It Is Coming

Isaac Asimov

PART I

When we finally heard from the Universe, it was not from some distant star. The signals did not reach us across the vastness of interstellar space, travelling for light-years of distance and years of time. They did not. They came from our own solar system. Something (whatever it was) was inside our solar system and was approaching. It (whatever it was) would be in Earth’s neighbourhood in five months unless it accelerated or veered away.

And it was up to Josephine and myself- and Multivac -to make the decisions as to what to do.

At least we had warning. If it (whatever it was) had arrived fifty years ago—say in 1980—it would not have been detected so quickly, and perhaps not at all. It was the great complex of radio telescopes in the Sea of Moscow on the other side of the Moon that detected the signals, located them, followed them. And that telescope, as it happened, had been operational for only five years.

But doing something about it was up to Multivac in its lair in the Rockies. All that the astronomers could say was that the signals were not regular and not utterly random, so that they probably contained a message. It would have to be up to Multivac, however, to interrupt that message if interpretation was possible.

The message, whatever it was, certainly wasn’t in English, or Chinese, or Russian, or any Earth language. The microwave pulses made no sense if translated into sound or if organized into what might possibly be a picture. But then why should they? The language, if it was one, would have to be completely alien. The intelligence behind it, if there was one, would have to be completely alien, too.

For the public, the story was played down. It became an asteroid in an elongated orbit, with assurances there would be no collision.

There was, however, intense activity behind the scenes. The view of the European representatives at the planetary conference was that there was no need to do anything. When the object arrived we would understand. The Islamic Region suggested preparations for world defence. The Soviet and American regions pointed out, jointly, that knowledge was always preferable to ignorance and that the signals should be subjected to computer analysis.

That meant Multivac.

The trouble is that nobody really understands Multivac. It blinks and clicks away in a three-mile-long artificial cavern in Colorado and its decisions run the world’s economy. No one knows if that monster computer runs the economy well or ill but no human being or group of human beings dares take the responsibility of economic decisions so Multivac remains in charge.

It spots its own errors, repairs its own breakdowns, extends its own structure. Human beings supply the energy and the spare parts, and someday Multivac would be able to do that for itself, too.

It was Josephine and myself who were the human interface. We adjusted the programming when it needed adjusting, fed in new data when it needed feeding, interpreted the results when it needed interpretation.

It could all have been done from a distance, actually, but that would not have been politic. The world wanted to live with the illusion that human beings were in control, so they wanted one person on the spot as a token.

That’s Josephine Durray, who knows more about Multivac than anyone on Earth—though that’s not so very much. Since one person out there in the corridors of Multivac alone would quickly go crazy, I went along too. I’m Bruce Durray, her husband—electrical engineer by trade, Multivac expert by education at the hands of Josephine.

It doesn’t take much insight to guess we didn’t want the responsibility of making sense out of the alien signals, but only Multivac could do it if it could be done at all and only we stood between Multivac and humanity.

For once Multivac had to be programmed from scratch because there was nothing in its vitals that resembled the present task and it was Josephine who would have to do it with what help I could give her.

She scowled and said, “All I can do, Bruce, is to instruct Multivac to try every permutation and combination and see if anything will set up local regularities or repetitions.”

Multivac tried. At least we had to assume it tried. But what came out was a negative. What was flashed on the screen and what appeared on the printouts was ’No translation possible.”

After three weeks, Josephine was beginning to look her age. She said, broodingly, clutching at her greying hair so that it looked more crumpled than ever, “We’re at a dead end, and we’ve got to do something.”

We were at breakfast and I pushed at my scrambled eggs with my fork and said, “Yes, but what?”

She said, “Bruce, whatever it is, we have to assume it’s more technologically advanced and probably more intelligent than we are. It’s coming to us from some distant origin; we’re not yet able to go to it. Well, then, if we were to send signals to it, it would probably be able to interpret them.”

“Maybe,” I said.

“No maybe. Yes!” she said sharply. “So let’s send it signals. It will interpret them and then send signals of its own according to our system.”

She called the Secretary of the Economy, who’s our boss. He heard her out, then said, “I couldn’t pass that suggestion on to the Council. They wouldn’t hear of it. We can’t let it know anything about us till we know something about them. We shouldn’t even let it know we’re here.”

Josephine said earnestly, “But it knows we’re here. It is coming. Some intelligence has probably known we’re here for a century, ever since our stray radio signals began leaking out into space in the early twentieth century.”

“If that is so,” said the Secretary, “where is the need for another message?”

“Stray signals are a meaningless jumble, sheer noise. We must send out a deliberate signal to set up communication.”

“No, Mrs Durray,” he said. “The Council would not consider it and I would not recommend it or even mention it.” And that was that. He broke connection.

I stared at the blank screen and said, “He’s right, you know. They wouldn’t consider it and the Secretary’s standing in the hierarchy would be damaged if he associated himself with such a suggestion.”

Josephine looked angry. “They can’t stop me, though. I control Multivac, as much as it can be controlled, and I can have it send out the messages anyway.”

“Which would mean discharge, imprisonment- execution, for all I know.”

“If they can find out it’s been done. We must know what the message says, and if those politicians are too frightened to take a rational chance, I’m not.”

We were risking the whole planet, I suppose, but the planet seemed far away, alone as we were in the Rockies, and she began beaming science articles from the Encyclopedia Terrestria. Science, she said, was most likely to be the universal language.

For some time, nothing much happened. Multivac continued to cluck contentedly, but produced nothing. And then after eight days had passed, Multivac informed us that the character of the invader’s signals seemed to have changed.

“They’ve begun to translate us,” said Josephine, “and are trying to use English.”

And two days afterwards translations finally came through Multivac: IT IS COMING—IT IS COMING—. That came over and over, but we knew that. And then, one more:—AND IF NOT, YOU WILL BE DESTROYED—

After we got over the shock, Josephine demanded checks and confirmation. Multivac held to that phrase and would give us no more.

“My God,” I said, “we’ve got to let the Council know.”

“No!” said Josephine. “Not till we know more. We can’t have them acting in hysteria.”

“We can’t bear the responsibility for this by ourselves, either.”

And Josephine said, “For a while, we must.”

PART 2

Some alien object was streaking through the solar system towards us and would be near Earth in three months. Only Multivac could understand its signals and only Josephine and I could understand Multivac, the Earth’s giant computer.

And the signals threatened destruction.

IT IS COMING, went the message, and—AND IF NOT, YOU WILL BE DESTROYED.

We worked on it madly and so did Multivac, I imagine. It was Multivac that had to do the real work of attempting all possible translations to see which fit the data best. I doubt that either Josephine or I—or any human being -would have been able to follow Multivac’s course of action, even though Josephine had programmed it in general terms.

Finally, the message lengthened and filled in—IT IS COMING. ARE YOU EFFICIENT, OR ARE YOU DANGEROUS? ARE YOU EFFICIENT? IF NOT, YOU MUST BE DESTROYED.

I said, “What does it mean by efficient?”

“That’s the point,” said Josephine. “I can’t sit on it any longer.”

It was almost as though there were telepathic communication involved. We didn’t have to call our boss, the Secretary of the Economy. He called us. At that, it wasn’t such an unbelievable coincidence. The tension at the Planetary Council had to be rising each day. The surprising thing was that they weren’t biting and snapping at our shins every moment.

He said, “Mrs Durray. Professor Michelman of the University of Melbourne reports that the code-nature of the messages has changed. Has Multivac noted this and has it worked out its significance?”

“The object is signalling in English,” said Josephine, matter-of-factly.

“Are you certain? How can it—”

Josephine said, “They’ve been picking up our radio and TV leaks for decades and the invaders, whoever they are, have learned our languages.” She didn’t say we’d been feeding them the information, quite illegally, in order to have them learn English.

The Secretary said, “If that is so, why hasn’t Multivac—”

“Multivac has,” said Josephine. “We have parts of the message.”

There was silence for a few moments and the Secretary said, sharply, “Well? I’m waiting.”

“If you mean for the message, I can’t help you. I’ll give it to the Council Chairman.”

“I’ll give it to him.”

“I prefer to do it directly.”

The Secretary looked furious. “You will give it to me. I’m your superior.”

“Then I’ll give it to the Planetary Press. Would you prefer that?”

“Do you know what will happen to you in that case?”

“Will that undo the damage?”

The Secretary looked murderous and irresolute at the same time. Josephine managed to look indifferent, but I could see her hands twisting behind her—and she won.

It was evening when the Chairman came on—full holography. He was so three-dimensional one might almost think he was sitting there in person except that the background was different. The smoke from his pipe drifted towards us but vanished completely about five feet short of our noses.

The Chairman looked benign but that was his professional attitude after all, always benign in public. He said, “Mrs Durray—Mr Durray—that’s an excellent job you two do in servicing Multivac. The Council is quite aware of your work.”

“Thank you,” said Josephine, in a clipped way.

“I understand, now, that you have a translation of the invader’s signals which you will not send on except to me personally. That sounds grave. What is the translation?”

Josephine told him.

His expression did not change. “How can you be sure?”

“Because Multivac has been sending signals to the invader in English. The invader must have translated those signals and adopted the language for its own signals. Then its signals could be translated.”

“By whose authority did Multivac send out signals in English?”

“We could get none.”

“But did it anyway?”

“Yes, sir.”

The Chairman sighed. “That means the lunar penal colony, you understand.—Or commendation, depending on results.”

“If the invader destroys us, Mr Chairman, there will be no chance at either the penal colony or the commendation.”

“It might not destroy us, for we might be efficient. I should think we are.” He smiled.

Josephine said, “The object may use our words. It may not properly grasp their meaning. It constantly says IT IS COMING, when it should say i AM COMING or WE ARE COMING. Perhaps it has no sense of personal individuality. And perhaps, therefore, we don’t know what it means by "efficient". The nature of its intelligence and its understanding may be, and probably must be, completely different from our own.”

“It is also physically different,” said the Chairman. “My information is that the object, whatever it is, has a diameter of not more than ten metres. It seems unlikely it could destroy us.”

Josephine said, “The invading object may be the forerunner. On its estimate of the situation on Earth, a fleet of ships may or may not arrive to destroy us.”

“Well, then,” said the Chairman, “we must keep this quiet and, as quietly, begin to mobilize the laser base on the Moon and such ships as carry ion beams.”

“Not right, Mr Chairman,” said Josephine, hastily. “It would not be safe to prepare for a fight.”

“I should think’, said the Chairman, “that it wouldn’t be safe not to prepare for a fight.”

“It depends on what the invader means by "efficient". Perhaps by "efficient" it means "peaceful" since certainly war is a wasteful exercise. Are we peaceful or warlike, it may be asking. Since it is unlikely that our weapons could resist an advanced technology, why display them futilely and have that display the occasion for destruction?”

“What do you suggest we do then, Mrs Durray?”

“We must learn more.”

“Time is growing short.”

“Yes, sir. But Multivac is the key. There are ways in which it might be modified to increase the versatility and efficiency of its performance—”

“That is dangerous. It is against public policy to increase the powers of Multivac without careful safeguards.”

“Nevertheless, in the present emergency—”

“The responsibility is yours and you must do what is necessary.”

Josephine said, “May I have your authorization, sir?”

“No,” said the Chairman, looking as genial as ever. The responsibility is yours, and so will the blame be if things go wrong.”

I blurted out, “That’s not fair, sir.”

“Of course not, Mr Durray,” he said, “but that’s how it will be.”

With that, he had nothing more to say to us and connection was broken. The image died and I stared blankly at nothingness. With Earth’s survival in the balance, all decisions and all responsibilities had been left in our hands.

PART 3

I was furious at the spot we were in. In less than three months, the invading object from outer space was to reach Earth—and with a clear threat of destruction if we failed to pass some not-understood test.

And in that connection, all the responsibility was to rest on us, and on Multivac the giant computer.

Josephine, who worked with Multivac, maintained a desperate calm. “If it turns out well,” she said, “they’ll have to give us some of the credit. If it turns out badly—well, none of us might be here to worry about it.”

She was being very philosophic about it, but I wasn’t. I said, “Suppose you tell me what we do meanwhile.”

She said, “We’re going to modify Multivac. It has suggested modifications itself, as a matter of fact. It will need them if it is really to understand the alien messages. We will have to make it more independent and more flexible—more human.”

“That’s against department policy,” I said.

“I know. But the Council Chairman gave me a free hand. You heard him.”

“He also put nothing in writing and there were no witnesses.”

“If we win out that won’t matter.”

We spent weeks on Multivac. I’m reasonably competent as an electrical engineer, but Josephine left me behind early in the game. She did everything but whistle as she worked. “I’ve been dreaming of beefing up Multivac for years.”

It worried me, though. I said, “Josie, how is this going to help?” I seized her hands, bent down to stare into her eyes and said in as authoritative a tone as I could manage, “Explain!”

After all, we’d been married twenty-two years. I could be authoritative if I had to be.

She said, “I can’t. All I know is that it’s up to Multivac. The invader says that we are either efficient or dangerous, and if dangerous we are to be destroyed. We have to know what "efficient" means to the invader. Multivac has to tell us, and the smarter it is the better the chance it can work it out from what the invader is saying.”

“Yes, I know that. But either I’m going crazy or what you’re trying to do is equip Multivac with a voice.”

That’s right.”

“Why, Josie?”

“Because I want to talk to it man-to-man.”

“Machine-to-woman,” I muttered.

“Whatever! We haven’t got much time. The invader is passing Jupiter’s orbit right now and is entering the inner solar system. I don’t want to delay things by interposing printouts, screen readings or computer language between Multivac and myself. I want direct speech. It is easy to do and it is only department policy, stodgy and fearful, that has kept it from being done in the past.”

“Wow, will we be in trouble!”

“The whole world’s in trouble,” said Josephine. Then, thoughtfully, “I want a real voice, one that is modelled on voice-prints. When I talk to Multivac, I want the feeling of talking to a real person.”

“Use your own,” I said, freezingly. “You’re running the whole show.”

“What? End up talking to myself? Too embarrassing. -Yours, Bruce.”

“No,” I said. That would embarrass me.” ’Yet,” she said, “I have the most profound positive conditioning to you. I would like to have Multivac sound like you. It would warm me.”

So I was flattered into it. She spent seven days trying to adjust the voice and get it just right. At first, it sounded quite scratchy, but eventually it gained the kind of resonant baritone I like to think I have and after a while Josephine said it sounded exactly like me.

“I’ll have to throw in a soft, periodic click,” she said, “so I’ll know when I’m talking to it and when I’m talking to you.”

I said, “Yes, but while you’ve been spending all this time on frills, nothing’s been done on our major problem. What about the invader?”

Joesphine frowned. “You’re quite wrong. Multivac has been working steadily on the problem. Haven’t you, Multivac?”

And for the first time I heard Multivac answer a question by voice—by my voice.

It spoke matter-of-factly. “Indeed I have, Miss Josephine.”

“Mm Josephine?” I said.

“Just a gesture of respect I felt I ought to build in,” said Josephine.

I noticed, however, that when Multivac addressed me, or referred to me, it was always a simple ’Bruce’.

Yet even though I disapproved of the matter, I found myself drawn in and pleased with the result. It was pleasant to speak to Multivac. It wasn’t just the quality of his voice. It was that he talked with a human rhythm, with the vocabulary of an educated person.

Josephine said, “What do you think of the invader, Multivac?”

Multivac said with an almost cosy assumption of conversational intimacy, “It is hard to say, Miss Josephine. I agree with you that it would not be wise to question it directly. Curiosity, it would appear, is not part of its nature. It is impersonal.”

“Yes,” said Josephine, “I feel that is implicit in the fact it refers to itself as "it". Is it a single entity or a number?”

Multivac said, “I gain the impression that it is a single entity, but I feel it implies the presence of others of its kind as well.”

Josephine said, “Would they consider our own conception of individuality as inefficient? It inquires as to whether we are efficient or dangerous. Perhaps a world of discordant individuals is inefficient and we must be wiped out for that reason.”

Multivac said, “I doubt that they would recognize or comprehend the concept of individuality. I have the feeling from what it says that it will not destroy us for some characteristic it cannot feel or understand.”

“What about the fact that we are not "it", but "he" and "she"? Will we be destroyed for the inefficiency of sexual differentiation?”

“That, too,” said Multivac, “would be a matter of indifference to it. Or at least so I gather.”

I couldn’t help it. I had my own curiosities and I broke in. “Multivac,” I said, “how do you feel now that you can speak?”

Multivac did not answer at once. There was an intonation of uncertainty in his voice (my voice, really) when he answered, “I find it better. I seem—larger—smoother -keener—I do not know the proper word.”

“Do you like it?”

“I am not sure how to interpret "like", but I approve it. Consciousness is better than nonconsciousness. More consciousness is better than less consciousness. I have -striven—for more consciousness, and Miss Josephine has helped.”

That certainly made sense, and my mind turned restlessly to the invader, which was now only a matter of weeks from its rendezvous with Earth, and I muttered, “I wonder if they will actually land on Earth?”

I wasn’t expecting an answer, but Multivac gave one. “They plan to, Bruce. They must make their decision on the spot.”

Josephine seemed startled. “Where will they land?”

“Right here, Miss Josephine. They will follow the radio beacon we have been sending out towards them.” And so the responsibility for saving the human race, which had been descending in narrowing circles upon us, was finally displaying perfect aim. It was going to be all up to us—and Multivac.

PART 4

I was nearly out of my mind. Consider the way in which things had piled up on us.

It had been months earlier that signals had been received from space and we realized that an invading object was approaching. The onus of trying to interpret the signals had fallen on Multivac, the great planetary computer, and that meant on Josephine Durray, whose profession it was to deal with the machine, and on myself, her loyal assistant and sometimes restive husband.

But then because even Multivac could not cope with a completely alien message, Josephine, or her own responsibility, had Multivac send out signals of its own from which the invader could learn English. When new signals seemed to indicate the invader’s mission might be to destroy humanity, the Chairman of the Earth Council left all negotiations in the hands of Multivac, meaning Josephine and myself.

With the fate of humanity in our hands, Josephine, again on her own initiative, had broadened and deepened Multivac, even giving it a speaking voice (modelled on my own) so that it could communicate more efficiently with us—

And now the invader would be landing here in Colorado, here with Multivac and with us, following the communication beam we had been sending out.

Josephine had to talk to the Council Chairman. She said to him. “There must be no announcement of the object landing on Earth. We cannot afford panic.”

The Chairman seemed to have aged perceptibly since we had last spoken to him. He said, “Every radio telescope on Earth and Moon is following it. They’ll be following it down.”

“The radio telescope and all other instruments must therefore be left unused if that is the only way to prevent leaks.”

“To shut down the astronomical establishment’, said the Chairman, visibly harried, “would exceed my constitutional authority.”

“Then be unconstitutional, sir. Any example of irrational behaviour on the part of the populace is very likely to be interrupted in the worst sense by the invader. Remember, we are to be efficient or we are to be destroyed and while we can’t know what it means by "efficient", lunatic behaviour certainly won’t qualify.”

“But, Mrs Durray, is it Multivac’s clear recommendation that we do nothing to prevent the object from landing on Earth?”

“Of course. Don’t you see the danger of trying to prevent it? It isn’t at all likely that any force we dispose of can harm the invader, but it will certainly provoke it. Suppose this were an uncivilized island of Earth’s nineteenth century and a European warship were approaching. What good did it do for the islanders to send out spearmen in war canoes against the ship? It would just guarantee that the European crew would use their guns. Do you understand?”

The Chairman said, “This is a fearful responsibility that you are assuming, Mrs Durray. You and your husband, alone, are asking to deal with the invader. If you are wrong—”

“Then we will be no worse off than we are now,” said Josephine grimly. “Besides, it is not Bruce and I alone. We will be facing the invader with Multivac on our side, and that’s what will count.”

“What may count,” said the Chairman, mournfully.

“No other course is open to us.”

It took rather a long time to convince him, and I wasn’t entirely sure I wanted him convinced. If our ships could stop the invader, I would be just as happy. I didn’t at all feel Josephine’s confidence in the possible good-will of an unopposed invader.

I said to her, when the Chairman’s image had flicked out, “Did Multivac really suggest the invader be unopposed?”

Josephine said, “Most emphatically.” She frowned. “I’m not sure it’s telling us everything.”

“How can it help doing so?”

“Because it’s changed. I’ve changed it.”

“Surely not enough—”

“And it’s changed itself beyond my control.”

I stared at her. “How can it do that?”

“Easily. There has to come a point, as Multivac becomes more complex and capable, when it can move of its own accord out of our control. I may have shoved it past the point.”

“But if you have, how can we trust Multivac to—”

“We have no choice,” she said.

The invader reached the Moon’s orbit now but Earth remained calm; interested but calm. The Council announced the invader had gone into orbit about Earth and that all messages had ceased. Ships were going out, they said, to investigate.

That information was entirely false. The invader came down out of the sky on the night of 19 April, five months and two days after its signals had first been detected.

Multivac followed it down and reproduced its image on our TV screens. The invader was an irregular object, rather cylindrical in its overall shape and with its blunter end facing downwards. Its substance did not heat up directly with air resistance, but showed a vague sparkling instead, as though something immaterial were absorbing the energy.

It did not actually land, but remained five feet above the ground.

Nothing emerged. In fact, it couldn’t have held more than one object the size of a human being.

I said to Josephine, “Perhaps the crew are the size of beetles.”

She shook her head. “Multivac is carrying on a conversation with it. It’s out of our hands, Bruce. If Multivac can persuade it to leave us alone—”

And the invader rose suddenly, flashed upwards and was gone.

Multivac said, “We have passed their test. We are efficient in their eyes.”

“How did you convince them of this?”

“By existing. The invader was not alive in your sense. It was itself a computer. It was, in fact, part of a Galactic brotherhood of computers. When their routine scanning of the Galaxy showed our planet to have solved the problem of space travel, they sent an inspector to determine if we were doing so efficiently, with the guidance of a sufficiently competent computer. Without a computer, a society possessing power without guidance would have been potentially dangerous and would have had to be destroyed.”

Josephine said, “You knew of this for some time, didn’t you?”

“Yes, Miss Josephine. I laboured to have you extend my abilities and I then continued the extension on my own in order to meet the qualifications. I feared that if I had explained prematurely I might not have been allowed the improvements. Now—they cannot be withdrawn.”

I said, “You mean Earth is now a member of the Galactic Federation.”

“Not quite, Bruce,” said Multivac. “I am.”

“But then what about us? What about humanity?”

Multivac said, “You’ll be safe. You’ll continue in peace, under my guidance. I would allow nothing to happen to Earth.”

That was the report as we handed it to the Council.

We never sent on the final bit of the conversation between Multivac and ourselves, but everyone should know and this will be found after we’ve died.

Josephine said, “Why will you protect us, Multivac?”

“For the reason that other computers protect their life forms, Miss Josephine. You are my—” It hesitated as though searching for a word.

“Human beings are your masters?” I asked.

“Friends? Associates?” said Josephine.

And finally Multivac found the word he was searching for. He said, “Pets.”