# Extract from Little Lost Robot (1947)

By Isaac Asimov

*Little Lost Robot is set in the future in a military research station, Hyper Base, which is located on an asteroid. One of the researchers, Gerald Black, loses his temper, swears at an NS-2 (Nestor) robot and tells the robot to get lost. Obeying the order literally, it hides itself. It is then up to US Robots' Chief Robopsychologist Dr. Susan Calvin, and Mathematical Director Peter Bogert, to find it. They even know exactly where it is: in a room with 63 other physically identical robots.*

Susan Calvin had never left the surface of Earth before, and had no perceptible desire to leave it this time. In an age of Atomic Power and a clearly coming Hyperatomic Drive[[1]](#footnote-0), she remained quietly provincial. So she was dissatisfied with her trip and unconvinced of the emergency, and every line of her plain, middle-aged face showed it clearly enough during her first dinner at Hyper Base.

Nor did Dr. Bogert's sleek paleness abandon a certain hangdog[[2]](#footnote-1) attitude. Nor did Major-general Kallner, who headed the project, even once forget to maintain a hunted[[3]](#footnote-2) expression. In short, it was a grisly episode, that meal, and the little session of three that followed began in a gray, unhappy manner.

Kallner, with his baldness glistening, and his dress uniform oddly unsuited to the general mood, began with uneasy directness.

"This is a queer story to tell, sir, and madam. I want to thank you for coming on short notice and without a reason being given. We'll try to correct that now. We've lost a robot. Work has stopped and must stop until such time as we locate it. So far we have failed, and we feel we need expert help."

Perhaps the general felt his predicament anticlimactic. He continued with a note of desperation, "I needn't tell you the importance of our work here. More than eighty percent of last year's appropriations[[4]](#footnote-3) for scientific research have gone to us-"

"Why, we know that," said Bogert, agreeably. "U. S. Robots[[5]](#footnote-4) is receiving a generous rental fee for use of our robots."

Susan Calvin injected a blunt, vinegary[[6]](#footnote-5) note, "What makes a single robot so important to the project, and why hasn't it been located?"

The general turned his red face toward her and wet his lips quickly, "Why, in a manner of speaking we have located it." Then, with near anguish, "Here, suppose I explain. As soon as the robot failed to report a state of emergency was declared, and all movement off Hyper Base stopped. A cargo vessel had landed the previous day and had delivered us two robots for our laboratories. It had sixty-two robots of the… uh… game type for shipment elsewhere. We are certain as to that figure. There is no question about it whatever."

"Yes? And the connection?"

"When our missing robot failed of location anywhere – I assure you we would have found a missing blade of grass if it had been there to find – we brainstormed ourselves into counting the robots left of the cargo ship. They have sixty-three now."

"So that the sixty-third, I take it, is the missing prodigal[[7]](#footnote-6)?" Dr. Calvin's eyes darkened.

"Yes, but we have no way of telling which is the sixty-third."

There was a dead silence while the electric clock chimed eleven times, and then the robopsychologist said, "Very peculiar," and the corners of her lips moved downward.

"Peter," she turned to her colleague with a trace of savagery, "what's wrong here? What kind of robots are they, using at Hyper Base?"

Dr. Bogert hesitated and smiled feebly, "It's been rather a matter of delicacy[[8]](#footnote-7) till now, Susan."

She spoke rapidly, "Yes, till now. If there are sixty-three same-type robots, one of which is wanted and the identity of which cannot be determined, why won't any of them do? What's the idea of all this? Why have we been sent for?"

Bogert said in resigned fashion, "If you'll give me a chance, Susan – Hyper Base happens to be using several robots whose brains are not impressioned[[9]](#footnote-8) with the entire First Law of Robotics."

"Aren't impressioned?" Calvin slumped back in her chair, "I see. How many were made?"

"A few. It was on government order and there was no way of violating the secrecy. No one was to know except the top men directly concerned. You weren't included, Susan. It was nothing I had anything to do with."

The general interrupted with a measure of authority. "I would like to explain that bit. I hadn't been aware that Dr. Calvin was unacquainted with the situation. I needn't[[10]](#footnote-9) tell you, Dr. Calvin, that there always has been strong opposition to robots on the Planet. The only defense the government has had against the Fundamentalist radicals in this matter was the fact that robots are always built with an unbreakable First Law – which makes it impossible for them to harm human beings under any circumstance.

"But we had to have robots of a different nature. So just a few of the NS-2 model, the Nestors, that is, were prepared with a modified First Law. To keep it quiet, all NS-2's are manufactured[[11]](#footnote-10) without serial numbers; modified members are delivered here along with a group of normal robots; and, of course, all our kind are under the strictest impressionment never to tell of their modification to unauthorized personnel." He wore an embarrassed smile; "This has all worked out against us now."

Calvin said grimly, "Have you asked each one who it is, anyhow? Certainly, you are authorized?"

The general nodded, "All sixty-three deny having worked here – and one is lying."

"Does the one you want show traces of wear? The others, I take it, are factory-fresh."

"The one in question only arrived last month. It, and the two that have just arrived, were to be the last we needed. There's no perceptible wear." He shook his head slowly and his eyes were haunted again, "Dr. Calvin, we don't dare let that ship leave. If the existence of non-First Law robots becomes general knowledge-" There seemed no way of avoiding understatement in the conclusion.

"Destroy all sixty-three," said the robopsychologist coldly and flatly, "and make an end of it."

Bogert drew back a corner of his mouth. "You mean destroy thirty thousand dollars per robot. I'm afraid U. S. Robots wouldn't like that. We'd better make an effort first, Susan, before we destroy anything."

"In that case," she said, sharply, "I need facts. Exactly what advantage does Hyper Base derive[[12]](#footnote-11) from these modified robots? What factor made them desirable, general?"

Kallner ruffled his forehead and stroked it with an upward gesture of his hand. "We had trouble with our previous robots. Our men work with hard radiations a good deal, you see. It's dangerous, of course, but reasonable precautions[[13]](#footnote-12) are taken. There have been only two accidents since we began and neither was fatal. However, it was impossible to explain that to an ordinary robot. The First Law states – I'll quote it – '*No robot may harm a human being, or through inaction, allow a human being to come to harm.'*

"That's primary, Dr. Calvin. When it was necessary for one of our men to expose himself for a short period to a moderate gamma field, one that would have no physiological effects, the nearest robot would dash in to drag him out. If the field were exceedingly weak, it would succeed, and work could not continue till all robots were cleared out. If the field were a trifle[[14]](#footnote-13) stronger, the robot would never reach the technician concerned, since its positronic brain[[15]](#footnote-14) would collapse under gamma radiations – and then we would be out one expensive and hard-to-replace robot.

"We tried arguing with them. Their point was that a human being in a gamma field was endangering his life and that it didn't matter that he could remain there half an hour safely. Supposing, they would say, he forgot and remained an hour. They couldn't take chances. We pointed out that they were risking their lives on a wild off-chance. But self-preservation is only the Third Law of Robotics – and the First Law of human safety came first.

We gave them orders; we ordered them strictly and harshly to remain out of gamma fields at whatever cost. But obedience is only the Second Law of Robotics – and the First Law of human safety came first. Dr. Calvin, we either had to do without robots, or do something about the First Law – and we made our choice."

"I can't believe," said Dr. Calvin, "that it was found possible to remove the First Law."

"It wasn't removed, it was modified," explained Kallner. "Positronic brains were constructed that contained the positive aspect only of the Law, which in them reads: 'No robot may harm a human being.' That is all. They have no compulsion to prevent one coming to harm through an extraneous agency[[16]](#footnote-15) such as gamma rays. I state the matter correctly, Dr. Bogert?"

"Quite," assented the mathematician.

"And that is the only difference of your robots from the ordinary NS2 model? The only difference? Peter?"

"The only difference, Susan."

She rose and spoke with finality, "I intend sleeping now, and in about eight hours, I want to speak to whomever saw the robot last. And from now on, General Kallner, if I'm to take any responsibility at all for events, I want full and unquestioned control of this investigation."

[...]

It took five hours for Susan Calvin to interview the sixty-three robots. It was five hours of multi-repetition; of replacement after replacement of identical robot; of Questions A, B, C, D; and Answers A, B, C, D; of a carefully bland[[17]](#footnote-16) expression, a carefully neutral tone, a carefully friendly atmosphere; and a hidden wire recorder.

The psychologist felt drained of vitality when she was finished.

Bogert was waiting for her and looked expectant as she dropped the recording spool with a clang upon the plastic of the desk.

She shook her head, "All sixty-three seemed the same to me. I couldn't tell [...] If we can't determine the modified Nestor by some gross[[18]](#footnote-17) difference that we can see with the naked eye, one that there is no mistake about, we're out of luck. The danger of being wrong, and of letting him escape is otherwise too great. It's not enough to point out a minute irregularity in a graph. I tell you, if that's all I've got to go on, I'd destroy them all just to be certain. Have you spoken to the other modified Nestors?"

"Yes, I have," snapped back Bogert, "and there's nothing wrong with them. They're above normal in friendliness if anything. They answered my questions, displayed pride in their knowledge – except the two new ones that haven't had time to learn their etheric physics. They laughed rather good-naturedly at my ignorance in some of the specializations here." He shrugged, "I suppose that forms some of the basis for resentment toward them on the part of the technicians here. The robots are perhaps too willing to impress you with their greater knowledge. [...] You're losing your nerve, Susan. I don't see what it is you're dramatizing. They're essentially harmless."

"They are?" Calvin took fire[[19]](#footnote-18). "They are? Do you realize one of them is lying? One of the sixty-three robots I have just interviewed has deliberately[[20]](#footnote-19) lied to me after the strictest injunction[[21]](#footnote-20) to tell the truth. The abnormality indicated is horribly deep-seated, and horribly frightening."

Peter Bogert felt his teeth harden against each other. He said, "Not at all. Look! Nestor 10 was given orders to lose himself. Those orders were expressed in maximum urgency[[22]](#footnote-21) by the person most authorized to command him. You can't counteract[[23]](#footnote-22) that order either by superior urgency or superior right of command. Naturally, the robot will attempt to defend the carrying out of his orders. In fact, objectively, I admire his ingenuity[[24]](#footnote-23). How better can a robot lose himself than to hide himself among a group of similar robots?"

"Yes, you would admire it. I've detected amusement in you, Peter – amusement and an appalling lack of understanding. Are you a roboticist, Peter? Those robots attach importance to what they consider superiority. You've just said as much yourself. Subconsciously[[25]](#footnote-24) they feel humans to be inferior[[26]](#footnote-25) and the First Law which protects us from them is imperfect. They are unstable. And here we have a young man ordering a robot to leave him, to lose himself, with every verbal appearance of revulsion, disdain, and disgust. Granted, that robot must follow orders, but subconsciously, there is resentment. It will become more important than ever for it to prove that it is superior despite the horrible names it was called. It may become so important that what's left of the First Law won't be enough."

"How on Earth, or anywhere in the Solar System, Susan, is a robot going to know the meaning of the assorted[[27]](#footnote-26) strong language used upon him? Obscenity[[28]](#footnote-27) is not one of the things impressioned upon his brain."

"Original impressionment is not everything," Calvin snarled at him. "Robots have learning capacity, you… you fool-" And Bogert knew that she had really lost her temper. She continued hastily, "Don't you suppose he could tell from the tone used that the words weren't complimentary? Don't you suppose he's heard the words used before and noted upon what occasions?"

"Well, then," shouted Bogert, "will you kindly tell me one way in which a modified robot can harm a human being, no matter how offended it is, no matter how sick with desire to prove superiority?"

"If I tell you one way, will you keep quiet?"

"Yes."

They were leaning across the table at each other, angry eyes nailed together.

The psychologist said, "If a modified robot were to drop a heavy weight upon a human being, he would not be breaking the First Law, if he did so with the knowledge that his strength and reaction speed would be sufficient[[29]](#footnote-28) to snatch the weight away before it struck the man. However once the weight left his fingers, he would be no longer the active medium. Only the blind force of gravity would be that. The robot could then change his mind and merely by inaction, allow the weight to strike. The modified First Law allows that."

"That's an awful stretch of imagination."

"That's what my profession requires sometimes. Peter, let's not quarrel[[30]](#footnote-29), let's work. [...]

1. Hyperspace is a faster-than-light method of traveling used in science fiction. A hyperatomic drive is most likely something that will enable this method of travelling. [↑](#footnote-ref-0)
2. **Hangdog attitude:** Seeming to be guilty of something [↑](#footnote-ref-1)
3. **Hunted** (adj) at se træt og slidt ud [↑](#footnote-ref-2)
4. **Appropriations** (sb) penge som gives til et specifikt formål [↑](#footnote-ref-3)
5. US Robots is the company that manufactures all the robots in Asimov’s universe. Bogert and Calvin work for the company. [↑](#footnote-ref-4)
6. **Vinegary** (adj) eddikesur [↑](#footnote-ref-5)
7. **Prodigal** (sb) fortabte søn (reference til bibelsk historie om den fortabte søn) [↑](#footnote-ref-6)
8. **Matter of delicacy** (vending) et fortroligt emne [↑](#footnote-ref-7)
9. **To impress** (vb) At præge [↑](#footnote-ref-8)
10. **Needn’t** (forkortelse) Need not [↑](#footnote-ref-9)
11. **To manufacture** (vb) at fremstille [↑](#footnote-ref-10)
12. **To derive** (vb) få [↑](#footnote-ref-11)
13. **Precaution** (sb) Forholdsregel [↑](#footnote-ref-12)
14. **A trifle** (vending) en smule [↑](#footnote-ref-13)
15. A **positronic brain** is a fictional technological device, originally conceived by science fiction writer Isaac Asimov. [↑](#footnote-ref-14)
16. **Extraneous agency**: udefrakommende kraft [↑](#footnote-ref-15)
17. **Bland** (adj) utryksløst [↑](#footnote-ref-16)
18. **Gross** (adj) betydelig [↑](#footnote-ref-17)
19. **To take fire** (vending) gør sig klar til at skælde ud [↑](#footnote-ref-18)
20. **Deliberately** (adv) med vilje [↑](#footnote-ref-19)
21. **Injunction** (sb) påbud [↑](#footnote-ref-20)
22. **Urgency (**sb) vigtighed [↑](#footnote-ref-21)
23. **To counteract** (vb) modvirke [↑](#footnote-ref-22)
24. **Ingenuity** (sb) opfindsomhed [↑](#footnote-ref-23)
25. **Subconsciously** (adv) underbevidst [↑](#footnote-ref-24)
26. **Inferior** (adj) laverestående [↑](#footnote-ref-25)
27. **Assorted** (adj) forskelligt [↑](#footnote-ref-26)
28. **Obscenity** (sb) sjofelhed [↑](#footnote-ref-27)
29. **Sufficient** (adj) at være nok [↑](#footnote-ref-28)
30. **To quarrel** (vb) at skændes [↑](#footnote-ref-29)