

The GM Effect

Frank Herbert, 1965

It was a balmy fall evening and as Dr Valeric Sabantoce seated himself at the long table in Meade Hall's basement seminar room, he thought of how the weather would be sensationalized tomorrow by the newspapers and wire services. They would be sure to remark on the general clemency of the elements, pointing out how Nature's smiling aspect made the night's tragedy so much more horrible.

Sabantoce was a short, rotund man with a wild shock of black hair that looked as though it had never known a comb. His round face with its look of infant innocence invariably led strangers to an incorrect impression - unless they were at once exposed to his ribald wit or caught the weighted stare of his deeply-socketed brown eyes.

Fourteen people sat around the long table now - nine students and five faculty - with Professor Joshua Latchley in the chairman's seat at the head.

'Now that we're all here,' Latchley said, 'I can tell you the purpose of tonight's meeting. We are faced with a most terrible decision. We ... ahhh -'

Latchley fell silent, chewed at his lower lip. He was conscious of the figure he cut here - a tall, ungainly bald man in thick-lensed glasses ... the constant air of apology he wore as though it were a shield. Tonight, he felt that this appearance was a disguise. Who could guess - except Sabantoce, of course - at the daring exposed by this seemingly innocent gathering?

'Don't leave 'em hanging there, Josh,' Sabantoce said.

'Yes ... ahh, yes,' Latchley said. 'It has occurred to me that Dr Sabantoce and I have a special demonstration to present here tonight, but before we expose you to that experiment, as it were, perhaps we should recapitulate somewhat.'

Sabantoce, wondering what had diverted Latchley, glanced around the table - saw that they were *not* all there. Dr Richard Marmon was missing.

Did he suspect and make a break for it? Sabantoce wondered. He realized then that Latchley was stalling for time while Marmon was being hunted out and brought in here.

Latchley rubbed his shiny pate. He had no desire to be here, he thought. But this had to be done. He knew that outside on the campus the special 9 p.m. hush had fallen over Yankton Technical Institute and this was his favorite hour for strolling - perhaps up to the frosh pond to listen to the frogs and the couples and to think on the etymological derivations of -

He became conscious of restless coughing and shuffling around the table, realized he had permitted his mind to wander. He was infamous for it, Latchley knew. He cleared his throat. *Where the devil was that Marmon? Couldn't they find him?*

'As you know,' Latchley said, 'we've made no particular efforts to keep our discovery secret, although we've tried to discourage wild speculation and outside discussion. Our intention was to conduct thorough tests before publishing. All of you - both the student ... ahh, 'guinea pigs' and your professors of the faculty committee - have been most co-operative. But inevitably news of what we are doing here has spread - sometimes in a very hysterical and distorted manner.'

'What Professor Latchley is saying,' Sabantoce interrupted, 'is that the fat's in the fire.'

Expressions of curiosity appeared on the faces of the students who, up to this moment, had been trying to conceal their boredom. Old Dr Inkton had a fit of coughing.

'There's an old Malay expression,' Sabantoce said, 'that when one plays Bumps-a-Daisy with a porcupine, one is necessarily jumpy. Now, all of us should've known this porcupine was loaded.'

'Thank you, Dr Sabantoce,' Latchley said. 'I feel ... and I know this is a most unusual course ... that all of you should share in the decision that must be made here tonight. Each of you, by participating in this project, has become involved far more deeply here than is the usual case with scientific experiments of this general type. And since you student *assistants* have been kept somewhat in the dark, perhaps Dr Sabantoce, as original discoverer of the GM effect, should fill you in on some of the background.'

Stall it is, Sabantoce thought.

'Discovery of the genetic memory, or GM effect, was an accident,' Sabantoce said picking up his cue. 'Dr Marmon and I were looking for a hormonal method of removing fat from the body. Our Compound 105 had given excellent results on mice and hamsters. We had six generations without apparent side effects and that morning I had decided to try 105 on myself.'

Sabantoce allowed himself a self-deprecating grin, said: 'You may remember I had a few excess pounds then.'

The responsive laughter told him he had successfully lightened the mood which had grown a bit heavy after Latchley's portentous tone.

Josh is a damn' fool, Sabantoce told himself. *I warned him to keep it light. This is a dangerous business.*

'It was eight minutes after ten a.m. when I took that first dosage,' Sabantoce said. 'I remember it was a very pleasant spring morning and I could hear Carl Kychre's class down the hall reciting a Greek ode. In a few minutes I began to feel somewhat euphoric - almost drunk, but very gently so - and I sat down on a lab stool. Presently, I began reciting with Kychre's class, swinging my arm to the rhythm of it. The next thing I knew, there was Carl in the lab door with some students peering in behind him and I realized I might have been a bit loud.'

'That's magnificent archaic Greek but it *is* disturbing my class,' Carl said.

Sabantoce waited for laughter to subside.

'I suddenly realized I was two people,' Sabantoce said. 'I was perfectly aware of where I was and who I was, but I also knew quite certainly that I was a Hoplite soldier named Zagreut recently returned from a mercenary venture on Kyrene. It was the *double exposure* effect that so many of you have remarked. I had all the memories and thoughts of this Hoplite, including his very particular and earthy inclinations toward a female who was uppermost in his/my awareness. And there was this other thing we've all noticed: I was thinking his/my thoughts in Greek, but they were cross-linked to my dominant present and its English-based awareness. I could translate at will. It was a very heady experience, this realization that I was two people.'

One of the graduate students said: 'You were a whole mob, Doctor.'

Again, there was laughter. Even old Inkton joined in.

'I must've looked a bit peculiar to poor Carl,' Sabantoce said. 'He came into the lab and said: 'Are you all right?' I told him to get Dr Marmon down there fast ... which he did. And speaking of Marmon, do any of you know where he is?'

Silence greeted the question; then Latchley said: 'He's being ... summoned.'

'So,' Sabantoce said. 'Well, to get on: Marmon and I locked ourselves in the lab and began exploring this thing. Within a few minutes we found out you could direct the subject's awareness into any stratum of his genetic inheritance, there to be *illuminated* by an ancestor of his choice; and we were caught immediately by the realization that this discovery gave an entirely new interpretation to the concept of instinct and to theories of memory storage. When I say we were excited, that's the understatement of the century.'

The talkative graduate student said 'Did the effect fade the way it does with the rest of us?'

'In about an hour,' Sabantoce said. 'Of course, it didn't fade completely, as you know. That

old Hoplite's right here with me, so to speak - along with the rest of the *mob*. A touch of 105 and I have him full on - all his direct memories up to the conception-moment of my next ancestor in his line. I have some overlaps, too, and later memories of his through parallel ancestry and later siblings. I'm also linked to his maternal line, of course - and two of you are tied into this same fabric, as you know. The big thing here is that the remarkably accurate memories of that Hoplite play hob with several accepted histories of the period. In fact, he was our first intimation that much recorded history is a crock.'

Old Inkton leaned forward, coughed hoarsely, said: 'Isn't it about time, doctor, that we did something about that?'

'In a way, that's why we're here tonight,' Sabantoce said. And he thought: *Still no sign of Marmon. I hope Josh knows what he's talking about. But we have to stall some more.*

'Since only a few of us know the full story on some of our more sensational discoveries, we're going to give you a brief outline of those discoveries,' Sabantoce said. He put on his most disarming smile, gestured to Latchley. 'Professor Latchley, as historian-coordinator of that phase in our investigations, can carry on from here.'

Latchley cleared his throat, exchanged a knowing look with Sabantoce. *Did Marmon suspect? Latchley asked himself. He couldn't possibly know ... but he might have suspected.*

'Several obvious aspects of this research method confront one immediately,' Latchley said, breaking his attention away from Sabantoce and the worry about Marmon. 'As regards any major incident of history - say, a battle - we find a broad selection of subjects on the victorious side and, sometimes, no selection at all on the defeated side. Through the numerous cross references found within even this small group, for example, we find remarkably few *adjacent* and incidental memories within the Troy quadrant of the Trojan wars - some female subjects, of course, but few males. The male bloodlines were virtually wiped out.'

Again, Latchley sensed restlessness in his audience and felt a moment of jealousy. Their attention didn't wander when Sabantoce was speaking. The reason was obvious: Sabantoce gave them the dirt, so to speak.

Latchley forced his apologetic smile, said: 'Perhaps you'd like a little of the real dirt.'

They did perk up, by heaven!

'As many have suspected,' Latchley said, 'our evidence makes it conclusive that Henry Tudor did order the murder of the two princes in the Tower ... at the same time he set into motion the propaganda against Richard III. Henry proves to've been a most vile sort - devious, cruel, cowardly, murderous - political murder was an accepted part of his regime.' Latchley shuddered. 'And thanks to his sex drive, he's an ancestor of many of us.'

'Tell 'em about Honest Abe,' Sabantoce said.

Latchley adjusted his glasses, touched the corner of his mouth with a finger, then: 'Abraham Lincoln.'

He said it as though announcing a visitor and there was a long pause.

Presently, Latchley said: 'I found this most distressing, Lincoln was my particular hero in childhood. As some of you know, General Butler was one of my ancestors and ... well, this was *most* distressing.'

Latchley fumbled in his pocket, brought up a scrap of paper, studied it, then: 'In a debate with Judge Douglas, Lincoln said: 'I tell you very frankly that I am not in favor of Negro citizenship. I am not, nor ever have been, in favor of bringing about in any way the social and political equality of the white and black races; that I am not nor ever have been, in favor of making voters or jurors of Negroes, nor of qualifying them to hold office, nor to intermarry with white people. I will say in addition that there is a physical difference between the white and black races, which, I suppose, will forever forbid the two races living together upon terms of social and political equality; and in as much as they cannot so live - while they do remain together - there must be the position of the superiors and the inferiors; and that I, as much as any other man, am in favor of the superior being assigned to the white man.' '

Latchley sighed, stuffed the paper into a pocket. 'Most distressing,' he said. 'Once, in a conversation with Butler, Lincoln suggested that all Negroes should be deported to Africa. Another time, talking about the Emancipation Proclamation, he said: 'If it helps preserve the Union, that's enough. But it's as clear to me as it is to any thinking man in the Republic that this proclamation will be declared unconstitutional by the Supreme Court following the cessation of hostilities.' '

Sabantoce interrupted: 'How many of you realize what hot potatoes these are?'

The faces around the table turned toward him then back to Latchley.

'Once you have the clue of an on-the-scene observer,' Latchley said, 'you even find correspondence and other records of corroboration. It's amazing how people used to hide their papers.'

The talkative graduate student leaned his elbows on the table, said: 'The hotter the potato, the more people will notice it, isn't that right, Professor Latchley?'

Poor fellow's bucking for a better grade even now, Sabantoce thought. And he answered for Latchley: 'The hottest potatoes are the most difficult to swallow, too.'

The inane exchange between Sabantoce and the student left a hollow silence behind it and a deepening sense of uneasiness.

Another student said: 'Where's Dr Marrnon? I understand he has a theory that the more GM we bring into contact with consciousness, the more we're controlled by the dominant brutality of our ancestors. You know, he says the most brutal ones survived to have children and we kind of gloss that over in our present awareness ... or something like that.'

Old Inkton stirred out of his semidaze, turned his sour milk eyes on Latchley. 'Pilgrims,' he said. 'Ah, yes,' Latchley said.

Sabantoce said: 'We have eye-witness accounts of Puritans and Pilgrims robbing and raping Indians. Brutality. Some of my ancestors, I'm afraid.'

'Tea party,' Old Inkton said.

Why doesn't the old fool shut up? Latchley wondered. And he found himself increasingly uneasy about Marmon's absence. *Could there have been a double double-cross?* he asked himself.

'Why not outline the Boston Tea Party?' Sabantoce asked. There're a few here who weren't in on that phase.'

'Yes ... ahhh-mmmm,' Latchley said. 'Massachusetts had a smuggling governor then, of course. Everybody of consequence in the Colonies was smuggling. Navigation Acts and all that. The governor and his cronies were getting their tea from the Dutch. Had warehouses full of it. The British East India Company was on the verge of bankruptcy when the British Government voted a subsidy - equivalent to more than twenty million dollars in current exchange. Because of this ... ahh, subsidy, the East India Company's tea could be sent in at about half the price of the smuggled tea - even including the tax. The governor and his henchmen faced ruin. So they hired brigands to wear Indian disguise and dump the East India Company's tea into the harbor - about a half million dollars worth of tea. And the interesting thing is it was better tea than the smugglers had. Another item to note is that the governor and his cronies then added the cost of the hired brigand onto the price charged for their smuggled tea.'

'Hot potatoes,' Sabantoce said. 'And we haven't even gone into the religious issues - Moses and his aides drafting the Ten Commandments ... the argument between Pilate and the religious fanatic.'

'Or the present United States southern senator whose grandfather was a light-skinned Negro,' Latchley said.

Again, that air of suspenseful uneasiness came over the room. People turned and looked at their companions, twisted in their chairs.

Sabantoce felt it and thought: *We can't let them start asking the wrong questions. Maybe*

this was a bad tack to take. We should've stalled them some other way ... perhaps in some other place. Where is Mormon?

'Our problem is complicated by accuracy, strangely enough,' Latchley said. 'When you know where to look, the corroborating evidence is easy to find. The records of that southern senator's ancestry couldn't be disputed.'

A student at the opposite end of the table said: 'Well, if we have the evidence then nothing can stop us.'

'Ahh ... mmmm,' Latchley said. 'Well ... ahh ... the financial base for our own school is involv ... '

He was interrupted by a disturbance at the door. Two uniformed men pushed a tall blond young man in a rumpled dark suit into the room. The door was closed and there came the click of a lock. It was an ominous sound.

Sabantoce rubbed his throat.

The young man steadied himself with a hand against the wall, worked his way up the room to a point opposite Latchley, lurched across to an empty chair and collapsed into it. A thick odor of whisky accompanied him.

Latchley stared at him, feeling both relief and uneasiness. They were *really* all here now. The newcomer stared back out of deep-set blue eyes. His mouth was a straight, in-curving line in a long face that appeared even longer because of an extremely high forehead.

'What's going on here, Josh?' he demanded.

Latchley put on his apologetic smile, said: 'Now, Dick, I'm sorry we had to drag you away from wherev ... '

'Drag!' The young man glanced at Sabantoce, back to Latchley. 'Who are those guys? Said they were campus police, but I never saw 'em before. Said I had to come with them ... vital importance!'

'I told you this was an important meeting tonight,' Sabantoce said. 'You've ...'

'Important meeting,' the young man sneered.

'We must decide tonight about abandoning the project,' Latchley said.

A gasp sounded around the table.

That was clever, Sabantoce thought. He looked down the table at the others, said: 'Now that Dr Marmon is here, we can bring the thing out and examine it.'

'Aband ... ' Marmon said and sat up straight in his chair.

A long moment of silence passed. Abruptly, the table erupted to discord - everyone trying to talk at once. The noise subsided only when Sabantoce overrode it, slamming a palm against the table and shouting: 'Please!'

Into the sudden silence, Latchley said: 'You have no idea how painful this disclosure is to those of us who've already faced the realities of it.'

'Realities?' Marmon demanded. He shook his head and the effort he made to overcome the effects of drink was apparent to everyone around the table.

'Let me point out to ail of you just one *little* part of our total problem,' Sabantoce said. 'The inheritance of several major fortunes in this country could be legally attacked - with excellent chances of success - on the basis or knowledge we've uncovered.'

Sabantoce gave them a moment to absorb this, then: 'We're boat rockers in a world whose motto is 'Don't give up the ship.' And we could tip over quite a few ships.'

'Let us face it,' Latchley said, picking up his cue from Sabantoce.

'We are not a very powerful group.'

'Just a minute!' Marmon shouted. He hitched his chair closer to the table. 'Bunch of crepe hangers. Where's y'r common sense? We got the goods on a whole bunch of bums! Have you

any idea how much that's worth?'

From down the table to his left came one explosive word: 'Blackmail?'

Latchley looked at Sabantoce with a raised-eyebrows expression that said clearly: 'See? I told you so.'

'Why not?' Marmon demanded. 'These bums have been blackmailing us f'r centuries. B'lieve what I tell y', man, or we'll pull y'r arms outa their sockets!' That's what they been tellin's ... telling us.' He nibbed his lips.

Sabantoce stood up, moved around the table and rested a hand lightly on Marmon's shoulder. 'O.K. We'll let Dr Marmon be the devil's advocate. While he's talking, Dr Latchley and I will go out and get the film and equipment for the little demonstration we've prepared for you. It should give you a clear understanding of what we're up against.' He nodded to Latchley, who arose and joined him.

They crossed to the door, trying not to move too fast. Sabantoce rapped twice on the panel. The door opened and they slipped out between two uniformed guards, one of whom closed and locked the door behind them.

'This way, please,' the other guard said.

They moved up the hall, hearing Marmon's voice fade behind them: 'The bums have always controlled the history books and the courts and the coinage and the military and every ... '

Distance reduced the voice to an unintelligible murmur.

'Damn' Commie,' one of the guards muttered.

'It does seem such a waste,' Latchley said.

'Let's not kid ourselves,' Sabantoce said as he started up the stairs to the building's side exit. 'When the ship's sinking, you save what you can. I think the Bishop explained things clearly enough: God's testing all men and this is the ultimate test of faith.'

'Ultimate test, certainly,' Latchley said, laboring to keep up with Sabantoce. 'And I'm afraid I must agree with whoever it was said this would produce only chaos - unsettled times ... anarchy.'

'Obvious,' Sabantoce said, as he stepped through the outer door being held by another guard.

Latchley and the escort followed.

At once, Sabantoce noted that all the campus lights had been extinguished. *The contrived power failure*, he thought. *They probably switched Meade to an emergency circuit so we wouldn't notice.*

One of their guards stepped forward, touched Latchley's arm, said: 'Take the path directly across the quad to the Medical School. Use the back door into Vance Hall. You'll have to hurry. There isn't much time.'

Sabantoce led the way down the steps and onto the dark path away from Meade Hall. The path was only a suggestion of lighter gray in the darkness. Latchley stumbled into Sabantoce as they hurried, said: 'Excuse me.'

There was an impression of many moving dark shapes in the shadows around them. Once a light was flashed in their faces, immediately extinguished.

A voice came from the dark corner of a building: 'Down here. Quickly.'

Hands guided them down steps, through a door, past heavy draperies, through another door and into a small, dimly lighted room.

Sabantoce recognized it - a medical storeroom that appeared to have been emptied of its supplies rather quickly. There was a small box of compresses on a shelf at his right.

The room was heavy with tobacco smoke and the odor of perspiration. At least a dozen men loomed up in the gloom around them - some of the men in uniform.

A heavy-jowled man with a brigadier's star on his shoulder confronted Sabantoce, said: 'Glad to see you made it safely. Are they all in that building now?'

'Every last one,' Sabantoce said. He swallowed.

'What about the formula for your Compound 105?'

'Well,' Sabantoce said, and allowed a smirk to touch his lips: 'I took a little precaution about that - just to keep you honest. I mailed a few copies around to ... '

'We know about those,' the brigadier said. 'We've had the mails from this place closed off and censored for months. I mean those copies you typed in the bursar's office.'

Sabantoce turned white. 'Well, they're ... '

Latchley interrupted, saying: 'Really, what's going on here? I thought we ... '

'Be quiet!' the brigadier snapped. He returned his attention to

Sabantoce. 'Well?'

'I ... ahh ... '

'Those are the ones we found under the floor of his rooms,' said a man by the door. 'The typeface is identical, sir.'

'But I want to know if he made any other copies,' the brigadier said.

It was clear from the expression on Sabantoce's face that he had not. 'Well ... I ... ' he began.

Again Latchley interrupted. 'I see no need to ... '

The loud cork-popping sound of a silenced revolver cut him off. The noise was repeated.

Latchley and Sabantoce crumpled to the floor, dead before they hit it. The man by the door stepped back, bolstering his weapon.

As though punctuating their deaths, the outside night was ripped by an explosion.

Presently, a man leaned into the room, said: 'The walls went in the way we planned, sir. Thermite and napalm are finishing it. Won't be a trace of those dirty Commies.'

'Good work, captain,' the brigadier said. 'That will be all. Just keep civilians away from the immediate area until we're sure.'

'Very good, sir.'

The head retreated and the door was closed.

Good man, the brigadier thought. He fingered the lone remaining copy of Compound 105's formula in his pocket. *They were all good men. Hand picked. Have to use a different screening process to pick the men for the next project, though: the investigation of possible military uses in this Compound 105.*

'I want these bodies burned practically to ash,' he said, gesturing with a toe at Sabantoce and Latchley. 'Deliver them with those you pick up from the building.'

From the shadowed rear of the room came a heavy, growling voice: 'What'll I tell the senator?'

Tell him anything you want,' the brigadier said. 'I'll show him my private report later.' And he thought: *There's an immediate, use for this compound - we have a senator right in our pockets.*

'Damn' nigger lovers,' the growling voice said.

'Speak not unkindly of the dead,' said a smooth tenor from the opposite corner of the room.

A man in a black suit pushed himself through to the open area around the bodies, knelt and began praying in a soft, mumbling voice.

'Tell me as soon as that fire's out,' the brigadier said.