don't have to count them. Well, this is my first one anyway. Nobody was paying attention to the aging woman with a tired look and a scarf arranged elaborately around her head. The scar would be purple red for some time yet, and while her hair had already grown back fully and covered it almost completely, Mary still felt it was too visible. Or maybe she just got used to wearing the scarf. After all, it was convenient and allowed her not to care about how her hair looked that day. Mary could never get used to those machines that make up your unruly hair for you; she found them scary.

It was different before. As she agitated her glass again, looking at the bubbles and inhaling the bready smell of beer, Mary

recalled the time when she almost had a habit of going to a pub by herself, to have a drink or two. A girl sitting alone would always attract some attention. Someone grinning from afar, trying to make eye contact. Or someone staring from afar and avoiding eye contact. Someone approaching and saying hi, sometimes with a feigned nonchalance, sometimes perhaps showing real self-confidence.

It did not used to bother her, rather it was fun to observe. It was also fun to engage in some human interaction sometimes, and then maybe even take this interaction home. Not often, as it was an arduous task with an uncertain outcome, difficult to control and quite impossible to measure the dose of. When she did go for it, she preferred the interaction to be mostly physical. Words did not work well for Mary. If there were many people in a bar, the noise, the music, the crowd could provide a sufficient excuse for not talking much.

"Impossible to keep a conversation in this noise!" he said, and put his hand on her knee. Casually but confidently.

"Indeed," she said, glancing at him with gratitude and then quickly hiding her eyes in the crowd around them.

From this point, the touches and caresses should keep up the excitement all the way to the bed. This is not easy. It requires

not only a continued effort on his part, but also a continued concentration on hers. She thought of the excitation as a tall glass full to the brim, a glass that she had to carry holding it by the bottom. Carry it on, despite all the obstacles, all the noise and all the people constantly trying to push you from every side. Just hold it with both hands, move slowly, and concentrate on the shining golden liquid inside, ignore this smell, ignore the noise, the squeaking bed, the pain from his bones pressed against yours, concentrate on the shining, on the bubbles that mount, concentrate on what helps, his touch, concentrate on the muscle work, delicate but strenuous, disregard the sheets that are too rough, use the kisses — this helps, too — use your legs; with enough work and concentration, you may reach your destination.

One cannot just have a little bit of a one-night stand. The more you engage with a person, the harder it becomes to shake him off if you feel it does not work.

It is possible, but difficult and makes you feel bad. Guilty of hurting someone with a promise that you did not fulfill, even though you actually never promised him anything. And there are so many things that can go wrong. So many things that he can do wrong. Stupid things he can say. Silly laughs. Bad smells. Missed opportunities. Spoiled moments. Herself, Beni,

getting tired, sober, becoming cold. And of course, him, finishing too soon. At such moments she would often feel angry, furious even. She wanted him to leave immediately, disappear — out! And he would linger, apologize — worse, trying to go back to small talk.

At least these waves of fury made it easier for her to actually end the encounter. Send him off and go to sleep. Let the slumber wash away the experience, get it out of your blood stream, through your kidneys and off to your bladder, ready to be disposed of in the morning. Why can't you have just a little bit of it? If you like it, great, if not — easy to forget. That was why Mary preferred alcohol to drugs. Take LSD, for example. Once you swallow your little ticket, the tiny stamp, there is no turning back. You are in for the whole trip. Good or bad, like it or not. Try thinking good thoughts and watch colorful hallucinations. One bad thought, one preoccupation, and the hours that remain will be nothing but fear and angst.

How many LSD trips did Beni have? Mary tried to remember. Probably three. And one-night stands? Five? Six? If I can recall six, Mary thought jokingly, and the rate of transmission of memories from the young to the old is approximately forty percent, does it mean that Beni had had fifteen of them?

Of course, she already knew that this was not how it worked. Each episode was there, in her memory, but perhaps not in its entirety. The more important the experience was for Beni, the more memorable, the larger would be the part transmitted to Mary. Yet, Beni was wild, she thought. She took drugs. She had casual sex.

Mary was trying to find this personality in herself, in her past life, and couldn't. The Beni romantic, the Beni intellectual, the Beni that could get infatuated with someone simply by talking science with him – and whit whom! Martin Fromm, of all people! – this Beni Mary could easily recognize. But the one putting stuff in her brain as if it were a lab beaker, experimenting with her body as if it were not her own but her friend the mouse's, that Beni was foreign to her old self. Or perhaps that was not the right way of looking at it. Perhaps, Mary had only been living the life of her mind, while Beni had been also living the life of her body. And now she, Mary, had all those experiences for free, without having had to expose her body to physical interactions with strangers or to the intake of psychoactive substances.

She could have spent her youth differently. She could have been more explorative, more wild, she could have had more lovers, more experiences. But now she didn't have to! Mary felt as if she'd accomplished something great. A wild youth — done! Check! What else? Education to the highest possible level — a doctorate, done! Well, almost. Let Beni defend her thesis, but they both knew this was only a formality. Check! What else? A successful career, her own business, made from scratch, that grabs half-a-billion contracts — done! That was already one of hers, Mary's, accomplishments. In fact, the final outcome was yet completely unknown. If their preproject won, and they were in charge of supervising the construction, then Mary would be rich. She wouldn't even need to work on the project herself. Surely, she could reach an arrangement with her former employees, sell them her share in exchange for a very comfortable pension plan.

But even if it didn't win... A train of calculations had started in Mary's mind, as if independently of herself, since she never really planned to do it, never considered it an option. She was trying to see whether she could consider herself financially independent. Investing in low-liquidity, low-risk moderate-yield instruments, she could get maybe what, six-seven percent per year? Reinvesting one half, she could live modestly on the rest.

Sam is practically grown up; he shall be able to take care of

himself. And he has his rich retired father. Retired. Can this be me? Selling my parents' house, I could do it. Most of the argument was true, but Mary did not quite know whether the quick calculations she did summing up her finances were correct or if she was just jumping to the much-wanted conclusion: Successful career, financial independence, grown-up child — to sum it up, life — done!

"Hey!" Mary exclaimed, "I'd have another one, please," indicating her empty glass.

Then what would she actually do? The example of Roger was looming in her mind. She definitely did not want to be like him. Sitting at home, doing nothing except fetishizing his own memories.

Mary would start something new and exciting. Something she'd always wanted to do but did not have time for. Or maybe rather, something she was passionate about at the moment. In either case, what would that be?

She decided to make a mental experiment. Concentrate on thinking only about the present moment. The table, the empty glass in front of her, the noise around; trying to get rid of any petty worries swarming her mind. Then try to think about nothing at all. The first thought that breaks into that void would be something she is passionate about. Or maybe it would just be something random, but why not try anyway.

## MOXOS.

That single word was there, waiting for her to finally find a moment and consider it. Mary remembered San Ignacio de Moxos as a place she considered going to but decided not to. She had to make many of these choices on her short trip to Paraguay and Bolivia many years ago. Mary vaguely remembered seeing videos of men dancing, carrying large crowns of parrot feathers, or perhaps imitations thereof, and machetes. Supposedly, Moxos were an ancient Amazonian people that were not conquered neither by the Incas nor by the Guaranis, perhaps simply because neither of these conquerors bothered to advance this far into the jungle. Their language is one of those the Bolivian government tries to protect, so there are a lot of resources online available to learn it. Yet the number of its carriers is in the low thousands.

Come to think of it, the interest in Moxos must have been Beni's rather than her own, but it was still worth digging up some information about the language-learning experiment Beni had put herself through. SmasterX: pls don't ban. i found this place through a search engine. i'm 19. so yes i'm a MONO!! what can i do? the instruction says you need to be at least 25. i really want to learn a lot of languages. don't know why you all learn Moxos though if nobody speaks it anyway lol do you think i can use the app?? has anyone under 25 tried?

"Yes, of course, everything important is genetic. Everything that affects the chances to reproduce affects the genetic composition of the following generations. Take the mobile phones for example. Do we have genetic adaptations to use mobile phones? Yes, we do. Mobile phones are an essential way of communication in general, and are essential, in particular, in mating. If you refuse to use a phone, good luck getting a date. On all stages, from finding a potential partner to seduction, to maintaining a

<sup>&</sup>quot;Everything is genetic."

 $<sup>\</sup>hbox{``Everything?''}$ 

relationship, you need to use your phone.

"Some people are better at it than others, and this is reflected in the reproductive success. Of course, initially, when the phones just appeared, the success in using them, for dating in particular, has been based on prior adaptations. Whatever genetic variations may appear in the generations that follow, provided they affect the aptitude to use a phone, may be already considered adaptations to the new environment, the one that includes the said phones. The difference is only terminological though."

Beni was feeling irritated. There was too much to explain to Roger. She would have already left had he not tricked her into staying with a piece of cheesecake and a cup of hot coffee. The bastard. He knew, and he used the knowledge to his advantage.

"And what are you planning to do now?"

"You mean, now?" asked Beni looking at the cake on her plate. She was about to start eating. She could see tiny crystals of sugar glistening in the brown base of the cake, and a crack in its thick, creamy top. Visually, the cake was no feast, but guilt does not need to look great. It can look ugly, even dirty. The taste was what was important, and Beni knew what that would be.

"I mean, with your life. Are you going to become an architect?"  $\,$ 

"Become? I am an architect."

"Yes, of course... So —"

"No, don't worry, I'm not going to take over Mary's company. Not right now, anyway." Beni smiled smugly, looking at the cake but not starting it.

"Research, then?"

"Yes. Not on merging though. I am tired of this research community in particular." *Not a great excuse*, Beni thought, right after saying it. "There are other things I find more interesting at the moment."

"Like what?"

"I want to study the parasite."

"Parasite? Which one?"

Beni was surprised at herself for having said that. Indeed, she had not really thought about her own plans for the future. The question came unexpectedly and it appeared that the answer was somehow already there, on the top of her mind, waiting. So she blurted it out — to someone who did not merit this confidence in any way, unless one counts the cake. Someone who did not know anything about the subject.

In fact, she did not know much about this subject either. It was something she was still thinking about. Even just now, while listening to Roger's story, she was trying to formulate some ideas that she had. The ideas seemed very clear up until the moment you tried to make them precise, formulate them, in order to be able to transmit them to someone else. Then they started falling apart, making it so much more jarring to talk about them. So where do I start? Should I even start or should I just go, to think about it on my own? Leave the cake and go?

"There used to be a lot of research to find out whether this or that ability that we, humans, have, is innate or acquired. Genetic or learned. We have found out that we have genetic adaptations not only to learning a language, but also to reading and writing, among other things. Even to telling real gold from fake. That was perhaps the last study, before the obvious conclusion that everything is genetic had finally settled in the scientific community.

"Goldstein — yes, the name checks out — had managed to obtain a monster-sized grant for this study. He had been showing volunteers objects made of real gold and various kinds of fakes. He then looked for genetic markers that would be able to reliably predict the subject's answer: true or fake. These

markers would be indicators of genetic adaptations to solving this particular task. Goldstein had collected so much data that he was able to correct for various confounding factors, such as the general cognitive abilities. In the end he found not one but several markers, indicating that such adaptations appeared several times independently in different populations."

"So, there's a gene that helps you tell real gold from a yellow bling? And there's more than one such gene?"

"That's a way of putting it. Also, there's a gene for reading. Or rather, for not being dyslectic. These days we usually don't speak about 'genes' as discrete objects specifically designed for one thing or another. It's all too much jumbled together in our DNA; but let's not get me started on terminology."

Finally, Beni was starting to feel comfortable. Comfortable, and at the same time alert. She put one leg over the armrest of her easy chair, balancing the plate with the cake on the other leg, and holding the almost empty coffee cup in one hand. She was registering a little piece of the cheese in the crease of her seat and was thinking how not to get it smeared on her jeans when she stood up; at the same time she was noticing a droplet of coffee slowly making it down the cup's outer surface.

These observations were not distracting her, however. While

her brain was reacting to them with some reflections, these were staying in the background, quietly waiting for their turn, should it ever come, and not leading to any motor reaction. Beni's body was immobile in the rather picturesque pose that it assumed. Not a single muscle was moving besides those that were needed to speak. She was still alert, her mind was sharp and focused on the argument she was making, but she could already anticipate the yearning to make even those last muscles that were active stop contracting, hush, fix even the gaze and let the mind free itself and leave, only to lurk somewhere just above the scene, watching.

"Now, consider those genes that encode our adaptations to living in a society. By a society, I mean any group larger than an extended family or a clan. Take those genes and consider them as a single entity. This is the parasite. What does it do? It makes you take risks to defend it.

"To take one example, it hijacks the fighting behavior of males. Males would fight each other to show off their strength to females. But if you look at how this happens in animals, you will see that these are mostly mock fights — males rarely inflict serious damage upon each other, and killings are extremely rare.

"In humans, large troves of males fight to death in the name

of the group they belong to. They die serving the parasite. Those that survive gain in attractiveness. Yes, the parasite also hijacks our notions of attractiveness. It's not just heroes that are attractive, this is only an extreme case. Men and women have to comply with the society's standards in order to be considered a suitable mating partner. They have to show their ability to belong and to earn the approval of the group.

"Apart from the behavior, the standards of physical beauty also have to be approved by the parasite. Even further, money must be spent on beauty, and money is gained by serving the parasite.

"What else did it hijack? Child-caring behavior, empathy. Instead of feeling the need to care for our own children and those of our closest relatives — those that share the most genes with us — we empathize and feel the need to take care, even risk our lives if necessary, for other people and their children. Those that bear the genes of the parasite."

"So the society is a parasite on the individual?"

"Yes. To be more precise, the society is the external manifestation of the parasite. The parasite itself is already in our genes."

"How does it get transmitted then, from human to human,

this parasite?"

"Well, it is a rather primitive one. Unlike a virus, it cannot make a parallel transfer yet, that is, it cannot jump from one person to another. Not even via a sexual contact or a blood transfusion. It can only be transferred vertically, from a parent to a child."

"Then you can call any gene a parasite. The gene that makes one have green eyes, for example, or crispy hair. Is it a parasite?"

"No, because it does not hurt you."

"I see. So, what do you want to do? Find a cure?"

"Not really. I don't care about changing the world. I just want to understand how it works. I want to study the parasite, not kill it."

"And how do you want to study it? Do you have a plan already?"

Beni did not have a plan. She was wondering whether Roger could guess that she was thinking practically online, at this very moment, while talking to him. She did not have any more coffee either. Her mouth was getting dry from the caffeine-induced dehydration as well as from the anxiety that she was beginning to feel.

Speaking about the parasite gave Beni both the thrill and the anxiety of speaking in public, as well as the acute sensation of doing something she was not supposed to do. It was something forbidden, and something for which she was already punished in the past. Yet there was no turning back, she had already said too much. And then Roger was no Neguin. He was not a scientist; it would not occur to him to appropriate an idea. Even if it did, the ideas would all be the same to him, old and new, Beni's, Chipa's, Goldstein's — most of what Beni was saying was taken from Chipa's papers, as well as those of the classics of the past century.

"I don't have any concrete plan yet. But I want to study how it operates during the second sensitive period, the adolescence.

"You see, there are two sensitive periods during which the parasite is most active. The first one is early childhood, pretty much from birth to about five years of age. This is when you learn your native language and become forcefully inserted into the group of its bearers. This is one big group you shall never be able to rid yourself of."

Beni did not want to start telling Roger about the languagelearning app, the dog story, and all. She felt this would be too much. Anyway, this was something already done, discovered, and implemented by Chipa. It was even tested on a wild population, including herself. She had to find something less explored to study.

"The second sensitive period," she continued, "is adolescence. From about twelve to twenty years of age. This is the age when your desire to belong is the most acute, but it is also the period of exploration, during which the parasite mutates and reproduces. People seek to break away from a group they belong to and to form new ones. They then get fixated on these newly created groups.

"At the same time, the sexual desire first manifests itself; the standards of sexual attractiveness are defined and become linked to group membership. I want to study these mechanisms, both on the genetic and the behavioral level." Beni stopped for a moment, realizing that it must sound a little bit funny coming from the mouth of a twenty-seven-year-old: a young person wanting to study slightly younger ones.

Indeed, a somewhat mocking smile was lurking on Roger's face. Beni also felt that her explanation was getting less and less clear as she wandered into the areas she had not thought about before — including her own plans for the future. Thinking about the parasite could have been very interesting, but Beni

did not have the slightest idea what she was going to do with her life.

## \*\*\*

Sam woke up with a start. He'd just had the worst nightmare in years, perhaps the worst since childhood. He saw her face covered in blisters in which tiny black worms were wiggling. He had tried to touch them, carefully, with disgust. The blisters broke with a sticky goo, and the worms began eating into the skin of his hand. His heart was beating fast and he was sweating when he woke up. She should not have come. They should have some regulations against it. They should not be allowed to visit each other's relatives, just as well as they should not be allowed to use each other's social media accounts, or bank accounts for that matter.

Why had she come? She said she was feeling so young now but did not have any young friends. She wanted to mingle. Why didn't she mingle with her own friends? She must have had some. Some friends her age. What was she, twenty-six? Maybe that feels young for her, but that's a lot older than eighteen. We have TAs younger than that. And then what does she think—that they partied every night? Was it how students' life was in her time?

In any case, it would be so weird to invite his mom to join him and his friends. Of course, they wouldn't suspect this twenty-something-old woman to be his mom. But he would know. And she would know. Can there be anything more weird than that? Sam looked at his arm where she'd touched it. He could still feel it, as well as the place on his scalp where she'd felt his hair.

She was in his phone. A message. Sorry, I see that it is weird. Let's just drop it.

Okay, that's a relief.

Sam took a book and tried to read. You only need to read a page or two to be able to forget about the world that bothers you. Then you can get hours upon hours of coziness in your warm hide-out. If you can't concentrate, it's fine to go back half a page. And back again.

It did not work.

Sam went out of the room, out of the house, and started walking. The world outside seemed strange, distant. There

were still no classes this week. He could do anything he wanted. Presently he was approaching a pub named Jack Tar. The sign over the entrance was accompanied by a painting of the famous black train. The painting was crude, but the train was easily recognizable for anyone who had been to the Railroad Museum.

Inside, the pub was empty, except for one fat, sad person sitting at the bar. Rare, greasy hair. Clean but washed-out clothes. Looking at his watch: five to eleven. They were not serving yet. The old man is waiting for his first drink of the day. It would probably be a half-pint of beer, and then a journey through a succession of other drinks, which might include gintonic, vermouth, whiskey, with repetitions in some elaborate order. His addiction must be occupying most of his time, Sam thought.

He wouldn't wait to see any of that. He did not want to drink, but he, too, had all day to kill, and then all night, and then all day again. His studies in computer science did not interest Sam. He found programming exhausting, but not rewarding. It would never occur to Sam to work on any programming task that was not a requirement in the class.

Not all of his friends were like that. Lilly and Bope, for example, always seemed to be working on one or another app. Even if they never finished most of these, they always had something to ask the TAs and professors about. Can one be obsessed with, even addicted to one's studies?

Sam was wondering how that would feel, how it would feel to simply be interested in the subject one was studying, and whether it was possible at all for him. He had no idea even what science or subject it could be that would be so engaging for him. Maybe no such subject existed. No major that would really interest him. Boring studies, and then a boring job. Surely, he'd be able to find a job — there was always a need for coding monkeys. But what for? A boring life until when?

Let her come if she wants to. His flatmates would be watching something tonight, and tomorrow night as well, and the one after. They were always watching a show or playing a video game, having beers or smoking. Sam hated the stuff they watched. And the smell of weed. Weed only made him sick, and sometimes also dumb.

And then there were their silly laughs. Long, almost silent, with some high-pitch noises breaking out occasionally. Why not let her watch their crap with them? If she wants to mingle, let her mingle. Let her smoke with them. I don't even have to be there. Stay for ten minutes and then go to my room. And if

she brings beers, and maybe something to munch on, then sure enough they will be happy. Let's see how that works.



Mary's excuse was that she wanted to see Victor T.'s fans. Recently, she'd joined the online forum where people who used the Chipa's app to hack their language-learning abilities were congregating. She was curious to find out what was that experiment Beni participated in, and how it happened that she, Mary, now had a rather advanced understanding of Hungarian in her head.

She'd stumbled upon the forum while searching for information about the app. Apparently, the forum was mostly meant to discuss their experiences and offer support, but it ended up being full of all kind of topics, including politics and science. Mary found particularly curious the highly charged section where they were discussing the evolution of group behavior. It was all new to her. Mary was wondering just how much Beni must have been involved, but she also found herself genuinely interested in

the science behind the language-learning experiment, and, more generally, in group evolution.

One question in particular she found bothersome: self-sacrifice. If group behavior had somehow evolved, then how could one explain this extreme — sacrificing oneself for the sake of the group? After all, the only carriers of the genes are people. If one removes one's genes from the pool, then the behavior these genes are responsible for should die out. This seems like a contradiction. Of course, self-sacrifice is but an extreme case, but as Beni knew, by considering extreme cases you can start understanding the whole phenomenon. Victor T.'s fans camping outside the lab were a stark example of self-sacrifice. Mary did not really know what she wanted to do with them, or how she was supposed to use them to understand the phenomenon in question. If she just asked them why they wanted to do what they wanted to do, the answer would be obvious. A single song of Victor's is more valuable than my life, any of them would say.

As all of us, they speak their minds, not their genes. Beni only ever worked on mice, never on people, and her experiments were quite simple to understand. Before the operation, you teach a mouse to find food in the maze. Then, after the operation, you see if it still can find it. Or something like that.

Actually, Mary corrected herself, that was Huang Li's experiment. With these kids, there was no before and after.

In any case, Mary decided to go and see. She also had some weird longing for the place Beni spent so much time in, the campus and the lab. She wanted to see it and to find what effect it would make on her by simply being in that place.

The fans' tented camp next to the lab had been cleared off and rebuilt several times: sometimes bigger, other times smaller than before. Presently, however, there were but a few of Victor's fans remaining. Victor T was pronounced brain-dead some two months ago. If his name was still appearing in the media, it was to speculate on when he would be switched off. Since there was no brain for them to be merged with anymore, there remained only the most hardcore fans still camping. The most obstinate, Mary thought. Just two tents, in fact, was all she saw.

Walking across the campus, Mary was wandering through a wild forest of different sensations in her head. The scenery around her seemed unreal, as if she'd entered a film or a dream, a dream that was not her own. All the colors seemed more vivid than in real life, and the sounds seemed to have more significance. The sound of a truck's motor roaring at a distance had suddenly made the green of the leaves on the tree in front

of her pulsate. As if she were high on LSD, Mary thought. A Beni's experience, that one, she reflected immediately. She sat on the grass in front of one of the tents, listening to the faint music inside. A youth approached from behind and sat quietly beside her.

"May I?" he asked.

Mary did not understand immediately. The boy had long, unkempt hair, apparently not washed for many days. There was a large green and red tattoo right on his forehead, with a word that Mary was struggling to read. He was wearing a T-shirt with Victor's portrait. Of course.

"Hi," said Mary.

The boy was indicating the tent with his hand. Mary was blocking his entrance. He looked sleepy and sulky. He must be taking me for a journalist, she thought. Or, more likely, for a social worker. There must have been quite a few of those buggering these kids. She thought she should offer him something now — something to eat, maybe, or to smoke. But she did not have anything with her.

"Do you have a cigarette?" she asked, while giving him way to enter the tent.

"Yes," he replied, disappearing quickly inside.

When he re-emerged with a cigarette, Mary had taken off her headscarf. It worked. Presently the youth was looking at her scar.

"Merging," she said.

"Woah. Kim! Come!" he hissed toward the tent.

There were two of them now, looking at her head, visibly wanting to touch it.

"How was it?"

"Not bad," Mary replied, catching their tone. "I am still high."

The other youth was probably a girl, though it was not easy for Mary to tell. She had purple hair and no tattoo, at least not on her face or neck.

"Who... whom did you get merged with?" she asked.

"My clone." Mary was not sure it was a good reply. Should she have invented something? Or said something enigmatic, like "You wouldn't know?"

"How much did you pay for it?" the purple-head sniggered.

"How many millions?" her friend added.

"Nothing. It was an experiment."

The pair was waiting, incredulous. Mary was fine waiting, too. There were so many sounds around her to listen to and to

see. Birds chirping, leaves moving in the wind. Grass pricking her thighs through her pants. The soil was cold and perhaps a little bit moist.

"First opposite-sex merging," she said finally. "I just thought you might be interested."

When she was walking toward the lab building, Mary could not help giggling. Opposite-sex merging. With my clone! Right now it seemed to her the best joke ever. Anyway, it's good enough for the first contact, she thought, trying to get into a more serious mood.

A black door was blocking her entrance to the lab. Mary stretched her hand out, as if she were expecting the door to open magically. It didn't. Mary did not have a key. She remained standing with her hand stretched out, and then touched the wood with her fingers, savoring the sensation and the memories it was bringing. Why? Beni never did that.

Suddenly, the door opened from the inside.

"Hi" said Mary again and rushed in, barely letting the person on the other side make his way out.

Luckily, the corridors were empty, so she could wander, stopping at random places to stare at the wall, at someone's door, at a conference poster from five years ago. Negar and Finker. Where would Negar be now? Must be a group leader herself, having snatched some big and prestigious grant to form one. Soon enough, or maybe already, she would be putting her name on her students' papers without having contributed much. Or maybe not. Negar was not someone like Finker, she was a real one.

Mary did not plan to talk to Finker right now. It was a conversation to plan out carefully, perhaps with Beni and Ana together. The sign on the door said just **L. Finker** — no title, no position. That was how she remembered it.

Again, she was standing in front of a closed door, recollecting her memories, reflecting. Old books collecting dust inside the steel cabinet; the folds and wrinkles on his face. Their last conversation; their first conversation. Her enthusiasm, her confusion. Her disappointments. Then why not now? Threaten him, blackmail him. If their little BOZAR plot became known, he might very well be jailed. Make him tremble and whine. He's just an old man, after all, he'll be easy to beat. Yes, why not slap him, physically? He deserves that, for what he did! This door she is not supposed to have a key to. She knocked.

No answer.

Pushed the handle. The sign **L. Finker** printed in the Times

New Roman font has been staring at her, with neat serifs and a beautiful black dot. Was the part of the piece of paper that had paint on it slightly lower or slightly higher than the white paper around? *Slightly higher*, she thought, looking at the fibers around the dot.

Relieved that Finker was not in, Mary felt free to explore the space of Beni's memories and her life. She was too worked up to concentrate on anything, but at the same time, there were still so many things for her to recollect, to reflect on, to assimilate.

She stepped into the common room. Immediately, a recorded program of behavior started playing out: go to the right, enter the kitchenette, take your cup from the cupboard above, take the coffee pack from the cupboard on the right. There was a tickling sensation that there would be others right outside in the common room, perhaps waiting for her, or even observing her; or maybe someone would come in just now.

Suddenly, Mary froze. The coffee was not where it used to be. The smell was there, she could feel it vividly, but the coffee was missing. She was wondering whether she was smelling the actual coffee that was to be found somewhere nearby, or if it was only a memory of it that evoked the sensation in her nose. She was hesitating to check, to look for the coffee pack. She was

standing immobile, now reflecting on this state of immobilization and finding it perfectly comfortable.

Then Mary remembered. Her mice! This was how many of the post-op mice behaved. They would run around agitated, often appearing motivated to solve a cognitive task she gave them, then suddenly freeze. She was trying to measure their attitude to risk, but maybe she should have just measured the frequency of this freezing behavior.

Someone was staying next to her. She felt it, she could see it with the corner of her eye. Perhaps she could smell him, too. This latter thought made her finally turn and face him. A young man, with a reddish stubble and spectacles. Looking at his shirt, his hair, his slightly opened mouth betraying somewhat unclean teeth, Mary could clearly see that there was no woman looking after him. Poor boy. She hadn't realized before just how young he was. The young man was slowly turning red.

"Hi" she said for the third time this morning. "Sorry, I must be blocking your way." She pressed her back against the wall behind.

Martin became even more red while he tried to get past her toward the kitchen sink, his cup clutched in his hand, facing Mary and still looking at her intensely. His shirt, which was forming a rambled pack of cloth above his waistline, had touched her blouse. Can he get even more red, she thought, or will his head explode?

It's just the shirt.

She put her right leg slightly forward, blocking his way again. He was still looking at her, his mouth now gaping, not saying anything. Mary stretched her hand, put it around his waist, and pressed it against hers. A broad smile appeared on her face as she confirmed her suspicion. Slowly, she pushed his head toward hers. He was still immobile, but she knew that it would only take one more push to make him unfreeze.

Guenga: The importance of culture, be it the cultures of past civilizations or contemporary societies, is a fallacy. It has been known for decades that children are able to create a language pretty much from scratch. A community of adults that doesn't have a common language develops a pidgin that lacks any grammar and is functionally very limited. A single generation of children is sufficient to form a fully-fledged language, with all its grammatical complexity, from such a pidgin. Similarly,

just one generation of adolescents is enough to form a cultural corpus. If their need for a social identity is not completely satisfied, they will create a culture from whatever their environment gives them: music, tv shows, commercials, series, even consumer products and their wrappings. You can marvel at the sophistication of the art of ancient Egypt, and you can argue for the need to preserve it for the future generations to study, but every school creates a culture just as functional every three to five years. And not just one but several, to satisfy the need of having groups one belongs to and groups one does not belong to. Should we preserve the vestiges of the dead groups? Sure. Each of them is as interesting and important to study as every different virus is to a virologist. But a culture is more primitive than a virus, even if it may be just as unique. society is a parasite on an individual (it is), then it is a much more primitive one than a virus, and a cultural corpus is not even all of the parasite, but only its shit. Yes, culture is shit.

And language is shit.

Go educate yourself and study your shit if you like it.

Right now we only need to read Chipa and references therein.

"It would usually be in bed that we would make our most earnest attempts at conversation. We used a pidgin version of French that we developed, deliberately trying to use phrases as simple as possible, sacrificing whatever grammar we learned for a better chance to be understood without having to repeat and rephrase every sentence.

"'Demain montagne,' I said, notifying Maria about my intention to go to the mountains the next day.

"'Guillermo?'

"Oui,' I acknowledged. A long pause ensued, during which Maria must have been thinking about Guillermo and our friendship. I had recently started taking Maria as my 'plus one' on social occasions, so she knew Nieto.

"'Pas copine, Guillermo? Toujours?"

"'Pas copine', indeed. 'Attendre amour grand,' I replied, de-

scribing Nieto's romantic situation, or rather the absence thereof.

"'Va encontrer, el,' said Maria.

"She said it as something very much matter-of-fact, with certainty, as if she were talking about a Swiss bus. It will come in five minutes. Guillermo will find his big love. But there was something that bothered me in this short sentence. Maria's certainty gave it finality, yet I felt it was unfinished. As it was difficult to converse the way we did, when we tried to do it we would often mull a long time over each phrase, sometimes letting the mind drift away and leaving the conversation unfinished. Did she want to say something else? Something else about Guillermo, or about our friendship? Or was she finished? He will find his big love. Of course, the romantic always ends up finding his princess.

"I couldn't help feeling preoccupied during the hike. Nieto showed up with a pack of apples, and I barked at him — why would one bring something this heavy for a mountain hike?

"'Relax,' he said, 'I'll take care of them, you only have to eat if you want to.'

"I felt a bit guilty afterwards. Indeed, it was only a day trip, we didn't carry much stuff, and the weight was not of a major concern. What did it matter to carry an extra kilo? And besides, the apples were delicious.

"Trying to make amends, I offered to carry them as well as some other things. Nieto was probably surprised, but did not say anything. He must have been even more surprised when I did not stop to take pictures of a viper that we crossed paths with. I was fascinated with the little buggers and their anger, the way they look and hiss at you when you approach. I would always stop to observe and take pictures, even though I must have had a million of those viper pictures that I would most probably never look at again.

"'One needs quite a lot of trust in one's hiking partner,' I said. 'Like, what if one of us gets bitten by a viper. Then he'd depend on the other to help him out. To go down to the city looking for help, I suppose.'

"'Of course,' he replied.

"Indeed, my observation was so obvious that it hardly deserved a reply. Nieto replied simply out of courtesy. Why did he? We were friends enough to skip this kind of formality. If one says something that does not deserve a reply, it is perfectly fine, and even appropriate, for the other person to acknowledge the triviality of the observation by not giving it any attention.

"If Nieto did reply, it was because he sensed that there was

something not quite right about me that day. What was it that he felt? What was it that I felt myself? I felt guilt, and it was not because of the apples. There was something more about it, something I could not quite put my finger on. And he, Nieto, already sensed that. Did he know me so well already? Or was it that he felt there was something sufficiently wrong to question the trust we had in each other?

"That trivial trust that we put in our partner, the one I just talked about — trusting your partner to help you out in case of an accident. Could it have been that he found the change of my mood to be reason enough to question even this default level of confidence? Sometimes, people find hiking partners on the Internet, in semi-anonymous groups. Someone simply posts a message that he or she is going for a trip to that place at that time, and others join if they want to.

"'Hi, I'm John, how are you?'

"'Gill. Nice to meet you, John, this is my friend Anne.'

"And off they go. They trust each other enough to go to a secluded and moderately dangerous place together, even though they have only just met. Nieto, on the other hand, knows me so well that he can sense that the change in me, in my attitude toward him, is so important as to question even this trivial level

of trust between us; so much so that he feels he has to point it out to me. Or wait a bit. It was I who pointed it out to him! I was the first to draw his attention to this question, and he only replied. He simply acknowledged the fact that, yes, there was a change of attitude, and that, indeed, now each of us had to be conscious about putting his life in the hands of his partner. So, what was this change?

"Finally, we reached the pass. It had been a long climb over rolling slopes, where each one looked like it was the topmost one, only to reveal another descent and yet another, higher, ascent behind. When hiking over these it is best not to think about the pass or how much higher you have to climb. You just climb hill after hill, ascent after descent after ascent.

"The pass we had suddenly reached looked like a precipice. One could see the valley behind, stretching all the way to the horizon, complete with villages, a lake, and the envelope of mist in the distance that would let one's imagination draw the whole world behind, starting right below one's feet.

"The precipice we were at appeared impossible to descend without any ropes or climbing equipment. Yet, there was a thin little trail snaking down from where we were standing, only to disappear between the rocks some twenty meters to the left. According the red-and-white markings, it was perfectly manageable on foot.

"We sat down for a bit to appreciate the view and to eat some of those apples. I let the precious juice run down my chin and drip on my T-shirt. Doesn't matter. The wilderness justifies breaking the rules. We did not talk and did not look at each other, only at the valley below. What does one think about while admiring something beautiful? Can you appreciate the beauty if your mind is somewhere else? Or do your pre-occupations steal your impressions? Can you not enjoy your experiences, your emotions, whatever it is that the present moment has to offer you, if you haven't got rid of what's bothering you?

"'El,' she said. He. ' $Va\ encontrer,\ el$ .'

"The phrase was unfinished. Or rather, the phrase was finished, but the implication was left open, for me to surmise. And it was obvious.

"'He,' she said.

"He.

"Not you.

"Of course, she knew. She knew I did not love her. She knew we would be breaking up at some point. Soon, perhaps.

Maybe very soon. Already we could talk. Already our pidgin French was preventing us from learning to speak properly. To speak properly with other people, including potential new mating partners. Perhaps, she was not thinking about that, but she knew that the end must have been near, and the real reason was that there was no love. I would never find love, she was saying. Nieto would, for sure. Not me.

"Why? Why would she throw this prophecy at me, as if condemning me to a life without love? Did she like Nieto? Did I have a reason to be jealous? Of course not. Everyone who knew Nieto would know that he would never go after a friend's girlfriend. Not even after a friend's ex-girlfriend. It would never occur to him to consider Maria as an object of romantic desire, no matter what she or I did. She knew it, I knew that she knew it, she knew that I knew that she knew it, and so on to infinity.

"There was no place for doubt, and when there is no place for doubt there is no place for jealousy. Perhaps she was just bitter. Perhaps she was just bitter and wanted to hurt me. Subtly. With an open implication. Or perhaps she knew people well enough. A young girl, she could not have had a lot of experience or worldly wisdom, but she had strong emotions always at the skin's surface, which gave her an acute sense of the emotional

potential of others around her.

"How many times had she met Nieto? Once, twice at most. They could not have exchanged more than a dozen sentences, and even that because Nieto could see that she was still struggling with French and wanted to give her an opportunity to practice.

"And yet, she was confident enough to say, and say with an absolute certainty, that he would find his love. And that I wouldn't. Me, she knew very well. If she knew that much about Nieto having hardly known him, how much could she say about me, with whom she had a full-fledged four-months relationship, from courtship all the way up to — or almost up to — breaking up?

"Then she must be right. Perhaps, I have been chasing trifling attractions too much to experience a true love. Perhaps this emotion is not for me. There are only a few distinct emotions a human can experience. Most of us do experience all of them, but to a very different extent. Maybe there's just one emotion that one gets to live to its fullest.

"For me, it is not love.

"But so what? You have a horse, and I have a snake. You have an apple tree, and I have a garden of stones. I shall treasure

it and enjoy it; I shall get the most of what is given to me, for it is mine. What is mine is precious, even if it is hard and cold, as was my envy."

## \*\*\*

What was she like when they first met? She must have been about Beni's age. Maybe a bit older.

Sam wanted to ask his dad about it. He wanted to talk about his mom when she was young. Surely, Dad should be happy to indulge in his memories: that's what he likes the most. The two of them were divorced since a long time ago, but they must have had their happy times, and the first years must have been among the happiest. After all, what else does Dad have to do, other than rummaging through the memory books of his youth, all oily with fingerprints accumulated over so many years of perusal?

No. Desist. Beni is not Mary. She may be her clone, she may share some memories, but she is a very different person. Mixing her up with Mom would be dangerous and destructive.

Anyway, Mom would never be able to do what Beni did. It was incredible, yet Beni was so matter-of-fact about it. Sam wished he could be so brave and so humble at the same time.

He couldn't talk about her with his flatmates either. They would be all sniggers. Did you have fun yesterday in the kitchen? As he expected, Beni did not stay long watching series and smoking with them. All of twelve minutes she lasted — Sam actually measured the time. Then she went to ask him whether she could make iced water. Him, not them. She could have asked them just as well.

"What was it that you wanted to find out, anyway?" he asked her.

They were standing in the kitchen, a glass of water in Beni's hand, Sam munching on some chips from yesterday.

"Uhm," she uttered, taking the glass in both hands and hiding her face in it, looking at the ice. "I don't really know. I am rather confused after the operation."

"It's ok," said Sam. Unexpectedly, he was in control of the situation, with this woman who was some eight years his senior and looked like his mom. It was unusual and he was enjoying it. He was even more surprised when Beni started talking about the parasite, the forum, and adolescents.

"To understand the parasite, you need to understand adolescents," she said. "But I realize now that it is really not necessary to do field observations. I used to be an adolescent myself. I only need to think of what I would have done in this or that situation, or what would my friends have done, some ten years ago. Sorry, this all must be rather confusing. I really should not have used you for that."

Sam would have not been able to understand anything from her account, had he not been reading the same forum himself.

"Then you are a mono, too?" he asked.

"No," she replied, glancing at him rapidly, but keeping her matter-of-fact tone. "I actually learned Moxos. I know, it's silly, I could have just searched for it. Anyway, it was fun to learn, no regrets there."

"So, you used the app? Before your merging or after?"

"Before. I had some free time, and I was curious whether it'd work."

One of Sam's roommates entered the kitchen and opened the fridge, marking an uncomfortable pause in the conversation. Beni and Sam still had so much to talk about, though. They went to Sam's room where they would spend half the night talking about Chipa's papers. For lack of space, they sat on the opposite sides of the bed, facing each other, their feet almost touching. Beni was sitting at the bed's head, with her back against the wall, and Sam, on the other side, propping his back against the wardrobe behind.

After she left, Sam took moved to her side and proceeded to spend the rest of the night reading the papers and browsing the forum. He was trying to guess Beni's handle. He, too, had some free time. Should he take the plunge as well? Beni did not recommend it. According to her, the age limit was not simply a question of responsibility for one's actions. She thought that the learning state was too mobile before at least twenty or twenty-one, and trying to kick it back to childhood would not work. It must freeze before it can be broken off.

Maybe she was right, but Sam was not convinced. Above all, he had a burning desire to do something, to get involved, to join. *Perhaps I should calm down and read more Chipa*, he thought, before going to sleep.

## Nilch:

> **Notse:** I propose to solve the monos problem once and for all.

- > Let's face it: Chipa has made a mistake when setting up this forum.
- > She laid out hints how to find it through learning Hungarian (first but optional) and then Moxos, but she left it accessible to the search-engine spiders. Hence the monos infestation.
- > I propose to make a new forum that will only be available to registered users. Registration will be granted after an interview in Moxos.
- > We can even add another language or two, to exclude monos who actually speak Moxos as their native language, as well as linguists who might have learned it with traditional methods.
- > I suggest the Koryak language, as there are enough video resources online to pick it up from, and few enough people that speak it.
- > Please feel free to suggest others I don't want all the suggestions to come from me. Reply if you are
- > interested in splitting off in this way. If there is enough interest.
- > I'll take care of creating a new forum.
- I think if Chipa made the forum accessible to monos it's because she wanted to. She wanted to make a place where we would be able to find each other, but she did not want

to create a closed community. Chipa actually wanted to liberate us from all the communities, not to create a new one. Then of course if you want to split off and add another community to the world of communities then you are free to do so.

Rinchi: I don't care about the monos, but I think we do need to make a community. It doesn't have to be a secret or a gated one. It can be open. What's the point of making a community closed anyway? Let's think about this. If you make the entrance harder, you are forcing new members to invest their time and effort. That makes them less willing to leave. It's a useful feature but it's a trade-off, as you may be leaving out some potentially good members. Also, you are risking concentrating too much on selecting members and forgetting what the community is actually for.

So why do we need a new group? First of all, to satisfy our own need to belong. Let's face it, we are human as much as everyone else, and we have the same needs. Unless you subscribe to the OHF crap, we'd need some real community with all its attributes. If you don't have sex then you better at least masturbate. Every doctor will tell you that. But we won't just be a wanker group. We'd be a support group for the people that liberated themselves from all the rest of the groups. I think it's a noble enough group-defining ideology, if you know what I mean. So let's start with the group attributes that we'd need. For a cultural corpus, obviously, we have Chipa's papers. It's enough for a start. The apocrypha we are creating right here on this forum.

What else? How about our own language?

"Breeding dogs. A rather natural occupation for an infertile woman, don't you find? Anyway, that's what I was doing, besides stalking you, as you aptly put it. Look, I'm not asking for pity or anything... But if you see me as a totally evil character, then you are mistaken."

"Oh, yeah? And you tried to stop me from getting merged because of something else apart from your envy that was too strong for you to resist?"

"Yes. I was trying to save you. Wait, I can explain."

Mary was already regretting having agreed to come to talk to Ana. What could have it been rather than envy, the envy that had been consuming her former friend all those years and that ended up making her not quite right in the head. What could there be more to that?

Oh, yes, Ana was infertile. So much easier to understand her obsessive behavior.

Not that Mary did not have any empathy for her former friend — she did, but she did not want to have anything to do with Ana any more. Ana had seen enough of her, Beni, having stalked her mom and then herself for the best part of twenty years. It was already too much to give her also this evening. Now she will attempt to explain. Why do I have to listen?

They were sitting in a roof-top restaurant, at a table by the window. Mary was looking outside, grateful to have a beautiful night view to explore, as she was unable to look at Ana's face. The sun had just set and the last shades of purple and orange were slowly disappearing from the clouds that were covering most of the sky, only making space for the crescent and a single bright star.

Mary could see some dark contours darting between the crescent and the star every now and then — Birds? Bats? — she could not tell. Still no word of Ana's was escaping her attention, to Mary's own surprise.

At least I must be making her somewhat uncomfortable by looking away, denying her the attention of my eyes. Or maybe not. I wonder what she is looking at now, thought Mary, trying to catch the glimpse of Ana's reflection in the dark sky on the other side of the window glass. Between the city lights white and yellow illumination, red aircraft signal lights on top of the tallest buildings, flickering colors of TVs in some windows, she could spot the white shirt of a waiter, the tablecloths, some cutlery, Ana's earrings, but not her eyeballs, perhaps not bright enough. It is often easier to talk when you are not facing your interlocutor: for example, in a car. Or on the bed of a psychotherapist. That must be why they use those. But then she, the therapist, looks at you. So awkward. Since Mary could see both of her earrings, Ana must have been looking out of the window as well — or else, in the opposite direction, turning her back to the window, but not looking at her, Mary.

"I'm not an envious person, though I may be an obsessive one. I was obsessed with the idea of getting into Project One. It was not easy to convince my dad. Knowing well the scientists in the project, he was very reluctant to trust them with the life of his daughter, even less so to give her to them as a guinea pig. Retrospectively, it looks like he was right. Anyway, it was a huge blow for me to be kicked out of the Project for such a silly reason as bad ovaries. From being one of the select few in the whole world who hacked life and made it infinite, to being one of the few rejects of evolution who was given a body that can't even reproduce itself. What were my options? To adopt is a common solution.

"That did not really interest me at that age. I did not feel the need to love and take care of someone — whatever necessities I had in that regard were more than satisfied by my dogs. What I wanted was to live on in the next generations. If not to pass on my memories and thought directly, then, at least, as normal people do, all of us normal people that don't get merged — pass the memories of me.

"Yet, it occurred to me that I could get somewhat more than a normal person could — I could still be a little bit of a hack, not just a worthless throw-away. What does a normal child remember about his mother? The childhood memories are almost completely repressed if not erased. The only memories

children carry along beyond the lifetime of their parent are that of an old person. And then when the child dies — then what? The grandchildren will carry even less, and then even this little comes to end.

"I, on the other hand, had you. You've known me as a young adult, you've known me through my adult years into the middle age. You, as a grown-up, and then you again, as a child. And then you, or rather, Beni-you, will carry on an impression of me, perhaps forever. At least that was what I hoped for. Before this stupid substance experiment."

Mary was finding the monologue harder to follow. It was difficult to recognize in this confused, stumbling account the slow-paced and composed manner with which Mara used to tell her stories all through Beni's childhood. Perhaps those stories she had prepared better. Carefully sealed tins of memories deposited into young Beni's head, to be passed on to the future Benis. It was only logical that she chose Beni and not Mary to spend her time with. Fewer memories would be lost this way; and then, there was already a lot of Ana in Mary's head anyway.

Maybe Mara was just missing her smokes? Mary glanced back across the table at the aging woman sitting in front of her. Ana was looking out of the window; her face, far too wrinkled for her age, was relatively composed, but the hands were restless, one fidgeting with the tablecloth hem, the other clutching the glass. She spent so much time and effort trying to be remembered, but what did she actually do to be remembered besides breeding dogs?

"I had to choose between stalking Mary or Beni. Beni's child-hood memories would probably be forgotten, but Mary would only transfer some forty percent of hers. Since Mary had already known me for a while, I chose Beni. It was easy to befriend your surrogate mother. She had a submissive personality, and she had a dog. What more could one ask for? Besides, she's a smart girl, and I found it genuinely interesting to spend time with her."

Mary was listening to that in surprise, as Beni almost never heard her mom speak in Mara's presence. The word *submissive*, however, did strike a chord in her memories.

Hibiscus tea, she remembered.

"I think it'd be good for you, Amanda," Mara said. It was unusual for her to address Beni's mom by her name. Both women had the habit of omitting names altogether, preferring to say something like "look" or "hey" instead. The conversation about hibiscus tea was casual and seemed of no particular im-

portance, but that sentence, which closed the topic, ended up being some sort of an order for Beni's mom. The same day she bought a whole bag of dry hibiscus and put it in the water filter. All their water was hibiscus water from that point on, as well as all their tea. She even wanted to put it into their morning coffee as well, but Beni flat out refused, and it was decided to keep their coffee hibiscus-free.

The next time Mara showed up, Amanda thanked her for the suggestion profusely and served hibiscus tea with ice immediately. Mara took it rather matter-of-fact and did not give any comment. The hibiscus obsession continued for about a month. During this time, Amanda would always be eager to show it off to Mara, who would never reward it with any attention.

"Why do you always have to drink this same drink?" Mara said one day. "I think it's lame, and the taste gets old quickly."

That was it. The one to issue the order was the one to lift it. The purplish liquids disappeared from the house as swiftly as they came.

A drove of other memories was swarming in Mary's head, ready for her attention, but she was more interested in something else: did Beni have some of that submissive personality as well? Sure, she was not genetically related to Amanda, who was only her adoptive mother, after all, but still she could have inherited it by imitation, or she could have simply had it independently.

Beni's relationship with Neguin, for example, could be much better understood with this personality trait in mind. They ended up writing three papers together. Or rather, Beni ended up writing them, for the texts Neguin was producing were lacking any logic. A typical scientific paper has a simple structure: a problem formulation, methods for solving it, the results. Neguin would never be able to formulate the problem they were working on, and if Beni did it, the text her colleague wrote would quickly wander away from it and get lost in the woods of disparate details.

Yet, she would not let Beni do it herself. Neguin had not only to participate, but to show that she had the leading role. It was thus impossible to delete her text in the paper and to rewrite it from scratch: Neguin would end up fighting zealously for every phrase and every word.

Finally, Beni ended up finding the magic formula.

"It seems you don't have enough patience putting words together," she said to her colleague one day. "Why don't you tell me the main points you want to make in the conclusion, and I shall take care of making sure we have all the *materials and* methods sorted out, as well as all the rest of the boring stuff. You can just tell me orally and I will write it up."

It worked, but it was so shameful that Mary shuddered remembering it. And then Martin, who offended her with his lack of attention — she came back to him, not only to talk about the same subject but to bring him her most intimate experience. That was already too much for Mary to assimilate in one go.

"And why did you change your name, Ana?" she interjected into Mara's discourse.

"I wanted the two characters to be separated," Ana replied after a pause. "The one you knew, and the one Beni would know. Beni must be busy now trying to separate your memories from hers, and the easier it is to do with the memories of me, the more of them she will be able preserve. You see, I studied a lot of literature on merging, both on mice and people, including Project One preprints that are not yet available to the public. It appears that the memories you can't separate well may get jumbled and morph into memories of something that never even happened."

That smug expression on the face of her ex-friend who had been dominating Beni's mother, and, who knows, perhaps her, Mary, as well, was odious to Mary now.

"Mara — how did you chance upon that one? Just because of the two A's?"

"Anyway," Mary continued, as Ana was not giving her any reply, "why are you even talking to me? This brain will not get merged with anything anymore, so it is useless for you."

"The other one probably won't get merged with anything either."

"Why? Because we didn't wake up on time? Or because of all the drugs Beni took?"

"Because of one drug she took. And because you failed to wake up for twenty more days after the merging. You can't imagine all the strings I had to pull for them not to switch you off."

"Which drug?"

"Why, BOZAR, of course."

"But Beni didn't even take it! She was just holding on to the little baggy during the days preceding the operation. It was nothing more than a psychological help for her, like hugging a pillow in your sleep. She was pretending it was there with her to take it any moment before or during the merging."

"I didn't know that. The bastards. I thought it was Beni

herself that took it. Anyway, they couldn't count simply on the girl's whim. They bet big money on it. If she didn't take it, they made her take it. Then nobody can prove she didn't do it herself."

"Who they?"

"Finker and friends. My dad. Who do you think they are? Scientists? Your boss Finker — what did he ever discover? They are businessmen. They are interested in making money. Good businessmen wait for opportunities. They may need to wait for a long time, but when one comes, they snatch it. Beni was an opportunity."

"For what?"

"Finker has a fifteen percent stake at my dad's company, Frontier Chemicals. They make laboratory drugs. Some experimental substances that are made to order, but mostly the kind of stuff that is needed all the time to work with animal models. You know better about all this, I suppose, you did a Ph.D. in it. Anyway, most of the substances they produce will only ever be used on lab mice, but some might, one day, find their way to a more general clientele. That is always a lengthy process, but how you present it to investors is a different question. Investors don't get in when everything is done, packaged, and

ready for distribution. They want to invest before everybody else does. They are willing to risk millions on anything that looks half-promising."

"And that's the company that makes BOZAR?"

"Now you are getting it. Beni was an opportunity to sell the company. Having BOZAR successfully tested on humans, even if it is an unofficial test on a single human, even if it is, how to say it, by accident — would be the strongest selling pitch they could dream of. Did you talk with Finker about the operation?"

"Yes. And he did mention BOZAR."

"I suppose he'd try to make you take it yourself. But it wouldn't really matter for them if you did. What they needed was to be able to blame it on you. And you obliged. That is, Beni did."

Mary remembered with shame Beni's interview with the lead surgeon, and how she was upset that they would not use BOZAR. "Mice are also people." So puerile.

"Anyway, it didn't work for them," Ana continued. "The result of the experiment is that you barely made it."

"So it is all in vain for them?"

"Screw them! It's all in vain for you. And for me. For Project One you are a negative. Or a breach of protocol — depending on whether the lead scientists know about this little side experiment or not."

She's right, thought Mary. In the main experiment, the same protocol should be used on everyone. They can't count us in their averages, so what's the point continuing? This silly bitch taking drugs!

It occurred to Mary that one would never know what caused the problem with their waking up. It could have been BOZAR; but it also could have been any of a number of other things. The pre-op instructions clearly state that you should inform the staff about all the psychoactive substances you have been taking in the last ten years. Easy for her, Mary. She didn't take any, besides alcohol and coffee. Beni, on the other hand... And of course she kept quiet about it.

Then also the problem could be with something else entirely. Their genetics, for example. The experiment is not done on a bunch of linear mice that are almost identical genetically, but on a heterogeneous sample of the wild human population. We are but one data point, Beni and I. A negative one, it appears.

"You should have warned Beni, rather than simply trying to stop her from getting in, you know? With that silly Philippine rape story of yours." Much as she disliked Ana now, Mary was thinking that the three of them would need to act together if they wanted to fight back their chance at infinite life.



Often when Beni came to lab at night, she would have all the premises to herself. Sometimes there would be another noctambule or two sitting quietly in their office, but not more. Beni thought it would be so this time as well. All she wanted now was to sneak in, grab the stuff that had remained on her desk—her headphones were her main pretext for visiting—perhaps enjoy a little nostalgia sitting in her chair, and then make her exit. Beni did not belong there anymore.

Technically, she was still a student. There was still a non-trivial step to take before she would be finally out — her defense. But her life was already elsewhere, not with them.

To her surprise, she could already see from afar that the lab was busy: most of the windows had light in them. It was already past midnight. The lawn outside was lit by the full moon, as well as by the lab windows. Normally, you can't be seen from the inside during the night, but the moon was so bright that Beni was unsure.

She stepped away from the footpath and under a tree, observing the occasional shadows in one or another window. It smelled of apples. Beni was trying to guess what the people inside were doing. Usually, if someone was staying late at night it would be to work to some deadline. Could there be a deadline for many people together? Of course, there could. Beni pulled out her phone to confirm her suspicion. The BRAINS conference deadline was yesterday; the precise hour in our time zone would be one AM tonight. Why is nobody ever eating these apples, Beni thought.

She picked one up from the tree, as she decided to linger a bit under it and observe. Even Victor T.'s fans would not touch them. The small, brownish speckled fruit had a strong smell. Tastes great too, better than supermarket apples, she noted.

These conference deadlines were relatively new to their field of research. Previously, in order to present one's results at a conference, one would submit only a short abstract. The validity of the results could not be judged based on the abstracts alone, so conferences were rather informal events, meant to discuss new results and to make people meet others working in the same

field. Having presented at one or another conference did not count as a publication, and so it was not important for one's CV.

It all changed when, following the fashion coming from computer science and physics, some of the conferences started asking for a full paper instead of an abstract to be submitted. A full paper can be evaluated, and so people can be judged by how many papers they have published. Quickly, some of the conferences became prestigious venues, where you have to publish in order to get grants or jobs. This was driving the competition to ever higher levels. Finker's lab would always manage to score at least a few papers at BRAINS every year. The lab's brand surely helped, but that did not mean it was easy for any one of the lab members to be accepted. None of them could tell whether the works they are submitting right now will make it. The deadline has to be the same all over the world, no matter which time zone you are working from, hence the often-unusual hours. It was already past one, so people should start leaving. The front door opened, as if synchronized with Beni's thoughts.

"Let's go grab a pizza." Beni recognized the tired voice of Ghazaleh. Next to her was a tall fellow with a dark beard and spectacles. Must be someone new. Perhaps a new postdoc, she thought, judging by his age.

"Sure" he replied, as they walked past Beni's tree, without noticing her. She stopped chewing her apple, not to make any noise.

Another group emerged, chatting loudly. Beni was surprised to be able to identify only one voice among them. New students. This was probably their first conference submission, which was why they were so excited. They were in, she was out. The normal passage of time. She would not be sad about it had she not herself been in some kind of a limbo. If she had a postdoc position already lined up, she would be all living in the future. Or at least, she would know what her future would be, and so she would not think about what it should be and where she was now.

As it was, she was living in her own separate world, already distant from Finker's lab but not a part of anything else, not belonging anywhere.

She reached to pick another apple when the door opened again. A single figure emerged and walked past her with his head hanging down.

"Hey!"

Martin had barely muttered a greeting and hastened his

pace.

"Wait!" Beni said, catching up with him. This was weird even for Martin. He must be still deep in his thoughts about the paper he just submitted. Or, perhaps, that he didn't manage to submit. Why else would he be so preoccupied?

Beni had reflected that her interest in Martin was purely scientific. That is to say, she was interested in her own reaction to him, but as an external observer rather than as an actor. Being in love with him seemed rather incongruous to her right now. Yet, she used to be in love with him. How would that make her body, her brain, her mind react to him now? How would it react to being next to him, talking to him? Would it elicit any emotional reaction? What about having sex with him? She still found him cute. How would her body react?

Her reflections seemed rather cold to herself, distant, calculating. She remembered her plan of making him fall in love with her. Too much work, too much time that she did not have. What about now? *The night is young*, she thought.

"Did you submit your paper?"

"Yes. And what... what about you?"

"No. No submission this time. I've been busy with other things."

"Oh... Yes. Of course," he said, and blushed. She could sense even in the dark that he blushed.

"What time did you submit the last version?"

"Twelve minutes past." The way the submission process worked, one would typically submit at least some version of the paper several hours before the deadline, and then keep updating it. The submission server would be usually kept open some ten or fifteen minutes past the deadline, to avoid mishaps due to server overload. Few people knew about this, however, and even fewer tried to exploit this to get ten more minutes to work on their paper. Of course, Martin had to be one of those few. However, even telling about this little exploit did not manage to bring him up from the sinkhole he was in.

"Let's go for a pizza," Beni suggested.

No reply.

"Shall we?" she insisted.

Martin nodded almost imperceptibly. Beni was determined to find out what it was all about. She realized that she must be a total freak to him right now. First, the language learning experiment. Next, the merging. An excellent lab mouse she made of herself. More than that. In fact, nobody would use the same mouse for two completely different experiments. Once

it's used once, it's done with. I only have one body to play with though, she reflected.

When they entered the pizza place — the only one near the campus that was opened this late, they saw Ghazaleh and the bearded guy seated at one of the tables. The guy was talking and Ghazaleh was listening with interest. She saw Beni and Martin entering and followed them with her eyes, making a greeting sign with her smile only. Ghazaleh had not seen Beni for a while, and so she must be interested in what happened to her, even if she had not heard about her merging. She was probably expecting them to join and so she could contain her interest for now.

Meanwhile, Ghazaleh's bearded colleague had all her attention. Beni did not want to have a social chat though, nor a scientific one. They stopped at the counter to order. Martin was still unresponsive, so Beni ordered for both of them.

"Sit in or take away?"

"Take away," Beni said, to Martin's surprise.

I wonder what Ghazaleh would think. Whatever. Why should I care what anyone thinks? They went out and began walking, Beni holding the large pizza box in her hands. Martin did not ask where they were going, and Beni did not know either. She

took out a slice of pizza and gave it to Martin. Obediently, he started to eat.

"Eat this and tell me about your paper," she said.

This worked. He started talking before finishing his slice. First in a low voice, unsure about himself, then gradually louder, and, finally entering his peroration stance, completely forgetting about his surroundings. While talking, he was waving the unfinished pizza slice in his hand.

Beni's hands were still busy with the box, so she was not able to eat herself. She was quickly getting bored. Same old stuff. Had he really been working on this same thing all through his Ph.D.? Perhaps it was an interesting little question to kick off his work, but it has been four years now — and still same old. How can he keep getting excited about this?

She had indicated a bench they could sit on. Martin kept talking while she finally took out a slice of pizza for herself. The pizza was tepid. Here we are, seated on a bench, alone in the night, under a full moon. He has just submitted a paper, got some fresh calories in his system, and thus, must be in elevated spirits. The stage is set for me to do whatever I want, but if I want anything to happen I would need to do it myself. Simply giving him the kiss look won't work.

The pizza slice that she held in her hand was drooping. Slowly, it let a piece of mushroom slide down the oily cheese surface and fall from its tip.

Beni didn't want to. Her mind wanted to experiment with her body, but the body would not oblige with any desire. She thought she could just leave him the pizza box and go. Suddenly, she felt his arm around her shoulders. She looked at him, startled. Martin had changed. He was already different when she saw him walking out of the lab. And now she was scrutinizing his face, trying to understand this unfamiliar expression.

"Sorry," he said, somewhat taken aback by her intense stare, but still maintaining his hand on her back. "You look so much the same. But younger. More beautiful!" he ventured.

"What do you mean? Younger than when?"

"Younger than her."

Beni jumped up from the bench to face Martin.

"Younger than who?"

His face was the same — the same short, unkempt beard, the nose that she used to find cute but that was always a little greasy, the restless eyes unable to sustain a look; but the expression was different. Where was his enthusiasm, his impatience, his readiness to be carried away by ideas or emotions?

Now there was only defiance, refusal to accept her rebuke. And maybe something else; could it be malice? He needed some of that in order to say what he thought he had to:

"Than your double."

Rinchi: IMHO there's no point hurrying to create a new group. Let's first start by cataloging the attributes. Then we can see what we need. I tried to collect here all the group-defining attributes I could think of. Groups are forming around any of these, but usually they need more than one.

- -- Language. This is the obvious one, which brought us here in the first place. It doesn't have to be a completely different language or even a dialect. A jargon, like a professional jargon, accents or intonations can be used at least as a start.
- -- Permanent body mods. This is the most obvious group-branding. Tattoos, piercing, scarring, circumcision (male and female) are some examples. Some body mods are applied to children, often to one sex only; others may be applied at initiation (adolescence or whenever one

joins), or both. Extreme examples of children body-mods: foot shaping for girls in China or skull-shaping in Andean cultures. Of course, we are not at this level yet.

- -- Dress and temporary body mods, like died hair. These kind of attributes are the most flimsy, but also the most flashy. Can be used as a provocation to entice the ire of other groups around. Since these are easy to get rid of, they can only be used in conjunction with other attributes.
- -- Cultural corpus. Texts, songs, dances, ideas, etc.

I would put leaders in the same category. Groups often form around a leader, but a leader dies and the group has to live. So I would say, leaders are useful as focal points of forming a cultural corpus. Then they die and become a part of the said corpus, in the form of a legend. By extension, I'd lump in ancestor worship as well.

- -- Dietary restrictions. Halal, kosher, vegan, gluten-free are examples.
- -- Rituals. I'm thinking of those rituals that are performed every day and take a lot of time. These are clearly group-defining elements but I'm not quite sure what purpose they serve.
- -- anything else??

Nilch: Pretty good list right there, Rinchi. Re the last two points: rituals and dietary restrictions. put them into a subgroup: investment-based attributes. Actually, I'd divide all the attributes into subgroups: branding-based, investment-based and mixed ones. With branding-based it is clear what they are for. Now, investment-based attributes are based, well, on investment. The more you invest in a group the more reluctant you are to leave, so the resources you spend on a group bind you to it. Investment may be wealth-based, like paying a tax, time-based, or other. For example, performing rituals means spending time on a group-defining activity, so you can see it as investing your time in the group. Even if you are performing your rituals alone, you are still ''investing'' your time. Dietary restrictions I would put in the same category. You are not spending money or time, but you are making a little self-sacrifice -- not eating something you could have liked to, which can be seen as an investment in the same sense as spending time on a ritual is. Cultural corpus is both a branding attribute and an investment one. Branding for the same reasons as a language is a branding attribute, and

investment because you spend a lot of time learning it.

Twinaraji: ok if restrictions are mini-sacrifices, then what about taboo words? Those words that you can't say, some of which are even filtered on this forum. Let me try, by the way, to see which are filtered: damn, shit, f---, n---. Let's see how many get filtered out when this post is made (my guess: one or two). Which words are taboo of course depends on the society (the group) and changes with time. Anyway - what does one sacrifice by not using them? Nothing. There's no investment, from what I can see. It's not like not eating something you would have liked to, or not having sex on certain days on which you would have wanted to.

What they do provide is an attack surface: someone can mark their dissent with the group by using the taboo words publicly. It is more suitable for attacks from the inside then for attacks from the outside: one can hardly imagine, say, the French, insulting the English using English taboo words. But for a fledgling dissident group they are very

useful; so, taboo words facilitate dissent and thus group reproduction. If we are trying to categorize group attributes, I would bundle taboo words with all the ostentatious attributes like dress, hair styles and tattoos (what Rinchi here called branding-based). I'd rather call this category provocative attributes.

Why is it that when you need sleep the most it does not come? Sleeping was the only thing Sam could think of doing. The only activity that was not destructive and that was interesting to him.

I apologize. she wrote. I should have kept out of your life. Please forget me. I am leaving, and won't bother you any more, ever.

It was four AM, and he could not read nor sleep. Worse still, Sam did not know what he would be doing tomorrow, and the day after. There was nothing that interested him. Books did not work anymore. These so-called friends are boring dolls. They don't do anything interesting unless you put them in position and

press the "start" button. The only way they can say something interesting is when they repeat after someone you don't know, and even then they fail to retain the source. Is there anything somniferous in the apartment that I could use?

Sam went to the kitchen and found a half-finished bottle of cheap gin that must have been left from some party. He took a couple of mouthfuls from the bottle and went back to bed. That only made things worse. Now his stomach was aching and rumbling, exuding the disgusting smell of junipers back up his throat and into his nose. It felt is if he swallowed some toilet cleaning liquid.

He tried to watch some videos and could not concentrate on any. I should avoid the forum because she is there.

Forgetting her and everything connecting to her is the only sane course of action. Time will heal it with certainty. But how long — a week, a month, a year? And what to do with all this time if you cannot sleep? A dog can sleep twenty hours a day if he has nothing else to do. I'd be so happy to do just that. Only wake up to eat and go to the bathroom. Then the classes resume, so maybe I would need a few more hours a day to keep up. Or maybe not. There's nothing more boring than those classes.

Her name on the forum is Guenga. I am dead sure about it. I could put her on ignore and read other people's posts. The forum is not hers. She did not show it to me, I found it myself. Perhaps I even found it before she did. So why should I let her deprive me of it, let her take away the only thing that I find interesting at the moment? I can hang out there for a few days until I find something else that is fun, or until the classes resume.



"I hated her. No, I did not, could not hate her, because she never did anything wrong to me. Nieto did not do anything wrong to me either, but at least he was a man. Some distance would always remain between us, some buffer zone, a wall that one could not break simply by extending one's hand and touching the other person. Maria, I could always take in my arms, undress, look at her body, try to find imperfections in it, fail to find any, and avail myself of it fully, at will, again.

"For that week's hike, I chose a ridge-top trail that was a

part of the Swiss-French border. On the left was Switzerland; on the right was France. The thin trail was hardly visible: now getting lost between the rocks, now overgrown with grass. The red and white stripes of the little flag that is used to mark Swiss hiking trails would be difficult to find, but on this one we also had the sturdy concrete sign posts demarcating the border.

"'We have to have our passports with us,' I warned Nieto before the hike, 'just in case.' I'm sure he had his. I forgot to take mine. I slept so little those days that I kept forgetting things.

"The lack of sleep was interfering with my work as well: in programming, you need a high degree of concentration, otherwise you quickly start spending more time fixing your bugs than writing new code. I began exercising more, but it did not help much. I hoped that at least hiking would help, and I was choosing harder hikes and making them more frequent.

"Nieto still accompanied me on all of them, as if he felt that his presence was important for me. Maybe he should have rather left me alone. We did not talk during the ascension part of our border hike, and on the ridge it was so windy that one could hardly open one's mouth without getting it filled with wind immediately. "I was busy replaying in my head the conversation I'd prepared. I have a trick for writing important emails. I tell myself that I would only write a draft and then won't send it. I pretend I am preparing that email just in case, or that I am writing a draft version that I shall get back to the following week. This allows me to work on the email calmly. Then, when it's done, I just hit the send button.

"One can do the same with conversations. Prepare one in your head, pretending you will never talk it out. Then, when it's ready and polished, and when the situation is right, just start saying what you had prepared. The action does not have to follow. It can always be turned into a joke. Everything can be turned into a joke, especially when you are with people who are supposed to be your friends.

"'This wind is treacherous,' I said. 'It blows strongly from one side, until you get used to it, then suddenly a gust comes from another side. Really, I almost got blown down to France right now.'

"'Yeah. I've heard the cheese is almost as good on that side.'

"'No, seriously. I think we should keep closer to each other. In case one is about to fall the other one can help.' My conversation was not going as well as it was in my head; in fact, it was

feeling rather awkward.

"'Sure,' he replied, glancing at me incredulously. 'We've seen worse, but extra caution never hurts.'

"'It's ok, keep ignoring it. I read an article recently. It says the weather is what kills the most in the mountains. Not the lack of experience.'

"Nieto did not reply. He must have guessed that I was trying to lead the conversation to something. To some practical joke, or maybe to a discussion of some tangentially related topic that he couldn't yet surmise.

"'If you don't care about the wind, how long do you think you could stand upright on that stone over there?'

There was a local peak some seven hundred meters ahead. It was not the highest point of the ridge — that one was still about a kilometer farther; one could already see a cross in the distance, one of those somber wooden crosses that it is a custom to crown the mountains peaks in Switzerland with. This local peak was just a flat-top stone. It would always give me vertigo to stand on a peak, even if there was no wind, and I knew Nieto would have the same reaction. The suggestion seemed childish, and surely it was not serious, but we both hastened our pace to reach the peak.

"The stone turned out to be much bigger than what it looked from afar. It was easily big enough for both of us to stand comfortably at the same time, albeit not more than at arm's length distance. Nieto was standing there facing me and smiling, waiting for me to finally tell him what all this stupid talk had been about. Strangely, the wind had almost completely ceased.

"On a peak you only feel vertigo if you look around you; and indeed, if you are alone, there is nothing to look at at close proximity, so that you cannot help looking farther away and feeling the world around you swaying and starting to spin.

"Here, we could look at each other and feel completely at ease, had it not been for the awkwardness of the situation — the awkwardness that was creating an almost palpable tension between us. To end it, Nieto opened his arms, stretching them to both sides and creating the largest sail he could out of his body, as if inviting the wind to give him its best push. He laughed looking at me — now what?

"I did not have to look at his legs to know that he was standing steady, the feet shoulder-width apart, one leg somewhat behind the other, the knees slightly flexed — all of this in order to maximize stability; he would not be toppled easily.

"The look in his eyes was that of expectation and incredulity.

This mix only changed in proportion and not in composition when I pushed him — more incredulity, but still mixed with expectation; he kept believing that I would end the situation somehow, catch him, perhaps, and explain the joke, or explain why it failed. He clasped his hands only grabbing the air, and did not utter a sound, or, if he did, then I could not hear it, as it was carried away by the wind that was lurking just beneath the peak.

"I did not look down toward where he fell. According to the map, there was a drop of some hundred and fifty meters, but it was difficult to tell from the map alone how sheer it was. It did not matter. It did not matter, I thought, and I started to laugh while running down the trail, down into Switzerland, away from France where my friend would have been lying, immobile. It did not matter whether he died or whether he was only hurt and waiting for the rescue.

"It did not matter, because, even if he survived, the imbecile would never tell the cops that I had pushed him. Not before talking to me, not before giving me a chance to explain what happened. The thought of it was exhilarating — I was absolutely certain in the wholesomeness of his character, in his unshakable belief in friends, in people in general — that people

are good and would not hurt you unless by mistake.

" The moron."

"And, I suppose, they never found out?" asked Beni. "The Swiss cops did not want to investigate because the body was in France, and the French did not want to investigate because — I don't know — you were both from Switzerland? Or because the Swiss ones were the first to find out?"

"That was kind of what I hoped would happen, but, in fact, there was an investigation in each of the two countries. First, there was a pretty efficient joint rescue operation — surprisingly so, gived that the French were involved. But what could they find? His body, and my account. I was questioned several times, both by the French and by the Swiss. Nothing. People — I mean, colleagues, friends, acquaintances — started turning away from me. Maybe it was a change in my character, or my reaction to the tragedy that was not conforming with what they were expecting. Or maybe simply being involved in this story made me a freak in their eyes. In any case, I ended up not having friends even before I started telling the story."

"When did you start telling it?"

"Not more than a year after the fact. I first began hinting at the possibility that it was not a simple accident when tipsy, at parties. Then someone reported me to the police, and there was more questioning. Both the French and the Swiss called me to have another talk. It was my way of coping, I said. Coping with the trauma and the resulting social isolation.

"I grew more bold in talking about this after I left Switzerland. There was no longer anybody around me who would have known Guillermo, and it became just a story to tell, a story that nobody would ever completely believe. Nobody, not even my wife."

Notse: you guys with your lists are missing the point.

Or maybe you are all OHFers? Then say so. Identify yourselves. The point is that all these attributes are worthless without one main thing: the enemy. No enemy - no group identity.

As always, if you want to understand group behavior, look at adolescents. Adolescents try to differentiate themselves from the society they belong to. But they are unhappy. Their songs are sad. Their behavior is self-harming.

Why are they unhappy? Because for all the efforts they make to provoke the society, asking it to punish them, they are only recognized as kids. Their behavior is only

identified as an adolescent rebellion. The society does not give them any recognition as a group. If they are chastised, they are chastised individually, not as a group. All they are asking for is one attribute to be identified by. Everyone with an earring should be punished. everyone with blue hair. Or everyone who listens to jazz. That would create a group. So, they create a bunch of ostentatious attributes and offer them all to the environment, to the big group around them, to choose from. They are asking the environment, the society around them to take any one of these attributes as an offensive identity. If the society, or some other existing group, takes a single one, then the rest may be discarded. group identity will be formed around the one chosen by the enemy. Call them punks. Use just that one word as a derogatory denomination. They will form a group identity around that single word. To put it differently, you cannot create a group yourself. You need an enemy to do it for you.

Beni was a mistake. She should have never happened. I should have said no to Ana thirty years ago and that would be it. Let her find someone else. Or not find anyone, why should I care? Now there is this Beni who is plain crazy. What infinite life? We nearly died on that operation table. No doctor in their right mind would try to put the same Beni through the same operation again, with another, younger, person. This will never happen. And all I get for my messed-up brain is this crazy bitch who is messing with my life.

The realization that Beni was properly, clinically insane came to Mary in a rather circumstantial way. It occurred to her that Beni might be frequenting the Chipa's forum. After all, it was Beni that got them into it. She used the app and learned Hungarian before the operation, so, naturally, she would have maintained interest in it. Given her profile — a scientist, an early user of the app — she might be even one of the most active contributors. Whom could she be? Mary wondered.

As of late, some of the discussions on the forum had taken a decidedly weird turn. There was a group of sensible people who were discussing how to control the people's need for a social identity. They were proposing some sort of a whole-world surrogate society that would be suitable for everyone. As if to mock them, another group emerged that was advocating creating a new society instead, and, as it was, to make it as radical as possible. Already they were discussing killing Chipa as a kind of sacrifice. Could Beni be one of them?

Mary was not an active user of the forum herself. She was reading almost everything, but she made not more than a couple of posts herself. After all, she was almost a *mono*.

She did make an account though, registering it with the same password that she was using on all the forums where she was not planning to be active. Or rather, the same password Beni was using on all the forums where Beni did not plan to be active, for Mary herself was not using online forums much. Out of pure curiosity, Mary logged out and tried to log in with some of the handles that were most notorious.

Guenga. The biggest troll. One of those pushing for murder.

Mary was scared. The first thing she tried to check were all her important online accounts. Banking, social networks. Mary was instructed to change all the passwords after the operation, but with all the information Beni had about her, it would be easy for Beni to gain access.

Already, Mary did not remember some of the passwords and had to resort to the various clumsy recovery options. Of course, Beni could do just the same. Or maybe she already had? Did I really forget those passwords or was it Beni who reset them? It was not easy to not panic.

She tried to call Roger, to see if talking to him would have the usual calming effect on her. Roger sounded weird on the phone. Mary hung up. After some deliberation, she called him again.

"Did you see Beni?" she asked boldly.

He did. Now the panic was properly setting in. She is taking over my life. My accounts. My ex-husband. Then what? My job? My son? She is insane and capable of anything. She can destroy my life just for fun, or because it fits some delirious plan that is fermenting in her sick mind.

I must take care of the panic attack first, before trying to solve the actual problem.

Mary went to the kitchen and opened the fridge. There was still food. Two big round boxes of Camembert were looking at her. Mary took out one box, unwrapped the cheese and bit into its white, silky side. She sat on the floor, eating. It is okay. Everything is allowed. You can sit on the floor and eat the cheese, all of the cheese if you like. It gives you the illusion of control, which should help you calm down. You can eat this one cold, and

put the other one in the oven. Anticipate the hot stickiness of the next in the creamy coldness of the first. Now start thinking. First, find at least one solution, no matter how outlandish it is, and try to think it thoroughly through. Calm yourself by establishing that a solution exists. With the reasoning and planning ability thus restarted, you can try to find other, sane, solutions, think them out, then select the best.

Beni is a drug addict. Well, a drug user, to be precise. She used heroin in the past. She told very few people, but still—some people know. That was one mistake she made. If she overdosed on fentanyl nobody will be too surprised. Naturally, after the operation, under stress, she'd relapsed. Who would know that she only tried heroin twice, and it was four years ago? A drug user once, a drug user forever. Fentanyl and even carfentanyl are easy to order online, at least for someone with Beni's experience.

Beni had gotten sick and began vomiting almost immediately. She ingested both the pizza and the drink. Mary glanced at her phone to check the time. It took Beni less than two minutes from getting sick to passing out. Now Mary had no more than another minute to simulate the injection. The skin at the injection site should show some signs of irritation, and

Beni should be alive for that to happen. There was already enough fentanyl in her blood stream, so the injection could be done with plain water. Or with this sparkling water over here.

She was already so pale, her heart was about to stop. Make her a heart massage while doing the injection. A dirty job. Beni's vomit everywhere. It would have to be cleaned up, as it contains the poison. First pump her stomach, then clean up. There should be no fentanyl anywhere except her blood. And her brain. Such a waste, merging it with my own. Careful when inserting the hose, not to scratch the esophagus too much. I will have to dispose of all these clothes, together with the pump. All dirty with her vomit, the pizza, the fentanyl that one cannot see but that is there. Leave only the syringe and the body. Such a beautiful young body. Why can't it be me anymore? Perhaps they should be making two of them each time. That is an interesting idea for an experiment — merging three brains instead of two. One source brain and two receptors. If one receptor goes bad, like this one did, you still have the other. I wonder if this idea had ever occurred to anyone. If not, it maybe something to try and work on.

That was not the real nightmare. This here is.

Sam instinctively huddled down and clenched his hips together, as he made the realization. He was still staring at his laptop screen, while his fingers were habitually feeling the worndown label of the empty cough-syrup bottle in his pocket. He always had the little bottle with him since the experiment. By now, Sam knew the content by heart:

Active Ingredient: Dextromethorphan Hydrobromide Excipients: Amaranth (E123), Sodium benzoate (E211),

Of course, there could be no Paracetamol down the list, but Sam still felt the need to prove it to himself reciting it all untill the last entry, Sorbitol (E420).

And it all seemed so simple and almost completely safe. Sam wanted to make the most of trying out the app. He felt one could only try once, and he was well below the recommended minimum age of twenty-five. Nilch on the forum had been advocating for taking a micro-dose of LSD to gear-up for the journey. He argued that the app worked mostly with the visual inputs,

while language-learning is based primarily on sound. LSD confounds the inputs from different sensors, so it is more likely that the change in one's learning parameters will affect the whole spectrum.

That totally made sense for Sam, and, besides, he had two stamps that he acquired for his birthday party and ended up not using. Indeed, he had canceled the party altogether. It was enough to imagine how it would go. First, it would take a lot of time to convince them. "Are you sure it's safe?" "How do you know it's even legit?" "Where did you buy it?" "No way I'm taking this shit. Hold on, leave a little bit for me!" "I want to see how the others react first."

Inevitably, some of them would not be convinced and would be spoiling it for the others. "Do you feel anything already?" "And now?" And then someone, defiantly, "I don't feel anything. This shit doesn't work." And some one else attention-seeking, "Wow it feels so weird!" Sam imagined their faces, laughing, opening wide their mouths in excitement, showing the saliva and the remains of the food inside, forgetting about how they looked but at the same time only wanting to show off more of themselves. And what is there to show? After all, split between seven to ten people, those two stamps wouldn't be more than

a micro-dose per person. Not more than twenty micrograms to put in each of those wet mouths, so there won't be much of a show — you get what you pay for.

That experiment was boring and totally predictable. This one, on the other hand, was unchartered waters. Now, taking two stamps alone would not be a micro dose, but rather, a double dose, but at least it would not be wasted. Another forum user, Pcheji, suggested that using a dissociative, such as Ketamine, could increase one's learning age. She even reported trying it out, using a tiny dose of the drug and the app's estimation function. Sam did not have any Ketamine, but he could easily procure another dissociative, DXM. In fact, it could be bought in any pharmacy in the form of a cough syrup, and Sam had done it before. He had tried both LSD and DXM previously. Even though he had not tried them together, the experiment seemed rather safe to Sam. What's the worst that could happen? The app wouldn't work, and he would have a bad hangover.

The experiment started very well. The current version of the app was 2.0, which seemed reassuring. It estimated Sam's learning age to be twenty-two, so perhaps the drugs were working. But after some time, he started to find that it was difficult to

concentrate. Everything was bothering him. His position on the bed — he tried all the usual ones: sitting with his back against the wall, lying on one side, lying on the other side — nothing was working. The noise coming from the other rooms, the light that was either too bright or too dim, no matter how Sam put it. Even the silly character in the game that never seemed to be doing quite what one would expect.

And above all, the nausea. It was normal to feel some nausea in the beginning, after ingesting DXM, but Sam's experience was telling him that by now it should have already subsided.

Instead, it was only getting stronger. Two words then appeared clearly in his mind, next to each other. "Paracetamol" and "overdose." Only last week Lilly told him that her niece attempted a suicide by taking a whole package of paracetamol pills. They barely managed to save her. Death by liver failure is one of the worst one can imagine. The poor girl probably did not know just how much suffering there is to it. Even drinking bleach must be less painful — you burn your guts, but at least you die quicker. Most Cough syrups have paracetamol in them.

Of course, Sam checked that the one he bought did not have it in the list of active ingredients. There was only Dextromethorphan. But what if? After all, he was abusing a medication, taking over fifty times the recommended dose. And the nausea was a clear first symptom. If paracetamol were there, what he ingested would be easily enough to kill him.

What a silly thought; but it was bothering Sam, and he could not concentrate on the game. What if the composition had changed from the last time he bought the syrup? Had he really checked well this time? What about the other names of the substance — Acetaminophen, APAP? Why not just check?

Sam found the empty bottle of the medicine he took and tried to read the label. Not enough light. He went to the bathroom, where the light was much brighter. A distorted face with dilated pupils was greeting him from within the mirror. Little red worms were wriggling just beneath the skin surface, trying to eat their way inside. That's what LSD does to you, he remembered. One should never look in the mirror while on acid.

He looked at the little bottle and tried to read the label. No matter how hard he tried to concentrate on it, the letters were jumping around, refusing to stay in line and form the words he was trying to read.

Calm down. You know what is there. You checked it online before going to the pharmacy, and then re-checked again at the pharmacy, holding this same bottle in your hand. Sam was trying to do some self-confidence and motivation exercises to get himself out of what was announcing to be a bad trip. He went back to the bed and tried to imagine what he would do after this was all successfully over. He would skip Hungarian and go straight to learning Moxos. This should not take more than two or three days. Empowered with that knowledge, he would go back to forum and show them. He would write his first post in Moxos. He would be humble, but the facts will speak for themselves: he would be the youngest person to have made it.

And then, stage two. Yes, there was a stage two. In fact, Sam was not interested so much in learning languages — at least, not the existing ones. What was most appealing to him was the liberation that the app promised — the liberation from the need to belong, and with it from all the existing groups and societies.

What do you call someone who does not need to belong? You call him a leader. People, that is to say, the others, the monos, the sheep, the herrings — will naturally follow a one who does not need them. So, what you get is a bunch of individuals who are natural leaders, and who, on top of that, have the ability to learn as fast and as well as a child.

Now, imagine what these people could do together. Already there was a discussion on the forum about forming some sort of a community. Of course, they did not need to create one, but they still may freely choose to do so if it serves their interests. The possibilities it would open seemed so vast that Sam could not even begin to think of what they might actually do together. But it was clear to him how they should go about creating the group: they should first make their own language. One that no outsider would be able to understand.

First, they would take the vocabulary base from some existing languages, say mix Moxos with Koryak or some others. Then, just like children of immigrants form a fully fledged creole language from the pidgin of their parents, they would make a new language on top of this base. Effortlessly. Let's liberate the dream!

Sam recalled the story of the blind child and the dog. How awesome it must be to be finally set free! Then it occurred to him that if he cannot read the label with his eyes, maybe he could still do it with his fingers. The letters, however tiny, were a little bit raised above the white glossy surface of the label. Surely, it will be tough to read, but with enough concentration he should be able to do it.

Let's first find the word *Ingredients*. With his eyes closed, Sam was slowly feeling the label with his ring finger, the one he thought should be the most sensitive, starting from the edge and slowly moving toward the center. *Ingredients* — it should be somewhere in the middle.

"What did I tell you?" Sam opened his eyes and saw Ingrid, his nanny, standing in front of him, her nostrils flaring, pointing her ring finger at him. "What are you touching there?" Her voice was angry, but there was a make-believe note to it, and her pursed lips seemed to contain a queer smile.

Was he really doing something wrong?

He woke up with the empty medicine bottle in his hand. It was broad day light. He looked at the bottle — Dextromethorphan was the only active ingredient. Sam was feeling a bit dumb and hungover, but he was clearly safe. The experiment did not work; maybe he can try some other time, with less drugs.

During the next couple of weeks Sam tried to keep himself

busy. He started going to the gym. He borrowed from the library In Search of Lost Time — the biggest book that was on his list of classics to read; this one should last him for a while. He also signed up for a volunteer peer-help group, to explain programming to fellow students that were struggling. All to keep his mind away from the thoughts about Beni and the experiment.

Slowly, he was building back his self-confidence. His muscles were toning up, and he was almost through the first volume of Proust. He found it interesting and even motivating to explain programming to others. It often helped Sam better understand some of the (admittedly, rather basic) topics he was teaching. It was rewarding when someone managed to overcome his difficulties with Sam's help.

Some of the students were hopeless, though. One fellow, Fred, was a particularly scary case. Sam had tried to explain him one of the most basic topics, the "for" loop. He tried everything: drawing diagrams, working through examples on paper, step-by-step on the computer, he even looked up educational videos on it to go trough them together with John. All he got for a reward was the blank stare in Fred's bright blue eyes, looking back at him as if from behind an aquarium wall.

That wall look was Sam's strongest impression from his teaching experience. How did Fred get his grades? Sam wondered. The answer was pretty clear: others helped him. It was much easier to give him ready-made answers than to explain anything to him. Sam could already read it behind that bank stare: the habit of waiting for the other person to finish the attempt to break through to him, give up, and surrender the solution.

Finally, the time had also come for Sam to catch up on his own studies. He had been postponing this moment, as he was a bit worried about his learning abilities after the experiment. But the exams were approaching.

He plunged straight into one of the tougher subjects, lower-level programming. Sam preferred studying in the comfort of his own room. Instead of sitting or lying on his bed, as he did for his leisure activities, for his studies Sam put his laptop on the desk in front of the window. All preparations were made, the working space had been set comfortably, with a mug of coffee and a piece of pie sitting next to the computer, ready to reward his first productive effort. "Pointer arithmetic," read the topic title.

He did not understand much of the introduction, but at this point he was not too worried: often, with more difficult topics he would only really get it from the examples. And here they were. Sam started the pie, and then slowly finished the pie, and the coffee. All the while he was looking at those three examples that, together, could fit on a single laptop screen. Studded with the \* and \*\* pointer notation, they were looking back at him, as if with so many eyes, accusingly.

"This is what you did to yourself. You and you alone — there is nobody else to blame."

For Sam did not understand first thing about the topic. Slowly, it dawned on him. This is what Fred's life must be. He imagined his future: a bleak succession of equally boring days. Slithering over the exams, all through to graduation. He'd manage somehow. Perhaps, he would even wriggle his way to some career, maybe even in IT. But all the time, all his life, inside this narrow wormhole that he dug for himself: never learning anything new. Is it even worth going through with all this? Sam shivered. He imagined going to a doctor and trying to tell his story about the app and the drugs.

"So, you are saying that you took the cough syrup and played a game on your phone."

"Yes. Also, LSD."

"And now you are having difficulties with your studies. Have

you tried asking a friend to help you with this subject?"

No way they could understand. There was only one person that could possibly help him. But there they were, her words, right there in his pocket. He did not need to take out his phone and read her message again, as he remembered it only too well — I apologize, and I won't write you any more, ever.

Rinchi: Some fair points about group creation there,
Notse. I do not agree, however, that a group cannot create
itself, that it always needs some external action. I
think there is another way. So let's see how it can be
done. Starting with external forces: the one you point
out is a systematic oppression based on some group attribute.
I would generalize this, and add any external major force.
It could be a war (so, another group attacking you) or
it may also be some natural disaster. People unite
spontaneously in the presence of any major threat to their
existence. They do not need any group attributes for
this. So, big threats create groups. Now let's scale
it down, and ask what are the minimal requirements to
create a group. I think that just one victim is enough.

If you have one person killed, a group can be born by claiming that this person died for them. This elevates the victim to the status of a hero. Disagreeing with the claim that he died for the group means challenging his hero status and thus disrespecting the dead, and not just the group. This is a very effective way of creating a group.

Now, where do you take a victim if nobody or nothing is attacking you? Very simple, you create one! I claim that a group can create itself by sacrificing someone, and it is also the most effective way of group creation. Again, anyone suggesting the group does not exist, suggesting that there was no cause to die for or downplaying its importance, would be directly offending the dead. This is something unthinkable, and if one dares to do it, it would only serve to further unify the group. The dead are the group's greatest assets, and if it does not have any it needs to create at least one.

Nilch: > Guenga: OK cool so who are we gonna kill? i suggest Chipa

Of course I see that you are joking, Guenga, but, continuing this humorous argument, Chipa would be the best. She is, in a way, the best of us -- she is already our hero. To be sacrificed is the greatest honor a group can bestow on its member, so the best should be chosen for it. But, really, anyone is good enough. Whoever is sacrificed will become our first Martyr, and our Hero Number Two. Chipa will always be our Hero Number One, unless she comes out of hiding with some major screw-up.

Beni remembered walking in the woods with a knife in her hand. In the other hand she had a large shopping bag, with several smaller bags inside. There are only some parts of the woods where mushrooms can grow. These parts are also perfect for walking, as they are clean, with little vegetation on the floor, only fallen leaves or needles and occasional ferns.

There are so many different kinds of mushrooms. Mushroompickers are after only a few of them: porcini, chanterelles, not more than half a dozen others. If Beni saw those, she would pick them as well, but they were not her goal. Most of the time, all of those would be already taken anyway. Beni liked to pick mushrooms she did not know. She would go by intuition: find some mushrooms that looked edible, take half a dozen, put them into a separate baggy and then identify them at home. It was important to not forget to take a picture of the mushroom's surroundings and the bottom of its leg before cutting it, as it was often necessary to be able to identify it.

Beni would usually be right: most of the mushrooms she brought home turned out to be edible. She also had a few species that were her favorites. Beni knew them well and she would look for them specifically in the woods. Sometimes she brought home too many mushrooms to be able to prepare them all, much to her own regret. But when you are out in the woods, it is hard to resist the intrepid parasol, for example, looking at you with its wide, speckled cap that it holds defiantly on a tall leg too thin for its burden. Just two or three of these caps make for a good meal, and Beni would often come back with a whole shopping bag full of them.

The parasols were great, but not her favorites. Her favorite was cortinarius violaceus, — the violet webcap. A dark mushroom, it is not easy to spot; but when you see one, even if you do not know anything about mushrooms, you are arrested by its sheer beauty. The violet, almost black cap has a flattened top, as if made specifically to boast the shiny silvery web it is covered with. The thin threads of the web are interwoven with great intricacy as if inviting one to decipher their secret message, but only revealing the perfect combination of colors: silver and violet. This violet turns sepia-black when you cook the mushroom. Beni liked to cook them with pasta. A few mushrooms had enough color to paint a whole dish a thick black. Their taste is not strong and is much like that of champignons, but with a thin nutty tone and a distinct smell of the forest.

Presently, Beni was looking at very different mushrooms. This kind she never cooked. Dried, they were dark gray, but Beni remembered their bulging olive-brownish caps when she saw them sitting in the forest, waiting. She did not cut them off with her knife like she did with other mushrooms, but carefully picked them using a plastic bag as a glove — the same bag she would bring them home in.

You wanted a dick? I shall give you a dick.

Amanita phalloides you shall get. Six small, shrunken bodies that were waiting patiently in their little jar for over three years. Beni did not know what she picked them for when she did it. It was the time when she was experimenting with drugs. The same dark-web platforms where she was buying her drugs were also selling arms and explosives, as well as some poisons. Nobody was selling the death cap, for some reason.

Beni fantasized about filling this gap, but she never considered it seriously. She dried the mushrooms in the sun, on the window seal outside her room, and stored them in a jar in a cool, dry and dark corner of her kitchen cupboard. Perfect preservation. Amatoxins are very stable substances. They can last indefinitely in storage, and, of course, they also resist cooking. Now the mushrooms were expanding, getting imbibed with the water Beni was boiling them in, recovering their original size. They should taste good. That's what they say before they die. She almost wanted to take one shroom out and try it. It would be possible to prepare a meal with them — maybe a pizza — and there would be nothing alarming in the taste. Beni, however, preferred to make an extract that she would be able to sprinkle any food or spike a drink with.

She did not love Martin. Much as she inspected her emo-

tions, there was no love for him to be found. When this old woman took him, however — a woman almost twice her age! — a totally different feeling possessed Beni. She was holding the small beaker against the light: a transparent liquid that was still warm — a perfect extract. Just half a mushroom should be enough to kill an adult.

Here, in this liquid, were the amatoxins of six. And my hatred.

The emotion was new to Beni, and she was fully enjoying the discovery. It was strong, pure, and abundant: Beni felt practically bathing in it. If she let her thoughts about Mary run unrestrained, in about forty seconds she felt the blood flowing out of her face and her scalp, and then her body started shaking. She had to check her hatred and divert her thoughts to something else. Was there jealousy behind? Jealousy must have been the origin, but Beni did not feel any of it now. Only clear, undiluted hatred, for her to savor and to fill her life with new meaning.

It is a slow death. After the meal, Mary is only slightly sick. She goes home, has a rest, and the sickness seems to pass. The next morning she is unwell, she has cramps and diarrhea, but it is not bad enough to go to a doctor. She gets really sick

only two days later. She is so much in pain from the cramps that she is sent straight to the emergency room, where whole-body seizures commence. Mary cannot help the medics much by explaining what happened to her. She does not know. She recently had brain surgery, which might explain the seizures and the delirium, for Mary is already hallucinating.

By the time all the tests are done and the diagnosis is made, it is already too late. Perhaps, it was too late even when she was admitted to the hospital, so large was the dose she ingested. Now, she can only be saved by a liver transplant. There is still some time to find the donor organ. Perhaps a week. On day three, her kidneys start failing, and then there is no hope any more; she is only waiting to die. She would rather die sooner, but she has to suffer another full day.

Pcheji: Guenga, and why don't you suggest yourself for this role? Why don't you become our Mohamed Bouazizi? You can be a hero too! Of course it's better if it's the enemy that kills you, but, as you rightly point out, one should start somewhere. If we don't have any enemy, then instead of choosing whom to sacrifice, we could use

the process of self-delegation, so to speak. I mean, I'm just continuing your own argument to its logical conclusion.

How can she be so stupid, if she is practically me? "You and your armadillo!" she said.

Stupidity was the one human quality that Mary found the most irritating. She was looking at Beni with surprise and could not find what to say. She remembered quite well her trip to Paraguay and Bolivia ten years ago. There are some twenty species of armadillo in Paraguay, some of which are abundant. Mary wanted to see them, and she was sure it would be easy.

Since they are well distributed all over the country, in the woods of the Paraguay's east, as well as all through the Chaco region in the west, she thought it would be hard to fail to see an armadillo at least once. Mary crossed the whole country, from the Iguazu falls, to Asuncion, across the Chaco and the Mennonite colonies to the border with Bolivia.

She saw a lot of armadillo burrows, but the only sighting of the actual animal she had was in a market in the capital. It was sold cooked, complete with its armored shell and its little clawed paws that looked rather out of place among the potato chips and rice. To see the animal in its natural habitat, which was not something important to her in the beginning of the trip, had become somewhat of an obsession. Everyone she met during the trip had already seen an armadillo, often many of them. Mary was ashamed to confess that she wanted to see one very much, and yet so far had been unable to, despite spending already two weeks in the country.

Mary almost gave up the hope after she crossed the border over to Bolivia. She was making her way to Salar de Uyuni and only had one more week of vacations left. The elevations were getting higher and the nights were getting colder, but there were still armadillo burrows all over.

Mary joined one of the numerous tours that were taking people from Tupiza to the Salar. On the first night, after they set camp in the mountains outside of Tupiza, she went for a walk to enjoy the sunset. She was walking facing the sun, looking at the mountains in the distance slowly changing colors — from yellow, light blue and red to orange, purple, deep blue and dark green.

Suddenly, she heard a rumbling noise on the ground to her

right. She looked down just in time to see the animal darting across and over her foot, before forcing its way to the burrow she was standing on. She felt a sharp pain in her foot before the animal disappeared. It all lasted only a split second, but it still imprinted in her mind and was clear and sharp even many years after the fact. It seemed to her she could see the vertical bands across the armadillo's body, although she would not be able to count them (was there six or nine? The picture was clear but it resisted all attempts to count the bands and thus identify the species), and even the mean little eyes glancing at her.

"It's been ten years, Beni."

"Leprosy can be dormant for up to twenty!"

Beni looked so angry that she was almost shaking. The two of them met to discuss how to push their way back into Project One. So far, there was no constructive discussion, only a quarrel. Mary started it, asking Beni why she had to try out so many different drugs. She also calmly pointed out the possibility that it could have affected their recovery from the merging operation. She was composed, civil and even courteous. She did not yet mention how Beni let herself be lured into the BOZAR trap.

Beni, on the other hand, was fulminating, and the best accusation she could find to fling back at Mary was this silly armadillo argument. Mary reached into her pocket and touched the little plastic baggy she had there. Now she was decided. She hadn't been sure when coming to the meeting. She thought she would bring the fentanyl and decide on the spot. In case she was wrong, and Beni was, in fact, a sane and reasonable person, then they would just have a civil discussion, make up a plan, perhaps discuss it with Ana-Mara, and then try to carry it forward.

Presently, Mary could see there was no such option. Beni was indeed insane. All that remained to do then was to wait for an opportunity to spike Beni's drink or food. Fortunately, Beni was drinking her water as if she had a serious hangover. Soon, she will want to go to the toilet.

The armadillo bit her. At least, Mary thought it did. Logically, it would have been more likely to have scratched her foot with its claws. Armadillos have strong paws with which they dig their burrows, and these they are more likely to use in defense than their teeth. Besides, an accidental scratching would be far more likely than a deliberate bite.

Yet, it seemed to Mary that she could see the teeth marks on her foot. Was it possible that these animals carried rabies? The phone reception was so poor that night that Mary was not able to complete a single search request to resolve her doubt.

The next day, they moved farther up into the mountains, and the signal was lost altogether. She started to have headaches and could not sleep. Mary knew that these were symptoms of altitude sickness — indeed, the place where the camp was set was almost four thousand meters above sea level — but she still wondered whether it could have been something else, some exotic bacteria that armadillos carry in their saliva.

The lack of sleep and general tiredness exacerbated her anxiety. When she was finally able to access the Internet — at a salt hotel next to the Salar, the news was not comforting at all. More than half of the wild armadillo population carried leprosy, she found. They contracted it from Spanish colons over five hundred years ago and kept giving it back to humans to the present day.

Later on, Mary would remember this episode with a smile. It became a reference of sorts: she recalled the armadillo adventure as an example of worrying a lot about a threat that is negligible if not non-existent.

Indeed, it was easy to calm down upon doing a little bit more research. First of all, ninety-five percent of humans are immune to leprosy. Second, it is not very contagious: you need an extensive contact with an infected individual, in this case, the armadillo, to contract the decease. Mary had at most a bite, and most likely just a scratch. Finally, if you do contract leprosy, it does not affect the brain, and is perfectly curable. The fact that this was the best Beni could find to reproach her was only a testimony to Mary's almost perfectly clean life.

Her phone was ringing already for the second time and she took it out to silence. There were two missed calls from Roger, a voice message and a link. Something must have been wrong: Roger never sent her voice messages, he preferred to take his time typing them.

"Sam sent me this. I'm going there."

The link was to a direct video transmission. Mary tapped on the link and saw the face of her son, talking. She increased the volume.

"... a unique place and a unique moment. People like you have not existed before. You are as intrepid as you are intelligent, and you have the ability to learn which is greater than that of any adult in the history of humanity."

Mary had never seen Sam talking like that. Now he rather reminded her of herself when she was eight, giving a speech at a Brownie convention. "There is one thing that remains to do, and a single action that can make it happen. United, you will be able to accomplish what you cannot do individually. I truly believe you can change the world if you resolve to do it together."

Beni could see his mouth was dry. There was an empty glass in front of him, but the big opaque bottle beside did not look like a bottle of water. It looked strangely familiar, though Beni could not quite place it, and Sam's hand was covering the blue-and-white label. His fingers were moving, now feeling the edge of the label, now making quick scanning movements along it as if he were trying to read Braille. Beni had instinctively grasped the tiny bottle of extract that she had in her pocket.

"I am not one of you, but I have what it takes to bring you together."

As Sam was saying this, his hand jerked up toward the bottle's cap, finally revealing the familiar label.

Mary was frozen, but surely, she would be ready to act any moment, doing everything in her power to save her offspring; or so was thinking Beni, noting the signs of adrenaline rush in the older woman: dilated pupils, rapid breathing, drops of sweat on her face swelling in real time. Strangely, Beni could find none of those reactions in herself: all she could think of while watching

Sam filling his glass with bleach was, "What else what you could expect from a mono?"